

EDITION 2025 / 2027



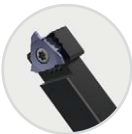
APPLITEC
CUTTING TOOLS



GENERAL CATALOGUE

PERFORMANCE | PRECISION | RIGIDITY

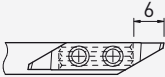
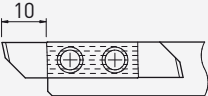


		TOP-Line	1
		TOP-Watch	2
		ONE-Line	3
		ONE-Watch	4
		PRO-Line	5
		ECO-Line	6
		TRIO-Line	7
		TURN-Line	8
		ISO-Line	9
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TOP-Line

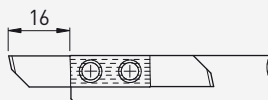


APPLITEC
CUTTING TOOLS

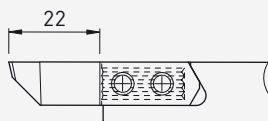
Codification Kodifizierung Coding guide			> 1.04
Infos et avantages Infos und Vorteile Infos and advantages			> 1.05
Nuances Sorten Grades			> 1.12
Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data			> 1.18
Nuances PCD PKD Sorten PCD grades			> 1.20
Paramètres de coupe indicatifs PCD PKD empfohlene Schnittwerte PCD standard machining data			> 1.21
710 / 720	Pour machines à cames Für kurvengesteuerte Maschinen For cam driven machines		> 1.22
730 / 740	Main series Small type		> 1.34
750 / 760	Main series Large type		> 1.90

770 / 780

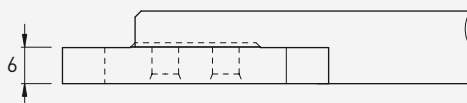
Tronçonnage de grande capacité
 Abstechen für grössere Durchmesser
 High capacity parting off

> **1.164****7050 / 7060**

Tronçonnage de grande capacité
 Abstechen für grössere Durchmesser
 High capacity parting

> **1.176****W750 / W760**

Outils avec plaquettes ébauchées larges pour profilage
 Werkzeuge mit breiten WSP-Rohlingen für Profilschleifen
 Tools with wide blank inserts for profiling

> **1.184**

Porte-outils spécifiques
 Spezifische Werkzeughalter
 Specific tool holders

> **1.192**

Pièces de rechange
 Ersatzteile
 Spare parts

> **1.214**

Codification

Kodifizierung
Coding guide

7	6	4	X	-	2.0	-	R20	-	HTA
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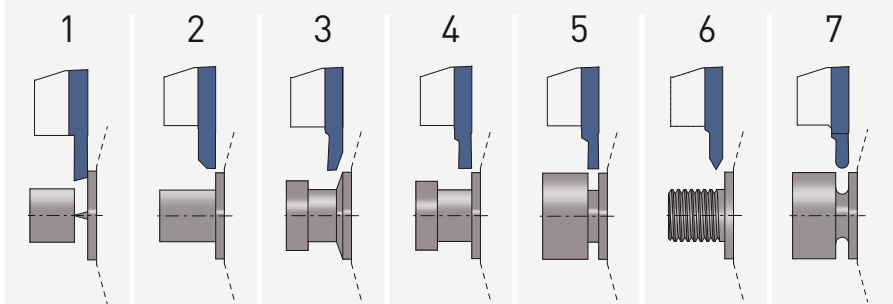
Dimension
Abmessung
Dimension

Rayon
Radius
Radius

Nuance
Sorte
Grade

Géométrie de coupe / Brise-copeaux / Particularités
Schneidgeometrie / Spanbrecher / Sondereigenschaften
Cutting geometry / Chip breaker / Special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry



Gamme de produit
Produktsérie
Product series

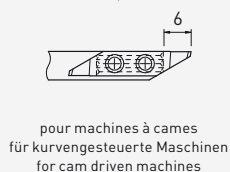
définit la compatibilité des plaquettes avec le porte-outils
definiert die Kompatibilität der Wendschneidplatten mit dem Werkzeughalter
defines the compatibility between inserts and toolholders

L = 1, 3, 5, 7 (chiffre impair / ungerade Zahl / uneven number)

R = 2, 4, 6, 8 (chiffre pair / gerade Zahl / even number)

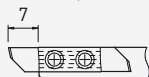
L
710

R
720



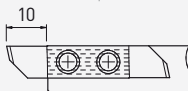
L
730

R
740



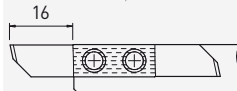
L
750

R
760



L
770

R
780

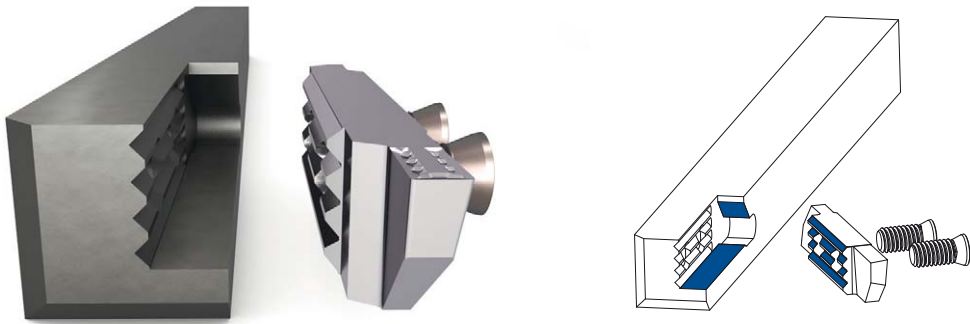
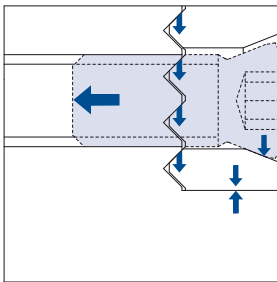


Applitec série 700
Applitec 700 Serie
Applitec 700 series

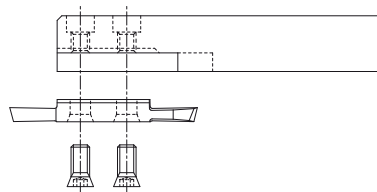
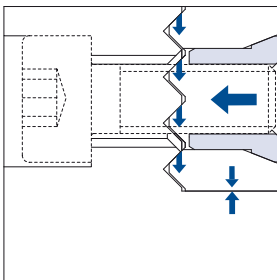
Système de serrage à denture décalée avec 2 vis de fixation
Spannsystem mit 2 Schrauben und verschobener Verzahnung
Shifted teeth clamping system with 2 screws

100 % rigid !

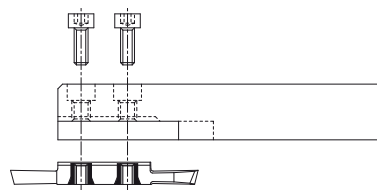
Système de serrage Applitec à denture décalée
Applitec-Spannsystem mit verschobener Verzahnung
Applitec clamping system with shifted teeth



Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)



Serrage type B*
Spannsystem Typ B*
Clamping system type B*



ajouter -B après le numéro d'article
-B nach der Artikelreferenz hinzufügen
add -B after the article number

Changement de la plaquette possible dans la machine, sans démontage du porte-outil
WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
The insert can be changed in the machine without removing the tool holder

TOP-Line



1^{er} choix
1. Wahl
1st choice



Recommandé
Empfohlen
Recommended



Pour pièces fragiles de très petits diamètres
Für empfindliche und sehr kleine Werkstücke
For fragile and very small work pieces

			Series					P	M		
Géométries de coupe Spanformgeometrien Cutting geometries		Arête de coupe Schneidkante Cutting edge	710/720	730/740	750/760	770/780	7050/7060	Acier de décolletage Automatenstahl Free-cutting steel	Acier allié Stahl Alloyed steel	Acier inoxydable Rostfreistahl Stainless steel	
	0°		•	•	•	•	•	★	✓	✓	
	0° PCD			•	•						
	X4°			•	•			★	★	★	
	XF			•	•	•	•	☆	★	★	
	X12°			•	•					☆	
	X25°			•	•					☆	
	U			•	•	•		☆	☆	☆	
	ZU8				•			★	★	★	
	X840				•						
	RAS				•			★	★	☆	

Conseils d'utilisation

Anwendungsempfehlungen

Application recommendations

Tronçonnage

Abstechen

Parting off

700 Series

	N					S	
	Aluminium	Laiton, bronze Messing & Bronze Brass & bronze	Laiton sans plomb [CuZn42, ...] Bleifreies Messing Lead-free brass	Ecobross	Cuivre Kupfer Copper	Titane Titan Titanium	Conseils et avantages Tipps und Vorteile Tips and benefits
	✓	★		✓	✓	✓	Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding
	☆	☆	☆	★	☆	☆	Durée de vie nettement prolongée Deutlich verlängerte Lebensdauer Significantly extended tool life
	✓		☆		✓	✓	Réduit l'effort de coupe, réaffûtable Reduziert Schneidkräfte, nachschleifbar Decreases cutting force, allows regrinding
					☆		Pour matières difficiles (pointe renforcée) Für schwierige Werkstoffe (verstärkte Spitze) For difficult materials (reinforced tip)
	★		☆		★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	★				☆	☆	Pour matières collantes faisant de très longs copeaux Für klebrige Werkstoffe mit sehr langen Spänen For sticky materials producing (very) long chips
							Pour resserrer le copeau, réaffûtage aisé Für Spanverschmälerung, einfaches Nachschleifen To narrow the chips, easy regrinding
	☆ <5% Si	☆				☆	Géométrie laser avec une très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	☆ <5% Si		★			☆	Pour l'usinage des matières sans plomb Bearbeitung bleifreier Werkstoffe Machining lead-free materials
						☆	Positif à 7°, réduit l'effort de coupe, réaffûtable Reduziert Schneidkräfte, nachschleifbar 7° positive, Reduces cutting force, allows regrinding



1^{er} choix
1. Wahl
1st choice



Recommandé
Empfohlen
Recommended



Pour pièces fragiles de très petits diamètres
Für empfindliche und sehr kleine Werkstücke
For fragile and very small work pieces

Géométries de coupe Spanformgeometrien Cutting geometries		Arête de coupe Schneidkante Cutting edge	Series			P		M	
			710/720	730/740	750/760	Acier de décolletage Automatenstahl Free-cutting steel	Acier allié Stahl Alloyed steel	Acier inoxydable Rostfreistahl Stainless steel	
	0°		•	•	•	★	✓	✓	
	0° PCD			•					
	PX			•	•	★	☆	☆	
	X			•	•	★	★	★	
	X5-EP				•	★	★	☆	
	X10-EP				•	☆	☆	★	
	VS			•	•	☆		☆	
	ZX10			•	•	★	★	★	
	ZX17			•				☆	
	ZX25				•			☆	
	ZXB10				•	★	★	★	
	ZXT				•	★	★	★	
	ZF-X			•	•				
	VX-800				•	★	★	☆	
	VUX				•	☆	☆	★	

Conseils d'utilisation

Anwendungsempfehlungen

Application recommendations

Tournage avant

Vorwärts drehen

Front turning

700 Series

	N					S	Conseils et avantages Tipps und Vorteile Tips and benefits
	Aluminium	Laiton, bronze Messing & Bronze Brass & bronze	Laiton sans plomb (CuZn42, ...) Bleifreies Messing Lead-free brass	Ecobross	Cuivre Kupfer Copper	Titane Titan Titanium	
	✓	✓		✓	✓	✓	Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding
	☆	☆	☆	★	☆	☆	Durée de vie nettement prolongée Deutlich verlängerte Lebensdauer Significantly extended tool life
	✓		☆		☆	☆	Très bonne maîtrise du copeau (7°) Sehr gute Spankontrolle Very efficient chip control
	★		☆		★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
							Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	☆					☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	✓				✓	✓	Brise-copeau pour usinage léger en finition Spanbrecher für leichte Schlichtbearbeitung Chip-breaker for light finishing operation
	☆ <5% Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	★ <5% Si				★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	★ <5% Si				★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	☆ <5% Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	☆ <5% Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
			★				Pour l'usinage des matières sans plomb Bearbeitung bleifreier Werkstoffe Machining lead-free materials
	☆				☆	☆	Pour l'usinage des matières sans plomb Bearbeitung bleifreier Werkstoffe Machining lead-free materials
	☆				☆	★	Roule-copeau bidirectionnel Bidirektionaler Spanroller Bi-directional chip-breaker



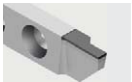
1^{er} choix
1. Wahl
1st choice



Recommandé
Empfohlen
Recommended



Pour pièces fragiles de très petits diamètres
Für empfindliche und sehr kleine Werkstücke
For fragile and very small work pieces

			Series			P		M
Géométries de coupe Spanformgeometrien Cutting geometries		Arête de coupe Schneidkante Cutting edge	710/720	730/740	750/760	Acier de décolletage Automatenstahl Free-cutting steel	Acier allié Stahl Alloyed steel	Acier inoxydable Rostfreistahl Stainless steel
	0°		●	●	●	★	✓	✓
	0° PCD			●				
	X			●	●	★	★	★
	VX-8°			●	●	★	★	☆
	VX-800			●	●	★	★	☆
	VX-15°			●	●	☆		☆
	VUX				●	☆	☆	★
	ZX10			●	●	★	★	★
	ZXB				●	★	★	★
	ZXT			●	●	★	★	★

Conseils d'utilisation

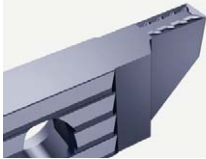
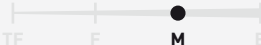
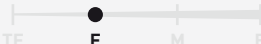
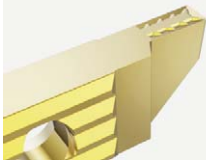
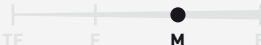
Anwendungsempfehlungen
Application recommendations

Tournage arrière

Rückwärts drehen
Back turning

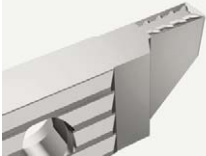
700 Series

	N					S	
	Aluminium	Laiton, bronze Messing & Bronze Brass & bronze	Laiton sans plomb [CuZn42, ...] Bleifreies Messing Lead-free brass	Ecobross	Cuivre Kupfer Copper	Titane Titan Titanium	Conseils et avantages Tipps und Vorteile Tips and benefits
	✓	✓		✓	✓	✓	Permet un réaffûtage aisé Erlaubt einfaches Nachschleifen Allows easy regrinding
	☆	☆	☆	★	☆	☆	Durée de vie nettement prolongée Deutlich verlängerte Lebensdauer Significantly extended tool life
	★		☆		★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	☆		☆		☆	☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	☆				☆	☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	★				★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	☆				☆	★	Roule-copeau bidirectionnel Bidirektionaler Spanroller Bi-directional chip breaker
	☆ <5% Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	☆ <5% Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control
	☆ <5% Si	☆	☆			☆	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control

<div>μK20</div>	<div><div>TiAlN</div></div>	<div><div> K20</div><div><div>μK20 + revêtement PVD</div><div>μK20 + PVD Beschichtung</div><div>μK20 + PVD coating</div></div><div><div></div></div></div>	<div><div><div>P★★★★★</div><div>M★★★★★</div><div>N★★★★★</div><div>S★★★★★</div></div><div><div>• excellente nuance universelle</div><div>• 1^{er} choix pour l'usinage des aciers, aciers inoxydables et alliages de titane</div><div>• très bonne résistance à la température</div></div></div>	<div><div><div>• beste Universalsorte</div><div>• erste Wahl von Stahl, rostfreiem Stahl und Titanlegierungen</div><div>• sehr gute Warmfestigkeit</div></div></div>	<div><div><div>• best universal grade</div><div>• first choice for steel, stainless steel and titanium alloys machining</div><div>• very good heat resistance</div></div></div>
<div>μK20</div>	<div><div>TiAlX</div></div>	<div><div><div> K20</div><div><div>μK20 + revêtement PVD</div><div>μK20 + PVD Beschichtung</div><div>μK20 + PVD coating</div></div><div><div></div></div></div></div>	<div><div><div>P★★★★★</div><div>M★★★★★</div><div>N★★★★★</div><div>S★★★★★</div></div><div><div>• nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox</div><div>• aciers alliés contenant : chrome nickel, vanadium, molybdène, ...</div></div></div>	<div><div><div>• sehr verschleißfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox</div><div>• legierter Stahl enthaltend : Chrom-Nickel, Vanadium, Molybdän, ...</div></div></div>	<div><div><div>• very wear and high temperature resistant grade. Recommended for following material : Inox 304, 316L, 317L, 904, Phynox</div><div>• alloy steel containing : Chrome-nickel, Vanadium, Molybdenum, ...</div></div></div>
<div>μK20</div>	<div><div>TiN</div></div>	<div><div><div> K20</div><div><div>μK20 + revêtement PVD</div><div>μK20 + PVD Beschichtung</div><div>μK20 + PVD coating</div></div><div><div></div></div></div></div>	<div><div><div>P★★★★★</div><div>M★★★★★</div><div>N★★★★★</div><div>S★★★★★</div></div><div><div>• nuance pour l'usinage des matières peu résistantes qui créent des arêtes rapportées</div><div>• très faible coefficient de frottement</div><div>• à éviter pour l'usinage du titane</div></div></div>	<div><div><div>• Sorte für die Bearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden</div><div>• sehr geringer Reibwert</div><div>• für die Bearbeitung von Titan nicht geeignet</div></div></div>	<div><div><div>• grade for the machining of low resistance materials which causes edge build-up</div><div>• very low friction ratio</div><div>• not suitable for titanium machining</div></div></div>

K20

Nuances
Sorten
Grades

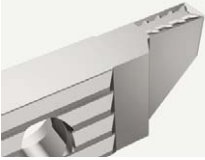
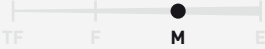
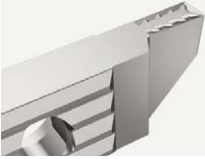
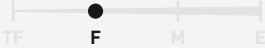
μK20	<div>ST</div> 	<div>● K20</div> <div>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</div> <div><div>TF</div><div>F</div><div>M</div><div>E</div></div>	<div><div>P</div>★★★★★</div> <div><div>M</div>★★★★★</div> <div><div>N</div>★★★★★</div> <div><div>S</div>★★★★★</div>	<ul style="list-style-type: none">• nuance résistante à la température, destinée à l'usinage des matières suivantes : inox, titane allié, alliages à base de nickel, chrome cobalt, les matières avec une dureté supérieure à > 50 HRC	<ul style="list-style-type: none">• verschleißfeste und temperaturbeständige Sorte. Für folgende Materialien empfohlen : Inox, legiertes Titan, Nickellegierungen, Chrom-Kobalt, Materialien härter als > 50 HRC	<ul style="list-style-type: none">• wear and temperature-resistant grade. Recommended for following materials : Inox, titanium alloys, nickel-based alloys, chrome-cobalt, and materials harder than > 50 HRC
	<div>N</div> 	<div>● K20</div> <div>Non revêtu Unbeschichtet Uncoated</div>	<div><div>P</div>★☆☆☆☆</div> <div><div>M</div>★☆☆☆☆</div> <div><div>N</div>★★★★★</div> <div><div>S</div>★★★★★</div>	<ul style="list-style-type: none">• supporte les coupes interrompues et autres conditions d'usinage défavorables	<ul style="list-style-type: none">• für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet	<ul style="list-style-type: none">• suitable for interrupted cut and other unfavourable machining conditions

Nuances

Sorten

Grades

K10 - K20

μK10 - μK20	<div><p>KCR</p></div>	<div><p>☉ K10 - K20</p><p>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</p></div>	<div><p>P ★★★★★</p><p>M ★★★★★</p><p>N ★★★★★</p><p>S ★★★★★</p></div>
	<ul style="list-style-type: none">• nuance spécifique aux matériaux non ferreux tels que cuivre, laiton, laiton sans plomb, bronze, maillechort• réduit le collage. Alternative aux revêtements DLC pour certains domaines d'applications	<ul style="list-style-type: none">• spezifische Sorte, für Nichteisenmetalle wie Kupfer, Messing, bleifreies Messing, Bronze, Neusilber• Verringerung des Klebens. Alternative zu DLC-Beschichtungen in gewissen Einsatzbereichen	<ul style="list-style-type: none">• specific grade for non-ferrous materials such as copper, brass, lead-free brass, bronze and nickel silver• reduces sticking. Alternative to DLC coatings for certain applications
μK10 - μK20	<div><p>KCRF</p></div>	<div><p>☉ K10 - K20</p><p>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</p></div>	<div><p>P ★★★★★</p><p>M ★★★★★</p><p>N ★★★★★</p><p>S ★★★★★</p></div>
	<ul style="list-style-type: none">• nuance spécifique aux matériaux non ferreux tels que cuivre, laiton, laiton sans plomb, bronze, maillechort• réduit le collage. Alternative aux revêtements DLC pour certains domaines d'applications	<ul style="list-style-type: none">• spezifische Sorte, für Nichteisenmetalle wie Kupfer, Messing, bleifreies Messing, Bronze, Neusilber• Verringerung des Klebens. Alternative zu DLC-Beschichtungen in gewissen Einsatzbereichen	<ul style="list-style-type: none">• specific grade for non-ferrous materials such as copper, brass, lead-free brass, bronze and nickel silver• reduces sticking. Alternative to DLC coatings for certain applications

K10 - K20

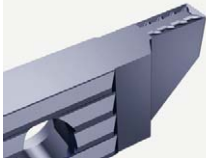
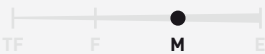
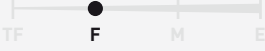
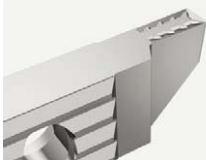
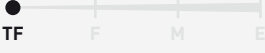
μK10 - μK20	<div>KST</div> 	<div>● K10 - K20</div> <div>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</div> <div>TF — F — ● M — E</div>	<div>P ★★★★★</div> <div>M ★★★★★</div> <div>N ★★★★★</div> <div>S ★★★★★</div>
	<ul style="list-style-type: none">• nuance présentant d'excellentes propriétés de résistance à l'usure et ténacité, destinée à l'usinage des matières suivantes : inox, titane allié, alliages à base de nickel, chrome cobalt, les matières avec une dureté supérieure à > 50 HRC	<ul style="list-style-type: none">• verschleißfeste und zähe Sorte. Für folgende Materialen empfohlen : Inox, legiertes Titan, Nickellegierungen, Chrom-Kobalt, Materialien härter als > 50 HRC	<ul style="list-style-type: none">• grade with excellent wear resistance and toughness properties. Recommended for following materials : Inox, titanium alloys, nickel-based alloys, chrome-cobalt, and materials harder than > 50 HRC
μK10 - μK20	<div>KN</div> 	<div>● K10 - K20</div> <div>Non revêtu Unbeschichtet Uncoated</div>	<div>P ★★★★★</div> <div>M ★★★★★</div> <div>N ★★★★★</div> <div>S ★★★★★</div>
	<ul style="list-style-type: none">• nuance micro-grain, alliant une très bonne résistance à l'usure et une bonne ténacité.• recommandé pour l'usinage des matières ne nécessitant aucun revêtement, par exemple le titane pur.	<ul style="list-style-type: none">• verschleißfeste Feinkornsorte, unbeschichtet, die eine sehr gute Verschleißfestigkeit mit guter Zähigkeit kombiniert.• empfohlen für die Bearbeitung von Werkstoffen, die keine Beschichtung erfordern, wie zum Beispiel reines Titan.	<ul style="list-style-type: none">• micro-grain grade, combining excellent wear resistance with good toughness.• recommended for machining materials that do not require any coating, such as pure titanium.

Nuances

Sorten

Grades

K10

<div>μK10</div>	<div><div>HTA</div><div></div></div>	<div><div> K10</div><div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div><div></div><div>TF F M E</div></div>	<div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div> <div><ul style="list-style-type: none">• nuance très résistante à l'usure• pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane</div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★	<div><ul style="list-style-type: none">• sehr verschleissfeste Sorte• für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen</div>	<div><ul style="list-style-type: none">• very wear resistant grade• for light machining of steel, stainless steel and titanium alloys under favourable machining conditions</div>
P	★★★★★												
M	★★★★★												
N	★★★★★												
S	★★★★★												
<div>μK10</div>	<div><div>HTAX</div><div></div></div>	<div><div> K10</div><div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div><div></div><div>TF F M E</div></div>	<div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div> <div><ul style="list-style-type: none">• nuance très résistante à l'usure et à la température, pour l'usinage en finition avec faible avance de petites pièces. Recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox</div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★	<div><ul style="list-style-type: none">• sehr verschleissfeste und temperaturbeständige Sorte, für Feinbearbeitung von kleinen Teilen mit geringer Vorschub. Für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox</div>	<div><ul style="list-style-type: none">• very wear and high temperature resistant grade, for light machining of small parts with low cutting feed. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox</div>
P	★★★★★												
M	★★★★★												
N	★★★★★												
S	★★★★★												
<div>μK10</div>	<div><div>HCR-TF</div><div></div></div>	<div><div> K10</div><div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div><div></div><div>TF F M E</div></div>	<div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div> <div><ul style="list-style-type: none">• nuance spécifique aux matériaux non ferreux tels que cuivre, laiton, laiton sans plomb, bronze, maillechort. Réduit le collage. Alternative aux revêtements DLC pour certains domaines d'applications</div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★	<div><ul style="list-style-type: none">• spezifische Sorte, für Nichteisenmetalle wie Kupfer, Messing, bleifreies Messing, Bronze, Neusilber. Verringerung des Klebens. Alternative zu DLC-Beschichtungen in gewissen Einsatzbereichen</div>	<div><ul style="list-style-type: none">• specific grade for non-ferrous materials such as copper, brass, lead-free brass, bronze and nickel silver. Reduces sticking. Alternative to DLC coatings for certain applications</div>
P	★★★★★												
M	★★★★★												
N	★★★★★												
S	★★★★★												

μK10	<div> </div> <div>HTiN</div> <div> K10 </div> <div> μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating </div> <div> </div> <div> <table border="1"> <tr><td>P</td><td>★★★★★</td></tr> <tr><td>M</td><td>★★★★★</td></tr> <tr><td>N</td><td>★★★★★</td></tr> <tr><td>S</td><td>★★★★★</td></tr> </table> </div> <div> <ul style="list-style-type: none"> • nuance pour l'usinage en finition des matières peu résistantes qui créent des arêtes rapportées • très faible coefficient de frottement • à éviter pour l'usinage du titane </div> <div> <ul style="list-style-type: none"> • Sorte für die Feinbearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden • sehr geringer Reibwert • für die Bearbeitung von Titan nicht geeignet </div> <div> <ul style="list-style-type: none"> • grade for light machining of low resistance materials which causes edge build-up • very low friction ratio • not suitable for titanium machining </div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★								
M	★★★★★								
N	★★★★★								
S	★★★★★								
μK10	<div> </div> <div>HAC</div> <div> K10 </div> <div> μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating </div> <div> </div> <div> <table border="1"> <tr><td>P</td><td>★★★★★</td></tr> <tr><td>M</td><td>★★★★★</td></tr> <tr><td>N</td><td>★★★★★</td></tr> <tr><td>S</td><td>★★★★★</td></tr> </table> </div> <div> <ul style="list-style-type: none"> • nuance pour métaux non ferreux • très faible coefficient de frottement • 1^{er} choix pour l'usinage des aluminums jusqu'à 5% Si, des cuivres et titanes faiblement alliés </div> <div> <ul style="list-style-type: none"> • Sorte für Nichteisenmetalle • sehr geringer Reibwert • erste Wahl von Aluminium bis 5% Si, Kupfer und niedriglegiertem Titan </div> <div> <ul style="list-style-type: none"> • grade non-ferrous materials • very low fiction ration • first choice for aluminium up to 5% Si, copper and low alloyed titanium </div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★								
M	★★★★★								
N	★★★★★								
S	★★★★★								
μK10	<div> </div> <div>HN</div> <div> K10 </div> <div> Non revêtu Unbeschichtet Uncoated </div> <div> <table border="1"> <tr><td>P</td><td>★☆☆☆☆</td></tr> <tr><td>M</td><td>★☆☆☆☆</td></tr> <tr><td>N</td><td>★★★★★</td></tr> <tr><td>S</td><td>★★★★★</td></tr> </table> </div> <div> <ul style="list-style-type: none"> • nuance micro-grain très résistante à l'usure • recommandé pour l'usinage du titane faiblement allié • déconseillé en cas de coupe interrompue </div> <div> <ul style="list-style-type: none"> • verschleißsfeste Feinkornsorte • für die Bearbeitung von niedrig legiertem Titan empfehlenswert • für unterbrochene Schnitte nicht geeignet </div> <div> <ul style="list-style-type: none"> • wear resistant micro-grain grade • suitable for the machining of low alloyed titanium • not suitable for interrupted cut </div>	P	★☆☆☆☆	M	★☆☆☆☆	N	★★★★★	S	★★★★★
P	★☆☆☆☆								
M	★☆☆☆☆								
N	★★★★★								
S	★★★★★								

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

		Tournage Drehen Turning			Tronçonnage Abstechen Parting off		
Matière Werkstoff Material		VC	Prof. de passe Schnitttiefe Depth of cut	Avance Vorschub Feed	VC	Largeur de coupe Abstechbreite Cutting width	Avance Vorschub Feed
		(m/min)	(mm)	(mm/U)	(m/min)	(mm)	(mm/U)
Acier de décolletage Automatenstahl Free-cutting steel		120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	80 - 150	0.50 - 1.50 1.50 - 3.50	0.01 - 0.08 0.03 - 0.15
Acier Stahl Steel	< 600 N/mm² 	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	70 - 120	0.50 - 1.50 1.50 - 3.50	0.01 - 0.06 0.03 - 0.12
Acier Stahl Steel	< 800 N/mm² 	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20	60 - 100	0.50 - 1.50 1.50 - 3.50	0.01 - 0.05 0.03 - 0.10
Acier Stahl Steel	> 800 N/mm² 	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	40 - 80	0.50 - 1.50 1.50 - 3.50	0.01 - 0.04 0.03 - 0.08
Acier inoxydable Rostfreistahl Stainless steel		60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	60 - 100	0.50 - 1.50 1.50 - 3.50	0.01 - 0.04 0.03 - 0.08
Aluminium Si <12%		200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	180 - 400	0.50 - 1.50 1.50 - 3.50	0.01 - 0.10 0.03 - 0.20
Aluminium Si >12%		180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	150 - 300	0.50 - 1.50 1.50 - 3.50	0.01 - 0.10 0.03 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze		100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35	100 - 300	0.50 - 1.50 1.50 - 3.50	0.01 - 0.10 0.03 - 0.20
Titane Titan Titanium		30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15	30 - 50	0.50 - 1.50 1.50 - 3.50	0.01 - 0.03 0.03 - 0.06

Indications pour premier réglage
Hinweise für die erste Einrichtung
Indications for first setting

Ébauche Schruppen Roughing	Finition Schlichten Finishing
<ul style="list-style-type: none">• vitesse de coupe moyenne• avance élevée	<ul style="list-style-type: none">• vitesse de coupe élevée• avance faible
<ul style="list-style-type: none">• durchschnittliche Schnittgeschwindigkeit• hoher Vorschub	<ul style="list-style-type: none">• hohe Schnittgeschwindigkeit• niedriger Vorschub
<ul style="list-style-type: none">• average cutting speed• high feed rate	<ul style="list-style-type: none">• high cutting speed• low cutting feed

Remarques importantes Wichtige Bemerkungen Important remarks
<ul style="list-style-type: none">• en raison des limites de la machine, il n'est souvent pas possible d'atteindre les vitesses de coupe préconisées• les outils Applitec sont spécialement développés pour permettre de hautes performances, même dans des conditions de coupe défavorables• des applications non préconisées dans le tableau ci-contre peuvent également s'avérer efficaces
<ul style="list-style-type: none">• wegen begrenzter Maschinenleistung ist es oft nicht möglich, die vorgeschlagenen Schnittgeschwindigkeiten zu erreichen• Applitec Werkzeuge sind besonders dazu entwickelt, um sogar bei ungünstigen Schnittdaten leistungsfähig zu sein• die in der nebenstehender Tabelle nicht erwähnten Anwendungsfälle können sich auch effizient erweisen
<ul style="list-style-type: none">• due to the limitations of the machine, it is often not possible to achieve the recommended cutting speeds• Applitec tools are specially developed to deliver high performance, even in unfavorable cutting conditions• applications not mentioned in the opposite table can also be efficient

Nuances PCD

PKD Sorten

PCD grades

PCD / PKD	PCD / PKD		<div><div>P☆☆☆☆</div><div>M☆☆☆☆</div><div>N★★★★★</div><div>S★★★★★</div></div>
		<div><div>Diamant polycristallin</div><div>Polykristalliner Diamant</div><div>Polycrystalline diamond</div></div>	
	<ul style="list-style-type: none">le PCD est principalement utilisé pour l'usinage de matériaux non ferreux très abrasifsil offre une haute dureté, une faible friction et une excellente conductivité thermique, des caractéristiques qui permettent d'atteindre des vitesses de coupe élevées et d'augmenter la durée de vie des outils	<ul style="list-style-type: none">PKD wird hauptsächlich für die Zerspanung hochabrasiver, nicht eisenhaltiger Werkstoffe verwendeter zeichnet sich durch hohe Härte, geringe Reibung und exzellente Wärmeleitfähigkeit aus – Eigenschaften, die hohe Schnittgeschwindigkeiten ermöglichen und die Standzeit der Werkzeuge erhöhen	<ul style="list-style-type: none">PCD is primarily used for machining highly abrasive non-ferrous materialsit features high hardness, low friction, and excellent thermal conductivity - characteristics that enable high cutting speeds and extend tool life

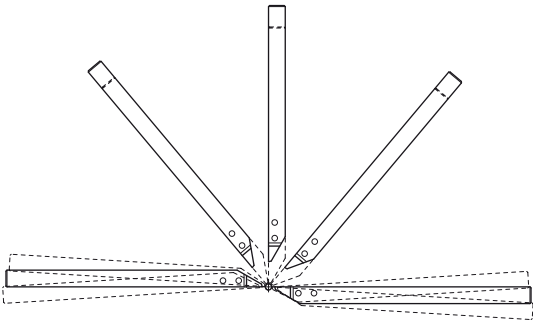
Paramètres de coupe indicatifs PCD

PKD empfohlene Schnittwerte

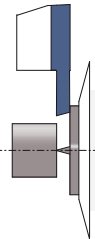
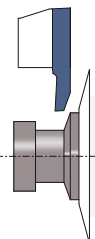
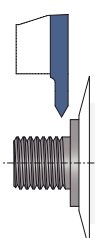
PCD standard machining data

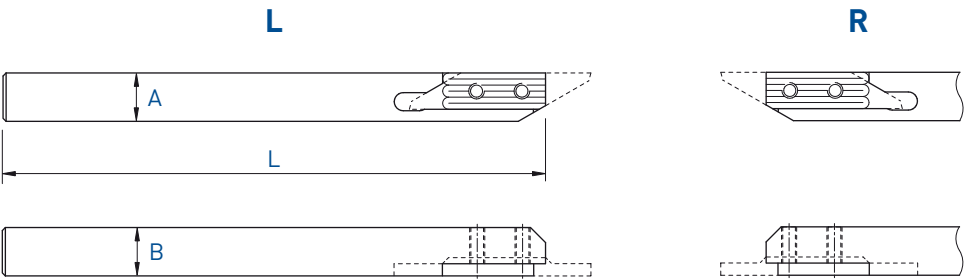
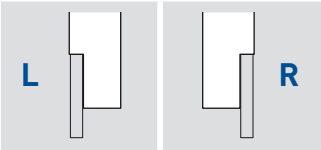
Matière Werkstoff Material		Tournage et tronçonnage Drehen und Abstechen Turning and parting off		
		VC	Prof. de passe Schnitttiefe Depth of cut	Avance Vorschub Feed
		(m/min)	(mm)	(mm/U)
Aluminium Si <12%	(N)	250 - 350	0.05 - 1.0 1.0 - 4.0	0.04 - 0.07 0.05 - 0.10
Aluminium Si >12%	(N)	180 - 250	0.05 - 1.0 1.0 - 4.0	0.10 - 0.25 0.12 - 0.36
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	(N)	350 - 450	0.05 - 1.0 1.0 - 4.0	0.04 - 0.08 0.05 - 0.11
Alliage de cuivre sans plomb (ECOBASS) Kupferlegierung ohne Blei (ECOBASS) Lead-free copper alloy (ECOBASS)	(N)	320 - 420	0.05 - 1.0 1.0 - 4.0	0.03 - 0.07 0.04 - 0.09
Plastique renforcé de fibres de verre, graphite Glasfaserverstärkter Kunststoff, Graphit Glass fiber reinforced plastic, graphite	(N)	450 - 600	0.05 - 1.0 1.0 - 4.0	0.04 - 0.08 0.05 - 0.11
Thermoplastique renforcé de fibres de carbone, téflon Kohlenstofffaserverstärkter Thermoplast, Teflon Carbon fiber reinforced thermoplastic, Teflon	(N)	450 - 600	0.05 - 1.0 1.0 - 4.0	0.04 - 0.08 0.05 - 0.11
Or, argent et platine Gold, Silber und Platin Gold, silver and platinum	(N)	320 - 370	0.05 - 1.0 1.0 - 4.0	0.03 - 0.06 0.04 - 0.07

L		R	
Type	Page	Type	Page
710	1.24	720	1.24
710-NOVIBRA	1.25	721	1.26
711	1.26	721-EP	1.33
711-EP	1.33	722	1.27
712	1.27	723-30	1.28
713-30	1.28	723-45	1.29
713-45	1.29	723-60	1.30
713-60	1.30	724	1.31
714	1.31	726	1.32
716	1.32		



Porte-outils et plaquettes pour machines à cames
Halter und WSP für kurvengesteuerte Maschinen
Tool holders and inserts for cam driven machines

	710 / 720 Porte-outils Halter Holders	> 1.24
	711 / 721 Tronçonnage Abstechen Parting off	> 1.26
	712 / 722 Tournage avant Vorwärts drehen Front turning	> 1.27
	713 / 723 Tournage arrière Rückwärts drehen Back turning	> 1.28
	714 / 724 Fonçage-tournage Einstechen und drehen Grooving and turning	> 1.31
	716 / 726 Filetage Gewinde drehen Threading	> 1.32
	Plaquettes ébauches WSP-Rohlinge Blank inserts	> 1.33

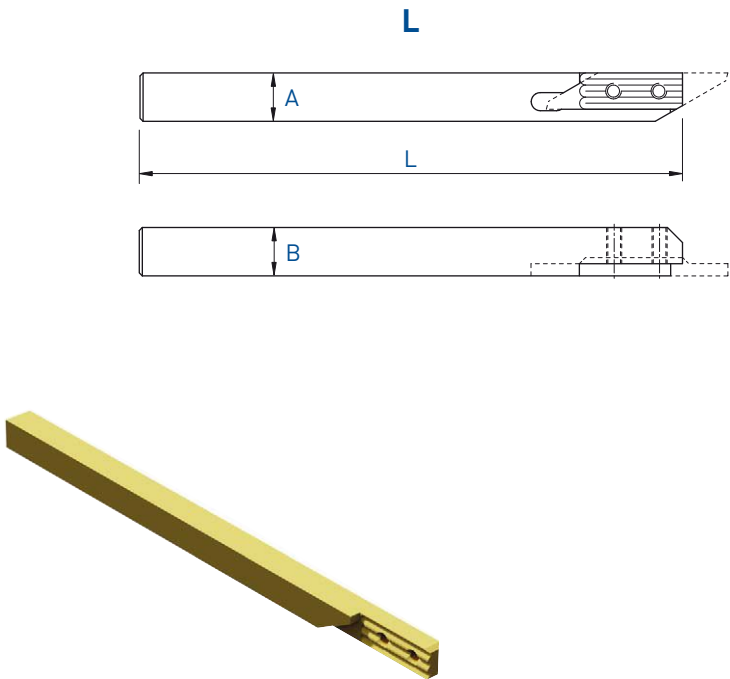
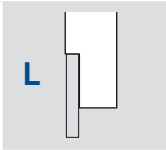


A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
6 x 6	115	A	710-6	-
7 x 7	115	A	710-7	720-7
8 x 8	115	A	710-8	720-8
8 x 8	140	A	710-8-140	-
10 x 10	115	A	710-10	720-10
12 x 12	130	A	710-12	720-12

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils en métal lourd anti-vibratoire
Schwingungsdämpfende Schwermetallhalter
Low vibration heavy metal holders

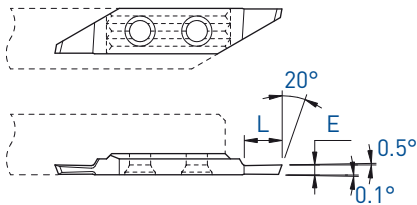
710-NOVIBRA



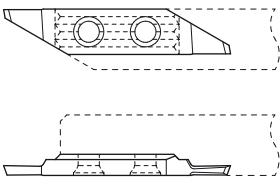
A x B	L	Serrage Spannsystem Clamping	Art. N°
6 x 6	115	A	710-6-NOVIBRA
7 x 7	115	A	710-7-NOVIBRA
8 x 8	115	A	710-8-NOVIBRA

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

L



R



L



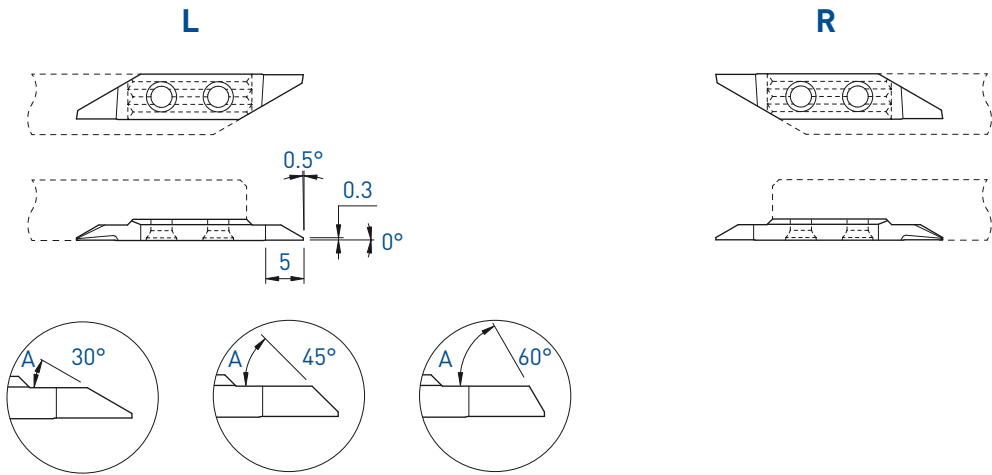
R



E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P		
			M	M		M	M			M	M		M	M		M	M
			N	N		N	N	N				N	N	N	N		
			S		S	S		S				S		S	S		
			TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]				TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]
0.5	2	711-0.5	●	●	●	●		●	-								
0.8	3	711-0.8	●	●	●	●	●	●	721-0.8	●	●	●					
0.9	3	711-0.9	●	●	●	●	●	●	-								
1.0	4	711-1.0	●	●	●	●	●	●	721-1.0	●	●	●	●		●		
1.1	4	711-1.1	●	●	●	●	●	●	-								
1.2	5	711-1.2	●	●	●	●	●	●	721-1.2	●	●	●	●		●		
1.3	5	711-1.3	●	●	●	●	●	●	-								
1.4	5	711-1.4	●	●	●				-								
1.5	6.5	711-1.5	●	●	●	●	●	●	721-1.5	●	●	●	●	●		●	
1.8	6.5	711-1.8	●	●	●	●	●	●	721-1.8	●	●	●					
2.0	6.5	711-2.0	●	●	●				721-2.0	●	●	●					

Tournage avant
Vorwärts drehen
Front turning

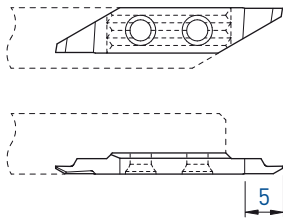
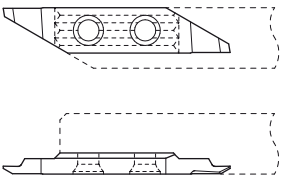
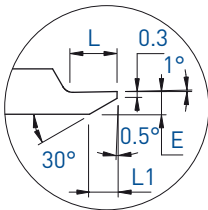
712 / 722



		L						R					
													
A	Art. N°	P M N S	P M N S	P N S	P M N S	P M N S	P N S	P M N S	P M N S	P M N S	P M N S	P M N S	P M N S
		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
30°	712-30	•	•	•	•	•	•	•	•	•	•	•	•
45°	712-45	•	•	•	•	•	•	•	•	•	•	•	•
60°	712-60	•	•	•	•	•	•	•	•	•	•	•	•

L

R



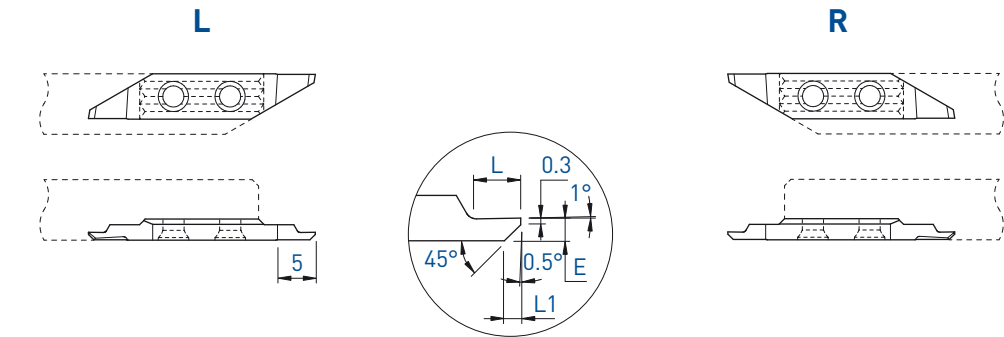
L

R

E	L	L1	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
				TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.8	1.6	0.85	713-30-0.8	•	•	•				723-30-0.8	•	•	•	•		•
0.9	1.6	1.05	713-30-0.9	•	•	•				-						
1.0	2.0	1.2	713-30-1.0	•	•	•	•	•	•	723-30-1.0	•	•	•	•		•
1.1	2.0	1.4	713-30-1.1	•	•	•				-						
1.2	2.5	1.55	713-30-1.2	•	•	•				723-30-1.2	•	•	•			
1.3	2.5	1.7	713-30-1.3	•	•	•				-						
1.4	3.0	1.9	713-30-1.4	•	•	•				-						
1.5	3.0	2.1	713-30-1.5	•	•	•	•	•	•	723-30-1.5	•	•	•			
1.8	4.0	2.6	713-30-1.8	•	•	•				723-30-1.8	•	•	•			
2.0	4.0	2.9	713-30-2.0	•	•	•	•	•	•	723-30-2.0	•	•	•			

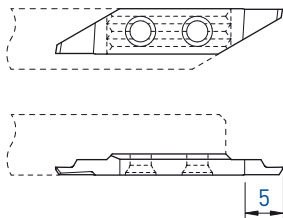
Tournage arrière
Rückwärts drehen
Back turning

713-45° / 723-45°

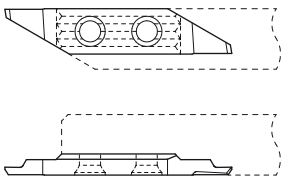
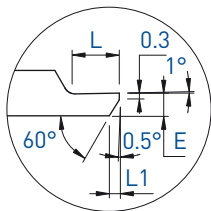


<div>L</div>							<div>R</div>						
	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>
Art. N°	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]	Art. N°	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]
713-45-0.8	●	●	●	●		●	723-45-0.8	●	●	●			
713-45-0.9	●	●	●				-						
713-45-1.0	●	●	●	●		●	723-45-1.0	●		●			
713-45-1.1	●	●	●				-						
713-45-1.2	●	●	●				723-45-1.2	●	●	●			
713-45-1.3	●	●	●				-						
713-45-1.4	●	●	●				-						
713-45-1.5	●	●	●	●	●	●	723-45-1.5	●	●	●			
713-45-1.8	●	●	●				723-45-1.8	●		●			
713-45-2.0	●	●	●				723-45-2.0	●	●	●			

L



R



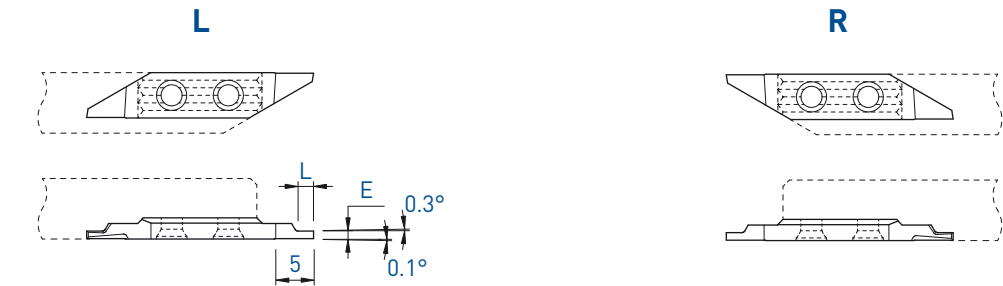
L

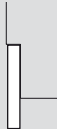
R

E	L	L1	Art. N°	P	P	P	Art. N°	P	P	P
				M	M			M	M	
				N	N			N	N	
				S		S		S		S
				TiAlN	TiN	N [µk20]				
0.8	1.6	0.3	713-60-0.8	●	●	●	723-60-0.8	●	●	●
0.9	1.6	0.35	713-60-0.9	●	●	●	-			
1.0	2.0	0.4	713-60-1.0	●	●	●	723-60-1.0	●		●
1.1	2.0	0.45	713-60-1.1	●	●	●	-			
1.2	2.5	0.5	713-60-1.2	●	●	●	723-60-1.2	●		●
1.3	2.5	0.6	713-60-1.3	●	●	●	-			
1.4	3.0	0.65	713-60-1.4	●	●	●	-			
1.5	3.0	0.7	713-60-1.5	●	●	●	723-60-1.5	●	●	●
1.8	4.0	0.9	713-60-1.8	●	●	●	723-60-1.8	●		●
2.0	4.0	1.0	713-60-2.0	●	●	●	723-60-2.0	●	●	●

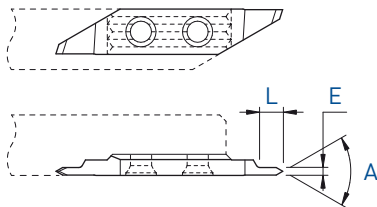
Fonçage-tournage
Einstechen und drehen
Grooving and turning

714 / 724

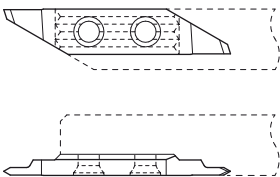


		<div>L</div> 							<div>R</div> 						
E	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> N [µk20]	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTA	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HN [µk10]	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> N [µk20]	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTA	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HN [µk10]
0.5	1.0	714-0.5	●	●	●				724-0.5	●	●	●	●		●
0.6	1.0	714-0.6	●	●	●				724-0.6	●	●	●			
0.7	1.5	714-0.7	●	●	●				724-0.7	●	●	●			
0.8	1.5	714-0.8	●	●	●	●	●	●	724-0.8	●	●	●			
0.9	2.0	714-0.9	●	●	●				724-0.9	●		●			
1.0	2.0	714-1.0	●	●	●	●	●	●	724-1.0	●	●	●			
1.1	2.0	714-1.1	●	●	●				724-1.1	●		●			
1.2	2.5	714-1.2	●	●	●				724-1.2	●		●			
1.3	2.5	714-1.3	●	●	●				724-1.3	●	●	●			
1.4	3.0	714-1.4	●	●	●				724-1.4	●		●			
1.5	3.0	714-1.5	●	●	●	●	●	●	724-1.5	●	●	●			

L



R



L



R



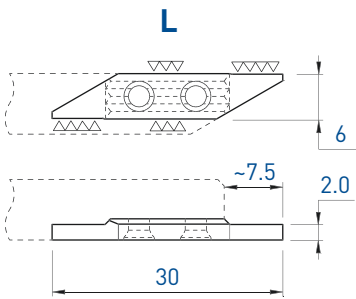
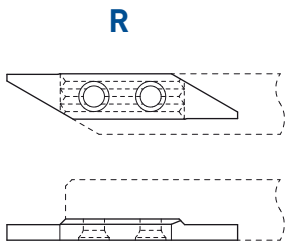
A	E	L	Art. N°	P	P	P	Art. N°	P	P	P
				M	M			M	M	
				N	N			N	N	
				S		S		S		S
				TiAlN	TiN	N (µk20)		TiAlN	TiN	N (µk20)
60°	1.0	3	716-60-1.0	•	•	•	726-60-1.0	•	•	•
60°	1.5	4	716-60-1.5	•	•	•	726-60-1.5	•	•	•
55°	1.0	3	716-55-1.0	•	•	•	726-55-1.0	•		•
55°	1.5	4	716-55-1.5	•	•	•	726-55-1.5	•		•

Plaquettes ébauches

WSP-Rohlinge

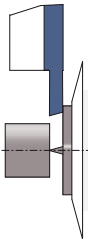
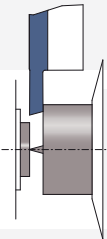
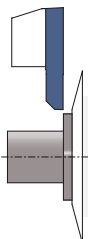
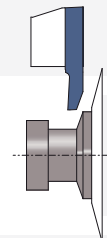
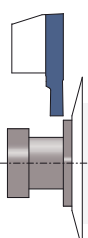
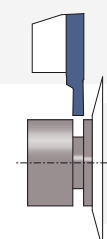
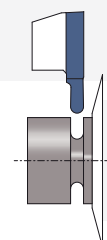
Blank inserts

711-EP / 721-EP



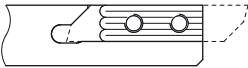
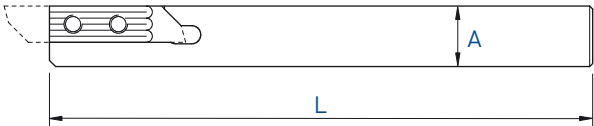
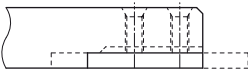
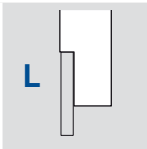
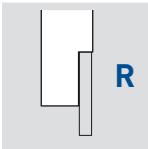
L							R						
Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
	M	M		M	M			M	M		M	M	
	N	N		N	N	N		N	N		N	N	N
	S		S	S		S		S		S	S		S
	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]		TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]
711-EP	•	•	•	•	•	•	721-EP	•	•	•	•	•	•

L			R		
Type		Page	Type		Page
730	730	1.36	740	740	1.36
	730-JET	1.37		740-C	1.38
	730-NOVIBRA	1.40		740-D-JET	1.42
	730RC	1.39		740-JET	1.37
731	731	1.43		740-NOVIBRA	1.40
	731-E	1.88		740/730-D	1.41
	731-EP	1.89	741	741	1.43
	731N	1.49/1.57		741-E	1.88
	731R	1.51		741-EP	1.89
	731R-PCD	1.58		741-PCD	1.50
	731RU	1.56		741L	1.51
	731RX12	1.54		741LX12	1.54
	731RX25	1.55		741LX25	1.55
	731RX4	1.52		741LX4	1.52
	731RXF	1.53		741LXF	1.53
	731U	1.48		741N	1.49/1.57
	731X12	1.46		741U	1.48
	731X25	1.47		741X12	1.46
	731X4	1.44		741X25	1.47
	731XF	1.45		741X4	1.44
732	732	1.59		741XF	1.45
	732PX	1.60	742	742	1.59
	732X	1.61		742-PCD	1.64
733	733	1.65		742PX	1.60
	733P	1.73		742VUX	1.62
	733VX-15°	1.70		742X	1.61
	733VX-8°	1.68		742ZF-X	1.63
	733VX-805	1.69	743	743	1.65
	733X	1.66		743-PCD	1.74
	733ZX	1.72		743P	1.73
734	734	1.75		743VX-15°	1.70
	734VS	1.76		743VX-8°	1.68
	734X	1.77		743VX-805	1.69
	734ZX	1.78		743VUX	1.71
735	735	1.82		743VUX8	1.67
	735X-90	1.83		743X	1.66
736	736	1.84		743ZX	1.72
	736-A60°	1.85	744	744	1.75
	736-M	1.86		744-PCD	1.81
737	737	1.87		744VS	1.76
				744X	1.77
				744ZF-X	1.80
				744ZX	1.78
				744ZXT	1.79
			745	745	1.82
				745X-90	1.83
			746	746	1.84
				746-A60°	1.85
				746-M	1.86
			747	747	1.87

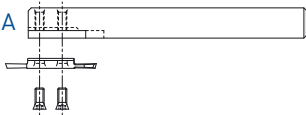
		730 / 740 Porte-outils Halter Holders		> 1.36
	731 / 741 Tronçonnage Abstechen Parting off			> 1.43
			741L / 731R Tronçonnage - coupe déportée Abstechen - versetztes Schneiden Parting off - cut off line	> 1.51
	732 / 742 Tournage avant Vorwärts drehen Front turning			> 1.59
			733 / 743 Tournage arrière Rückwärts drehen Back turning	> 1.65
	734 / 744 Fonçage-tournage Einstechen und drehen Grooving and turning			> 1.75
			735 / 745 Gorges Einstechen Grooving	> 1.82
	736 / 746 Filetage Gewinde drehen Threading			> 1.84
			737 / 747 Plaquettes à rayon Radius Wendeplatten Radius inserts	> 1.87
Plaquettes ébauches WSP-Rohlinge Blank inserts				> 1.88

L

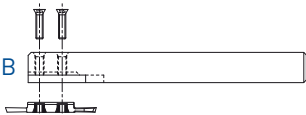
R



Serrage standard A
Standard Spannsystem A
Standard clamping system A



Serrage B
Spannsystem B
Clamping system B

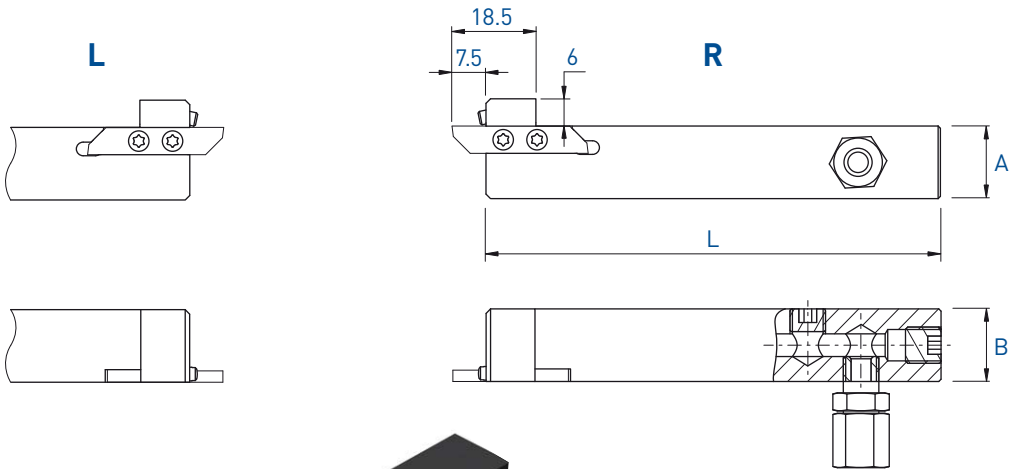
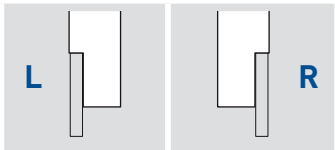


A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
7 x 7	115	A	730-7	740-7
8 x 8	115	A + B	730-8	740-8
8 x 8	140	A + B	730-8-140	-
9.52 x 9.52	115	A + B	730-9.52	740-9.52
10 x 10	115	A + B	730-10	740-10
10 x 10	50	A + B	730-10-50	740-10-50
12 x 12	130	A + B	730-12	740-12
12 x 12	90	A + B	730-12-90	740-12-90
12.7 x 12.7	130	A + B	730-12.7	740-12.7
16 x 16	130	A + B	730-16	740-16
16 x 16	75	A + B	730-16-75	740-16-75
20 x 20	120	A + B	730-20	740-20

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

730-JET / 740-JET



A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
8 x 10	100	A + B	-	740-0810-JET
10 x 12	100	A + B	730-1012-JET	740-1012-JET
10 x 12	80	A + B	-	740-1012-80-JET
12 x 12	100	A + B	730-12-JET	740-12-JET
12.7 x 12.7	100	A + B	730-12.7-JET	740-12.7-JET
16 x 16	100	A + B	730-16-JET	740-16-JET
20 x 20	100	A + B	730-20-JET	740-20-JET

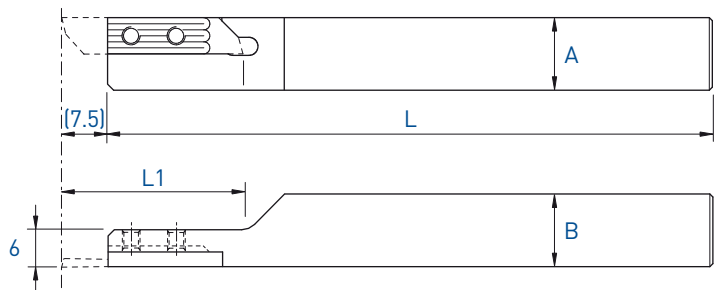
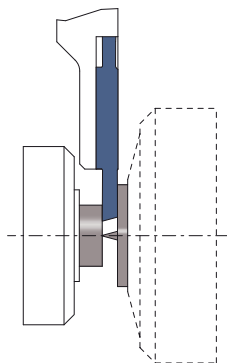
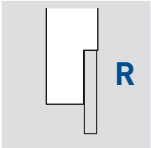
Chaque support est livré avec
une ou plusieurs vis. Les clés sont
à commander séparément.

Jeder Halter wird mit einer oder
mehreren Schrauben geliefert. Die
Schlüssel sind separat zu bestellen.

Each holder is supplied with one
or more screws. The keys must be
ordered separately.

Pièces de rechange Ersatzteile Spare parts	Art. N°	Art. N°	Buses Düsen Nozzles	Option
740-0810-JET	J-M5-D5	JB-M5	-	JC-M5-D5
730-JET / 740-JET	J-M8X1-D6	JB-M8X1	JJ-M3X6-D1.5	-
				More option see JET-Line

R



A x B	L	L1	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	24	A	740-C-8
10 x 10	115	24	A	740-C-10
12 x 12	130	30	A	740-C-12
12.7 x 12.7	130	30	A	740-C-12.7
16 x 16	130	40	A	740-C-16

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils

Halter
Holders

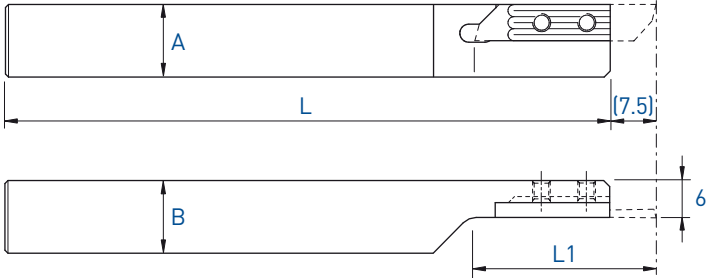
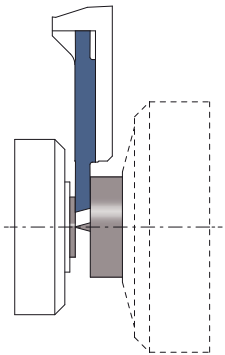
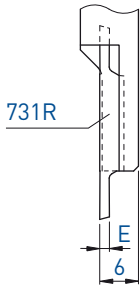
Coupe à droite déportée

Versetztes Rechtsschneiden
Right cut off line

730RC

Utiliser des plaquettes type 731R
WSP Typ 731R verwenden
Use inserts type 731R

Voir pages 1.51 - 1.58
Siehe Seiten 1.51 - 1.58
See pages 1.51 - 1.58



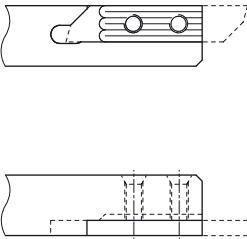
L (R)			
Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line			
A x B	L	L1	Art. N°
8 x 8	115	24	730RC-8
10 x 10	115	24	730RC-10
12 x 12	130	30	730RC-12
12.7 x 12.7	130	30	730RC-12.7
16 x 16	130	40	730RC-16

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

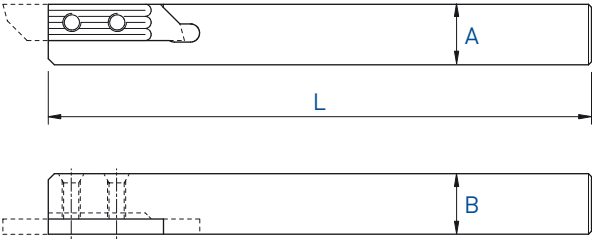
730-NOVIBRA
740-NOVIBRA

Porte-outils en métal lourd anti-vibratoire
Schwingungsdämpfende Schwermetallhalter
Low vibration heavy metal holders

L



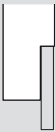
R



L



R



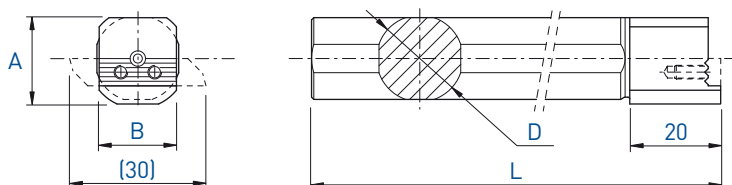
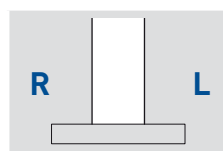
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
7 x 7	115	A	730-7-NOVIBRA	740-7-NOVIBRA
8 x 8	115	A + B	730-8-NOVIBRA	740-8-NOVIBRA
8 x 8	80	A + B	-	740-8-80-NOVIBRA
10 x 10	115	A + B	-	740-10-NOVIBRA
12 x 12	130	A + B	-	740-12-NOVIBRA

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

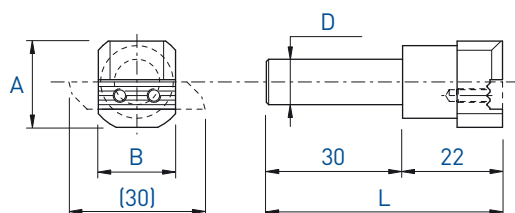
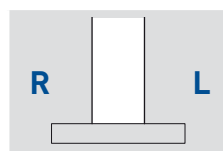
Porte-outils

Halter
Holders

740 / 730-D



A x B	L	D	Art. N°
19 x 17	160	16	740/730-D16
19 x 17	160	19.05	740/730-D19.05
19 x 17	110	19.05	740/730-D19.05-S
19.5 x 17	160	20	740/730-D20
20 x 17	110	22	740/730-D22
22 x 17	200	25	740/730-D25
22 x 17	200	25.4	740/730-D25.4

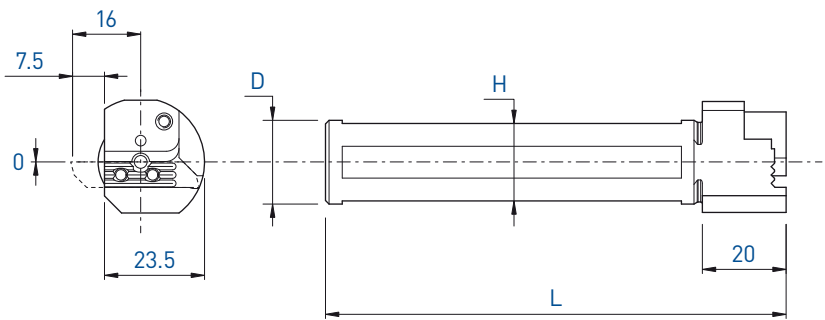
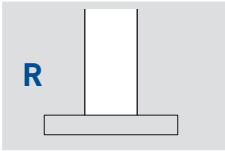


A x B	L	D	Art. N°
19 x 17	52	10	740/730-D10

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
 Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
 Each holder is supplied with one or more screws. The keys must be ordered separately.

740-D-JET

Porte-outil frontal avec arrosage intégré
Frontaler Halter mit integrierter Kühlmittelzufuhr
Front holder with integrated coolant supply

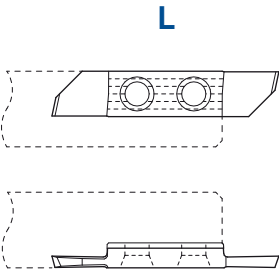
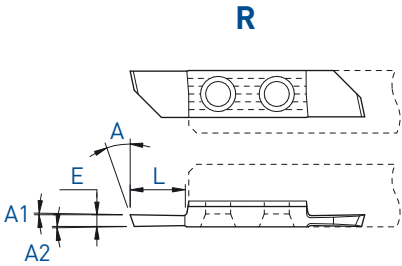
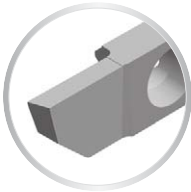
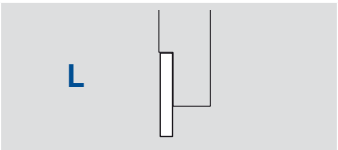
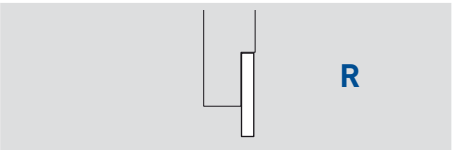


D	H	L	Art. N°
16	15	160	740-D16-160-JET
19.05	18	160	740-D19.05-160-JET
19.05	18	110	740-D19.05-110-JET
20	19	110	740-D20-110-JET
22	20	110	740-D22-110-JET
25	24	200	740-D25-200-JET
25.4	24	200	740-D25.4-200-JET

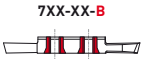
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Tronçonnage
Abstechen
Parting off

731 / 741

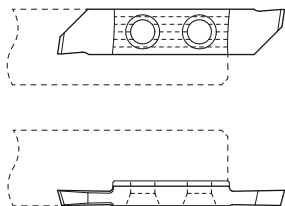


E	A	A1	A2	L	Art. N°	<div><div>P</div><div>M</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div></div><div>S</div></div>	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	
						TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)	K5T	KN (µk10-20)								
0.6	18°	2.5°	0.5°	3	731-0.6	●		●	●		●	741-0.6	●	●		●		●											
0.8	20°	0.3°	0.3°	5	731-0.8	●	●	●	●		●	741-0.8	●	●	●	●	●	●											
1.0	20°	0.3°	0.3°	5	731-1.0	●	●	●	●	●		741-1.0	●	●	●	●	●	●					●			●	●		
1.2	20°	0.3°	0.3°	5	731-1.2	●	●	●	●		●	741-1.2	●	●	●	●	●	●											
1.5	20°	0.3°	0.3°	7	731-1.5	●	●	●	●	●	●	741-1.5	●	●	●	●	●	●					●			●	●		
1.8	20°	0.3°	0.3°	7	731-1.8	●	●	●	●		●	741-1.8	●	●	●	●	●	●											
2.0	20°	0.3°	0.3°	7	731-2.0	●	●	●	●		●	741-2.0	●	●	●	●	●	●					●			●	●		
2.5	20°	0.3°	0.3°	7	731-2.5	●	●	●				741-2.5		●	●	●	●	●									●	●	

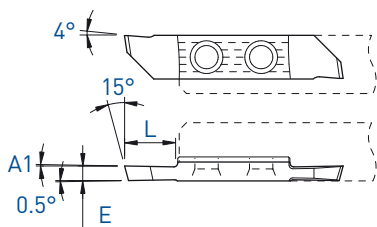
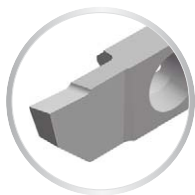


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R



L



R



E	A1	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P	P	P
				TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST
0.6	2.5°	3	731X4-0.6	•	•	•	•	•	•	741X4-0.6	•	•	•	•	•	•	•	•
0.8	0.5°	4	-							741X4-0.8					•	•		
1.0	0.5°	5	731X4-1.0	•	•	•				741X4-1.0	•	•	•	•	•		•	•
1.5	0.5°	7	731X4-1.5	•	•	•	•		•	741X4-1.5	•	•	•	•	•		•	•
2.0	0.5°	7	731X4-2.0	•	•	•				741X4-2.0	•	•	•	•				

7XX-XX-B



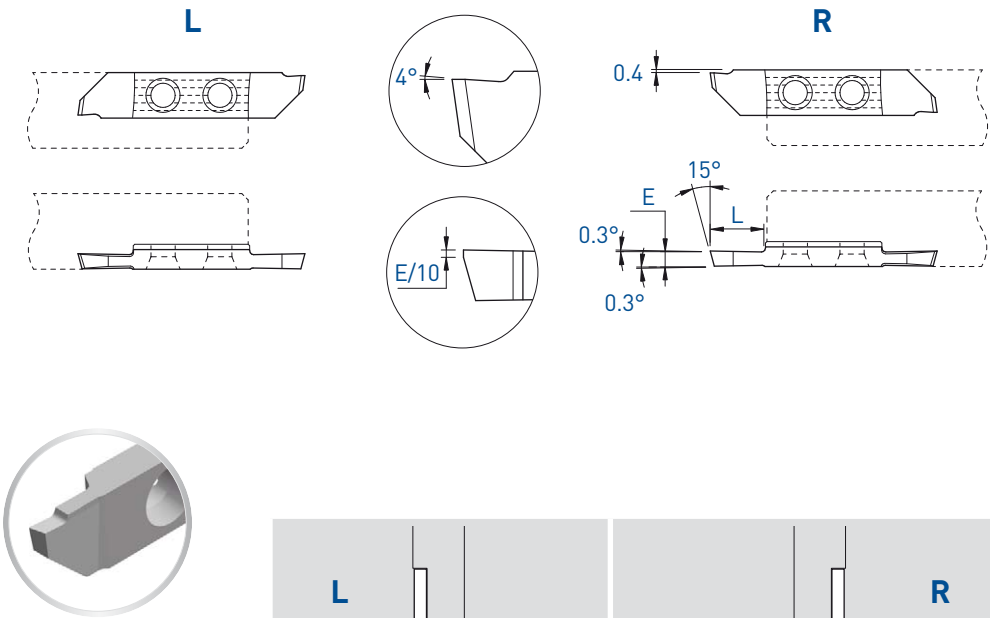
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tronçonnage

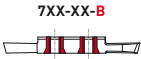
Abstechen

Parting off

731XF / 741XF



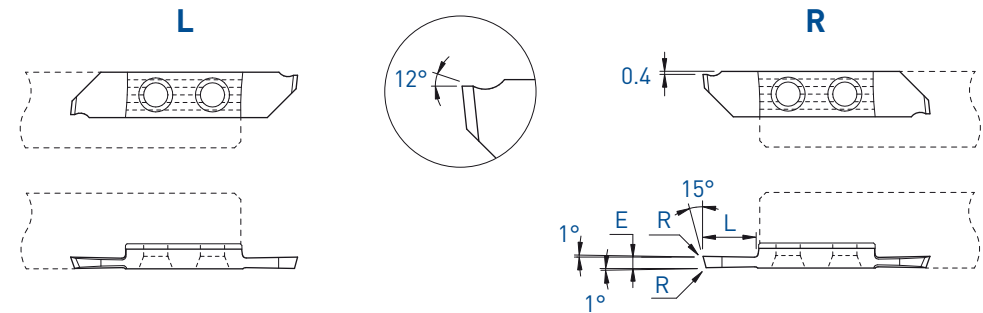
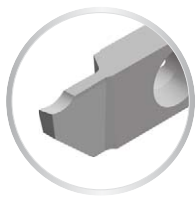
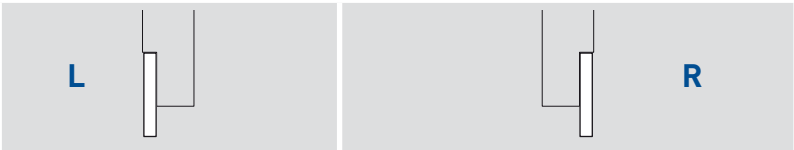
		L						R							
															
E	L	Art. N°	   	   	   	   	   	Art. N°	   	   	   	   	   	   	
			TiAlN	TiN	N (µk20)	HTA	HTiN		HN (µk10)	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.2	5	-	●	●	●	●	●	●	741XF-1.2	●	●				
1.5	7	731XF-1.5	●	●	●	●	●	●	741XF-1.5	●	●	●	●	●	●
2.0	7	731XF-2.0	●	●	●				741XF-2.0	●	●	●	●	●	●
2.5	7	731XF-2.5	●	●	●				741XF-2.5	●	●	●			



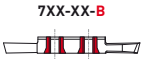
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

731X12 / 741X12

Tronçonnage
Abstechen
Parting off



E	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>			
				TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)			
0.5	3	0.03	-							741X12-0.5					●		●					
1.0	5	0.03	731X12-1.0	●	●	●				741X12-1.0	●	●	●	●	●		●	●				
1.5	7	0.03	731X12-1.5	●	●	●				741X12-1.5	●	●	●	●	●	●	●	●				
2.0	7	0.03	731X12-2.0	●	●	●				741X12-2.0	●	●	●	●	●	●						

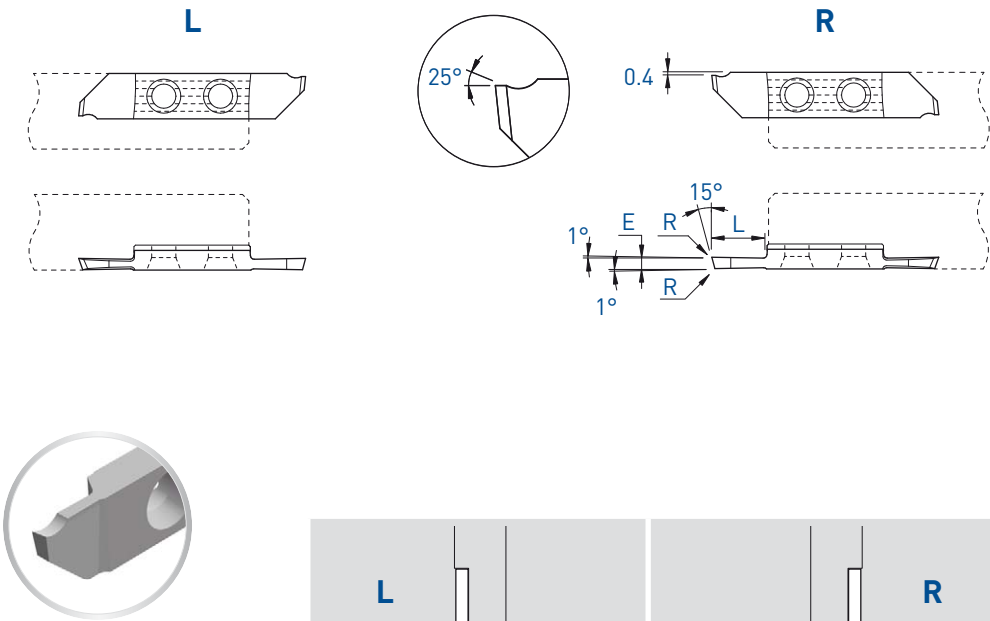


7XX-XX-B
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tronçonnage

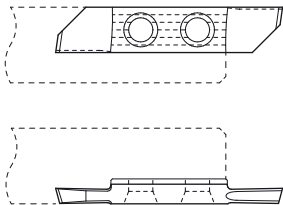
Abstechen
Parting off

731X25 / 741X25

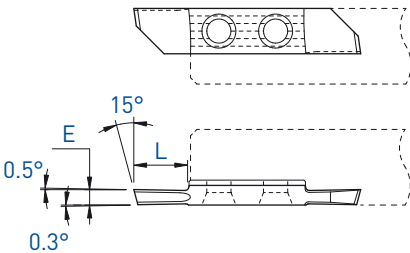
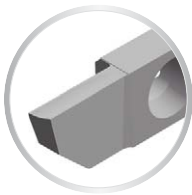


		<div>L</div>						<div>R</div>									
E	L	Art. N°	TiAIN P M N S	TiN P M N S	N [µk20] P M N S	HTA P M N S	HTiN P M N S	HN [µk10] P M N S	Art. N°	TiAIN P M N S	TiAlX P M N S	TiN P M N S	N [µk20] P M N S	HTA P M N S	HTiN P M N S	HN [µk10] P M N S	
1.0	5	731X25-1.0	●	●	●				741X25-1.0	●		●	●	●	●		●
1.5	7	731X25-1.5	●	●	●				741X25-1.5	●		●	●	●	●		●
2.0	7	731X25-2.0	●	●	●				741X25-2.0	●	●	●	●	●	●		●

L



R



L



R



E	L	Art. N°							Art. N°						
															
															
															
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7	731U-1.5	●	●	●	●		●	741U-1.5	●	●	●	●	●	●
2.0	7	731U-2.0	●	●	●	●		●	741U-2.0	●	●	●	●		●

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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

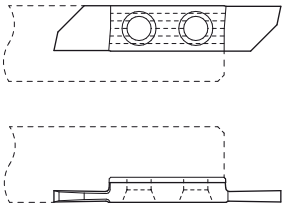
Tronçonnage

Abstechen

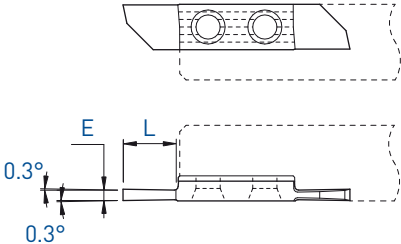
Parting off

731N / 741N

L



R



L

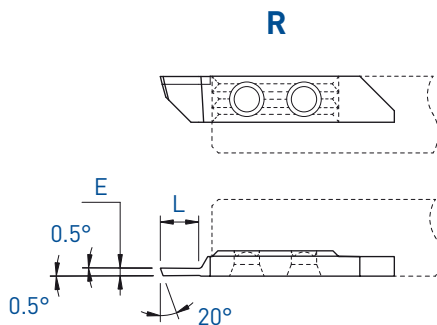
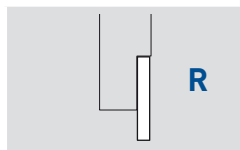
R

E	L	Art. N°							Art. N°						
															
															
															
			TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]		TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]
1.0	5	731N-1.0	●	●	●	●		●	741N-1.0	●	●	●	●		●
1.5	7	731N-1.5	●	●	●	●		●	741N-1.5	●	●	●	●		●

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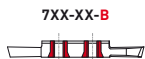


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



E	L	Art. N°	PCD
0.8	5	741-0.8	●
1.0	5	741-1.0	●
1.2	5	741-1.2	●
1.5	7	741-1.5	●
1.8	7	741-1.8	●
2.0	7	741-2.0	●
2.5	7	741-2.5	●

Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tronçonnage

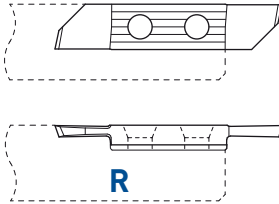
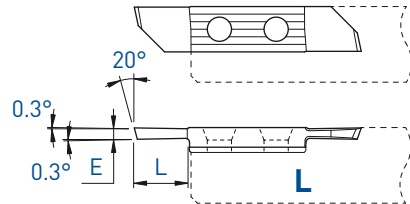
Abstechen

Parting off

Coupe déportée

Versetztes Schneiden

Cut off line

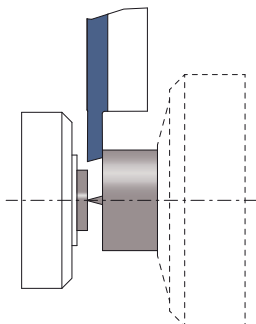
741L / 731R**Cut L****Cut R****R (L)**

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

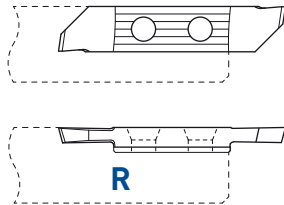
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P	P	P
			M	M		M	M			M	M		M	M		M	M
E	L	Art. N°	N	N		N	N		Art. N°	N	N		N	N		N	N
			S		S	S		S		S		S	S		S	S	S
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)
1.0	5	741L-1.0	•	•	•	•		•	731R-1.0	•	•	•	•	•	•	•	•
1.2	5	741L-1.2	•	•	•	•		•	731R-1.2	•	•	•	•	•	•		
1.5	7	741L-1.5	•	•	•	•	•	•	731R-1.5	•	•	•	•	•	•	•	•
2.0	7	741L-2.0	•	•	•	•		•	731R-2.0	•	•	•	•		•	•	•
2.5	7	741L-2.5	•	•	•				731R-2.5	•	•	•					

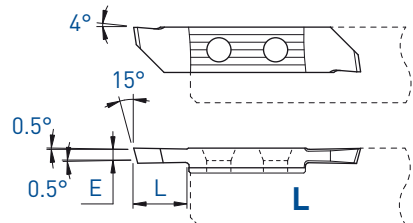
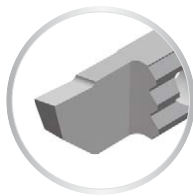
**7XX-XX-B**

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Cut L



Cut R



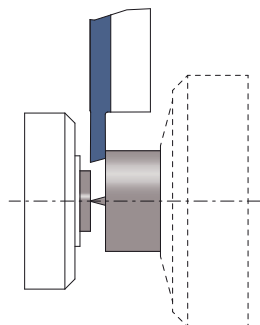
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°							Art. N°						
															
															
															
			TiAlN	TiN	N (µk20)					TiAlN	TiN	N (µk20)			
1.5	5	741LX4-1.5	●	●	●				731RX4-1.5	●	●	●	●	●	●



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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tronçonnage

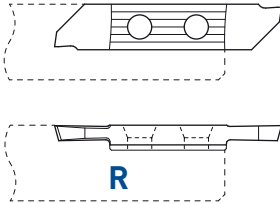
Abstechen
Parting off

Coupe déportée

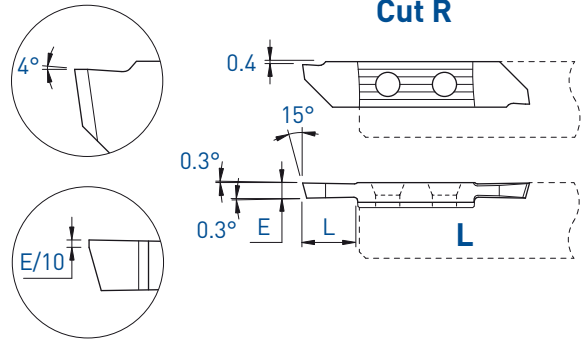
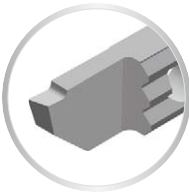
Versetztes Schneiden
Cut off line

741LXF / 731RXF

Cut L



Cut R



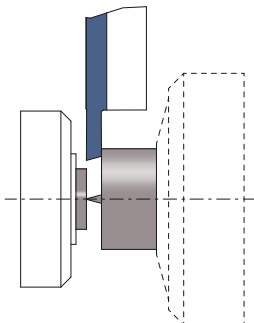
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
			M	M		M	M			M	M		M	M	
			N	N		N	N	N		N	N		N	N	N
			S		S	S		S		S		S	S		S
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7	741LXF-1.5	•	•	•				731RXF-1.5	•	•	•	•	•	•
2.0	7	741LXF-2.0	•	•	•				731RXF-2.0	•	•	•	•		•
2.5	7	741LXF-2.5	•	•	•				731RXF-2.5	•	•	•			

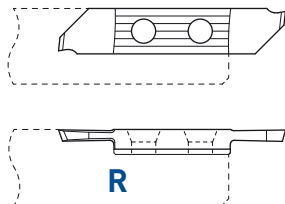


7XX-XX-B

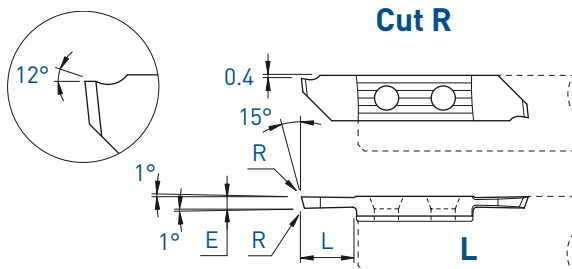
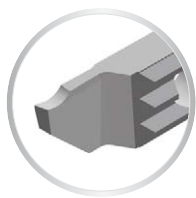


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Cut L



Cut R



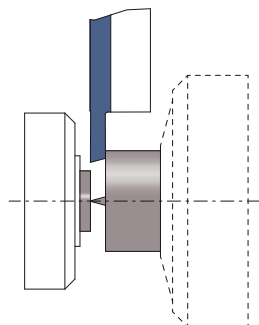
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztetes Rechtsschneiden
Right cut off line

				<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>			<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>
E	L	R	Art. N°	TiAIN	TiN	N (μk20)	HTA	HTiN	HN (μk10)		Art. N°	TiAIN	TiN	N (μk20)	HTA	HTiN	HN (μk10)	KST	KN (μk10-20)
1.0	5	0.03	-								731RX12-1.0	●	●	●				●	●
1.5	7	0.03	741LX12-1.5	●	●	●					731RX12-1.5	●	●	●	●	●	●	●	●



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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

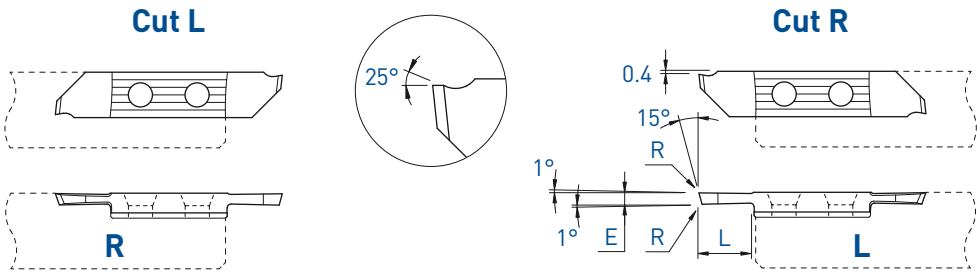
Tronçonnage

Abstechen
Parting off

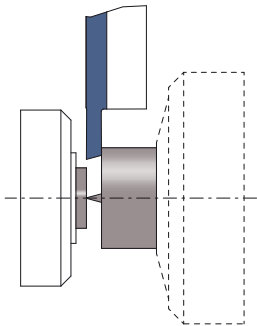
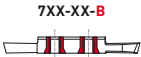
Coupe déportée

Versetztes Schneiden
Cut off line

741LX25 / 731RX25



			<div>R (L)</div> <div>Coupe à gauche déportée Versetztes Linksschneiden Left cut off line</div>			<div>L (R)</div> <div>Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line</div>				
E	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>TiAlN</div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>TiN</div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>N (µk20)</div>	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>TiAlN</div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>TiN</div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>N (µk20)</div>
1.5	7	0.03	741LX25-1.5	●	●	●	731RX25-1.5	●	●	●



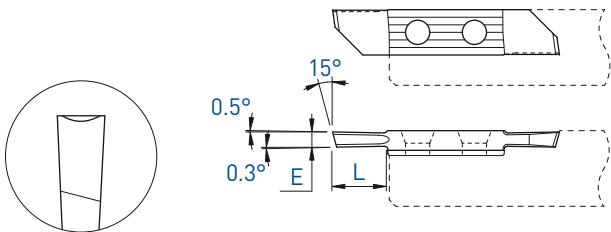
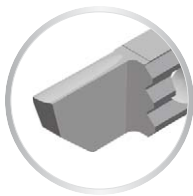
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

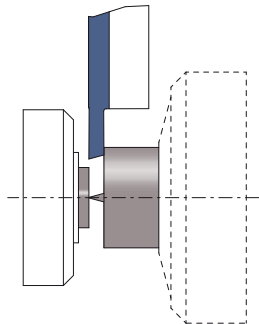
Cut R



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P
			M	M		M	M	
			N	N		N	N	N
			S		S	S		S
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	731RU-1.0	●		●			
1.2	5	731RU-1.2	●		●			
1.5	7	731RU-1.5	●		●	●		●
2.0	7	731RU-2.0	●		●			



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Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tronçonnage

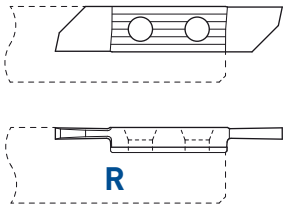
Abstechen
Parting off

Coupe déportée

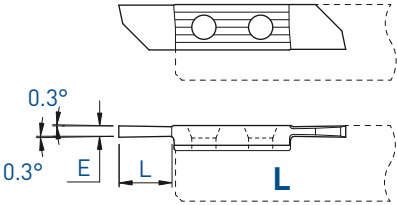
Versetztes Schneiden
Cut off line

741N / 731N

Cut L



Cut R



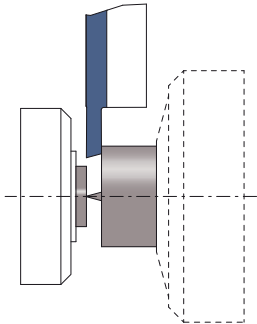
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
			M	M		M	M			M	M		M	M	
1.0	5	741N-1.0	N	N		N	N	N	731N-1.0	N	N		N	N	N
			S		S	S		S		S		S	S		S
1.5	7	741N-1.5	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	731N-1.5	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
			•	•	•	•		•		•	•	•	•		•
1.5	7	741N-1.5	•	•	•	•		•	731N-1.5	•	•	•	•		•
			•	•	•	•		•		•	•	•	•		•

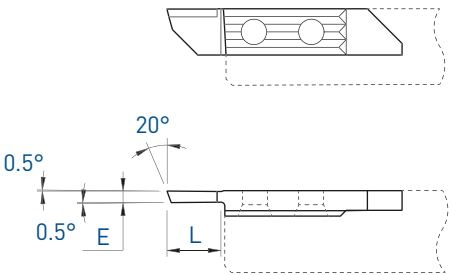


7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Cut R

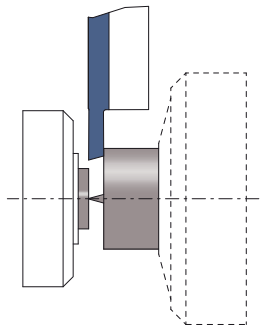


L (R)

Coupe à droite déportée
Versetztes Linksschneiden
Left cut off line

E	L	Art. N°	PCD
0.8	5	731R-0.8	●
1.0	5	731R-1.0	●
1.2	5	731R-1.2	●
1.5	7	731R-1.5	●
2.0	7	731R-2.0	●
2.5	7	731R-2.5	●

Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge



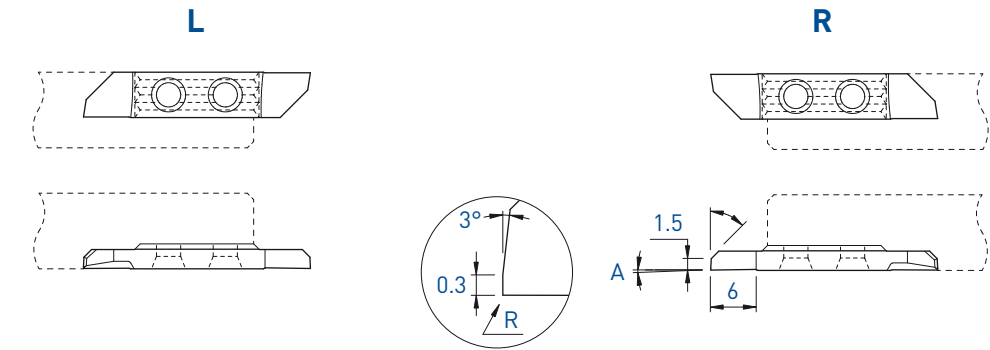
7XX-XX-B

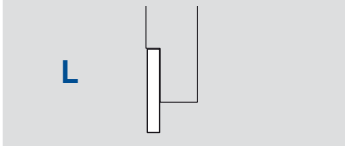
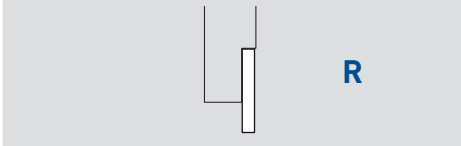


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

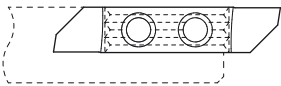
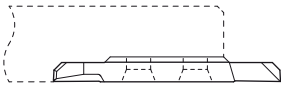
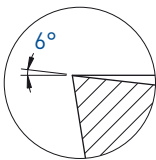
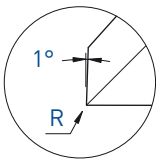
Tournage avant
Vorwärts drehen
Front turning

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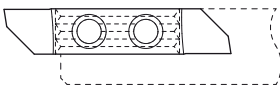
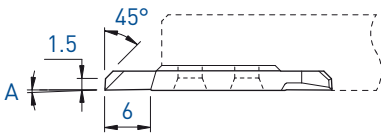
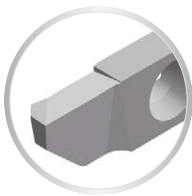


																			
			<div>P</div> <div>M</div> <div>N</div> <div>S</div>	<div>P</div> <div>M</div> <div>N</div> <div></div>	<div>P</div> <div></div> <div>S</div>	<div>P</div> <div>M</div> <div>N</div> <div>S</div>	<div>P</div> <div>M</div> <div>N</div> <div></div>												
		Art. N°	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]		Art. N°	TiAlN	TiAlX	TiN	N [µk20]	HTA	HTiN	HN [µk10]	KST	KN [µk10-20]
A	R																		
0°	0	732	●	●	●	●	●	●	742	●	●	●	●	●	●	●	●		
2°	0	732-2°	●	●	●	●		●	742-2°	●	●	●	●	●	●	●	●	●	●
2°	0								742-2°-R08	●	●	●	●	●	●	●	●		

L



R



L

R

A	R	Art. N°				Art. N°			
									
									
									
TiAlN	TiN	N (µk20)				TiAlN	TiN	N (µk20)	
0°	0	732PX	●	●	●	742PX	●	●	●

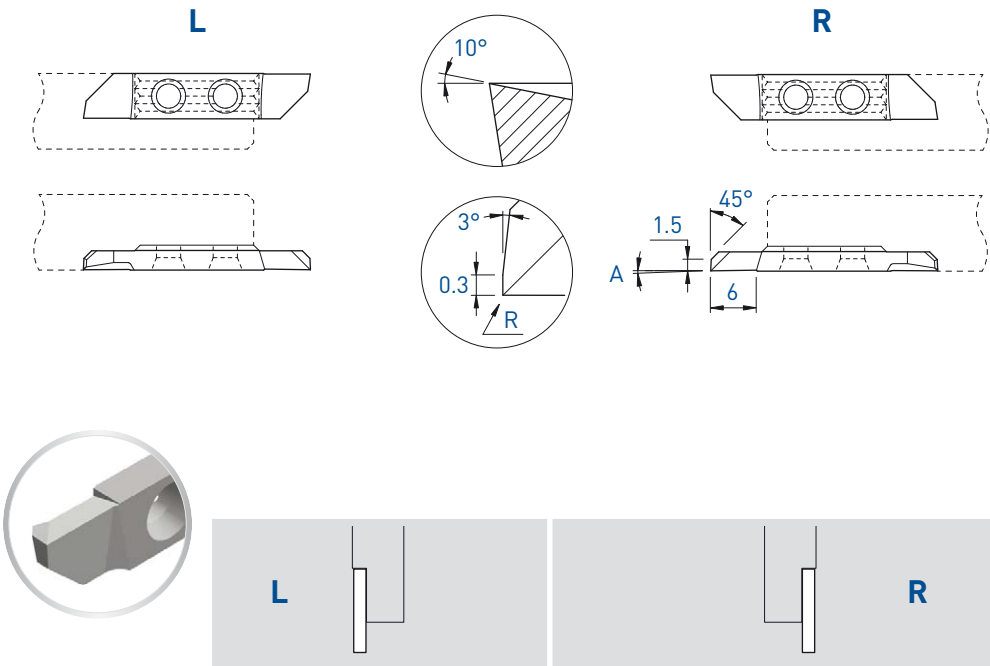
7XX-XX-B



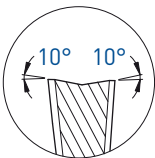
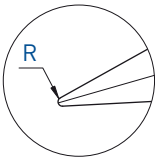
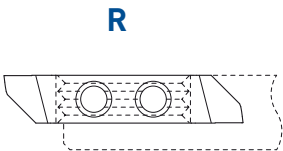
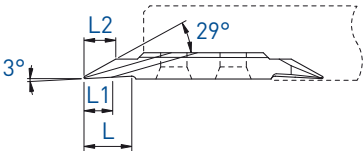
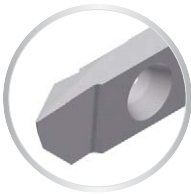
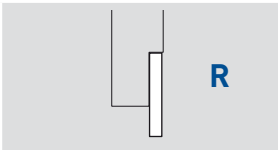
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage avant
Vorwärts drehen
Front turning

732X / 742X



A	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div></div><div>S</div></div>	<div><div>P</div><div></div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>			
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)			
0°	0	732X	●	●	●	●	●	●	742X	●	●	●	●	●	●	●	●	●			
2°	0								742X-2°	●	●	●	●	●	●	●					
2°	0.08								742X-2°-R08	●	●	●	●	●	●	●					



L	L1	L2	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>KST</div> <div>KN (uk10-20)</div>	
6	3.5	4.2	0.08	742VUX10-29°-R08	•	•
6	3.5	4	0.15	742VUX10-29°-R15	•	•

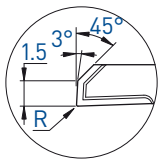
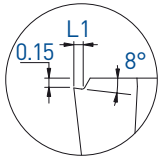
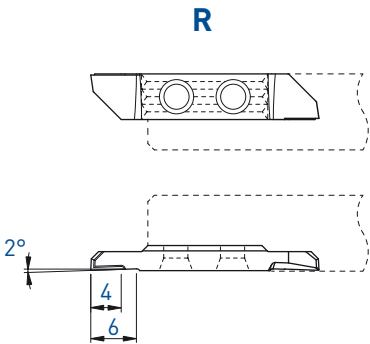
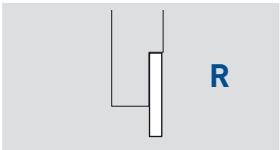
7XX-XX-B



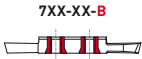
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage avant
Vorwärts drehen
Front turning

742ZF-X

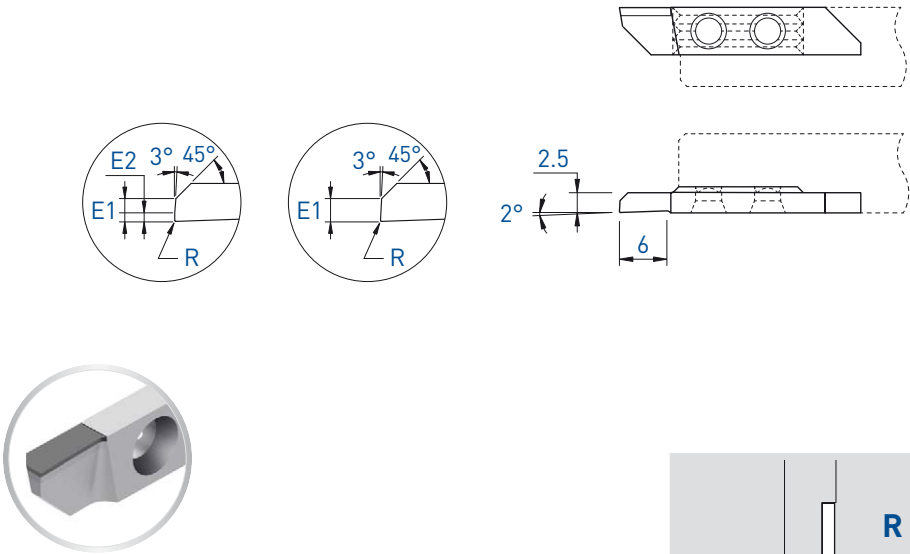


L1	R	Art. N°	<div><div>☐ P</div><div>☐ M</div><div>☒ N</div><div>☒ S</div></div>			
			KCRF	KN [µk10-20]		
0.12	0.03	742ZF-X812-R03	•	•	•	•
0.24	0.03	742ZF-X824-R03	•	•	•	•
0.36	0.08	742ZF-X836-R08	•	•	•	•



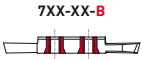
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

R



E1	E2	R	Art. N°	PCD
1.5	0.3	0	742-2°	●
1.5	-	0.08	742-2°-R08	●
1.5	-	0.15	742-2°-R15	●
1.5	-	0.20	742-2°-R20	●

Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge

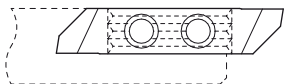
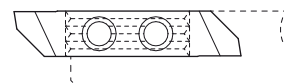
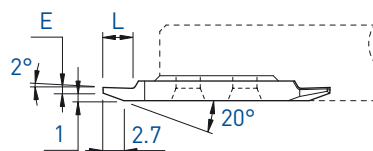
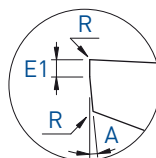
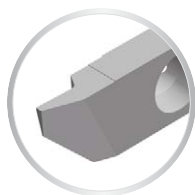


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière

Rückwärts drehen

Back turning

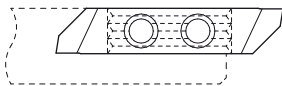
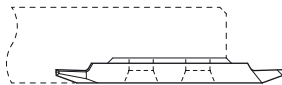
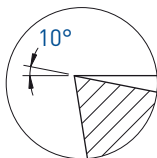
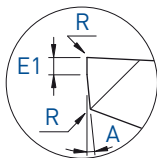
733 / 743**L****R****L****R**

						<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>			<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div></div><div>S</div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div></div><div>S</div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>
E	E1	A	L	R	Art. N°	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]	Art. N°	TiAlN	TiAlX	TiN	N [µk20]	HTA	HTiN	HN [µk10]	
0.5	0.25	3°	3	0	733-0.5	●	●	●	●		●	743-0.5	●	●	●	●	●	●	●	
0.5	-	2°	3	0.08	733-0.5-R08	●	●	●	●		●	743-0.5-R08	●		●	●	●		●	
0.8	0.30	3°	4	0	733-0.8	●	●	●				743-0.8	●	●	●	●	●		●	
1.0	0.40	3°	4	0	733-1.0	●	●	●	●		●	743-1.0	●		●	●	●		●	
1.2	0.50	3°	5	0	733-1.2	●	●	●	●		●	743-1.2	●		●	●	●		●	
1.5	0.50	3°	6	0	733-1.5	●	●	●	●		●	743-1.5	●		●	●	●		●	

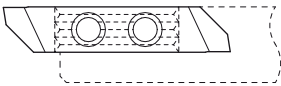
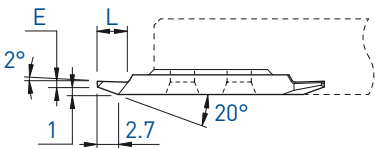
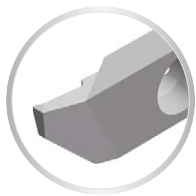
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
 Auf Anfrage für B-Spannsystem, siehe Seite 1.05
 On request for B clamping system, see page 1.05

L



R



L



R



E	E1	A	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>
E	E1	A	L	R	Art. N°	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]	Art. N°	TiAlN	TiAlX	TiN	N [µk20]	HTA	HTAX	HTiN	HN [µk10]
0.5	0.25	3°	3	0	733X-0.5	•	•	•	•	•	•	743X-0.5	•	•	•	•	•	•	•	•
0.5	-	2°	3	0.08	733X-0.5-R08	•	•	•	•	•	•	743X-0.5-R08	•	•	•	•	•	•	•	•
0.8	0.30	3°	4	0	733X-0.8	•	•	•	•	•	•	743X-0.8	•	•	•	•	•	•	•	•
1.0	0.40	3°	4	0	733X-1.0	•	•	•	•	•	•	743X-1.0	•	•	•	•	•	•	•	•
1.2	0.50	3°	5	0	733X-1.2	•	•	•	•	•	•	743X-1.2	•	•	•	•	•	•	•	•
1.5	0.50	3°	6	0	733X-1.5	•	•	•	•	•	•	743X-1.5	•	•	•	•	•	•	•	•

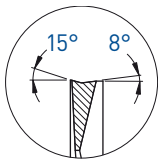
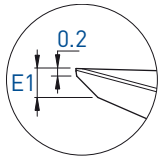
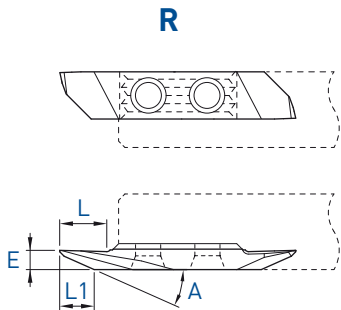
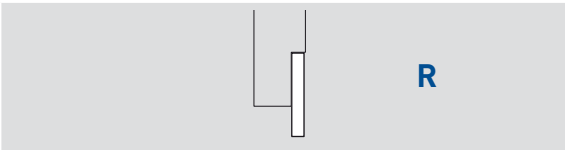
7XX-XX-B



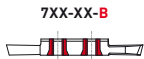
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning

743VUX8



E	E1	A	L	L1	Art. N°	P	P	P	P	P	P	P	P	P	P
						M	M	M		M	M	M		M	M
1.5	0.75	24°	3	2.3	743VUX8-0.2-1.5	N		N		N		N		N	N
						S	S		S	S		S		S	S
2.5	0.75	24°	6	4.4	743VUX8-0.2-2.5	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTAX	HTiN	HN (µk10)	K5T	KN (µk10-20)
						•	•		•	•	•		•	•	•
						•	•		•	•	•		•	•	•



7XX-XX-B
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

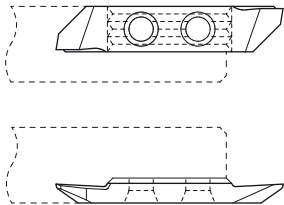
733VX-8° / 743VX-8°

Tournage arrière

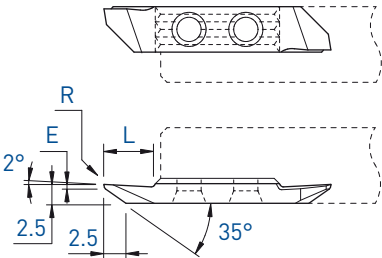
Rückwärts drehen

Back turning

L



R



L

R

E	L	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P	P	P
				TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	KST	KN (µk10-20)
1.0	6.5	0	733VX-8°	•	•	•	•	•	•	743VX-8°	•	•	•	•	•	•		
1.0	6.5	0.08	733VX-8°-R08	•	•	•	•		•	743VX-8°-R08	•	•	•	•		•	•	•

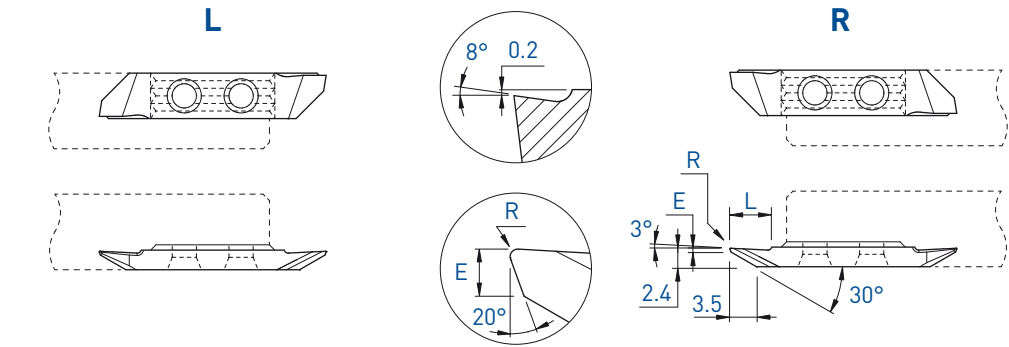
7XX-XX-B



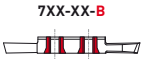
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning

733VX-805 / 743VX-805



<div>L</div>										<div>R</div>																	
Art. N°										Art. N°																	
TiAlN										TiAlN																	
TiN										TiN																	
N [µk20]										N [µk20]																	
HTA										HTA																	
HTiN										HTiN																	
HN [µk10]										HN [µk10]																	
Art. N°										Art. N°																	
TiAlN										TiAlN																	
TiN										TiN																	
N [µk20]										N [µk20]																	
HTA										HTA																	
HTiN										HTiN																	
HN [µk10]										HN [µk10]																	
KST										KST																	
KN [µk10-20]										KN [µk10-20]																	
733VX-805-R08										•	•	•	•	743VX-805-R08										•	•	•	•



7XX-XX-B
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

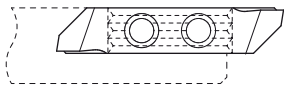
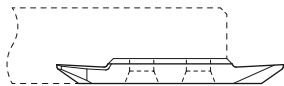
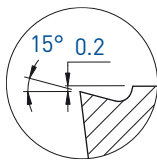
733VX-15° / 743VX-15°

Tournage arrière

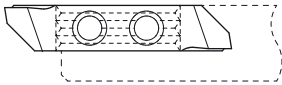
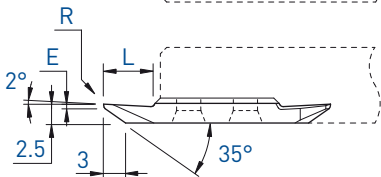
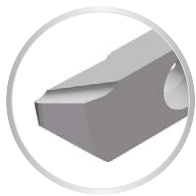
Rückwärts drehen

Back turning

L



R



L



R



E	L	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
				TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.6	6.5	0	733VX-15°	•	•	•	•	•	•	743VX-15°	•	•	•	•	•	•
0.6	6.5	0.08	733VX-15°-R08	•	•	•				743VX-15°-R08	•	•	•	•	•	•

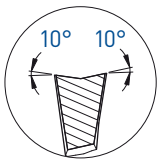
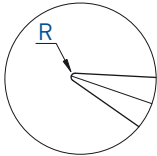
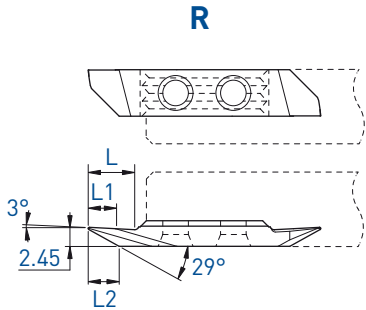
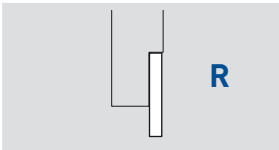
7XX-XX-B



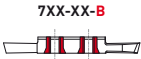
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning

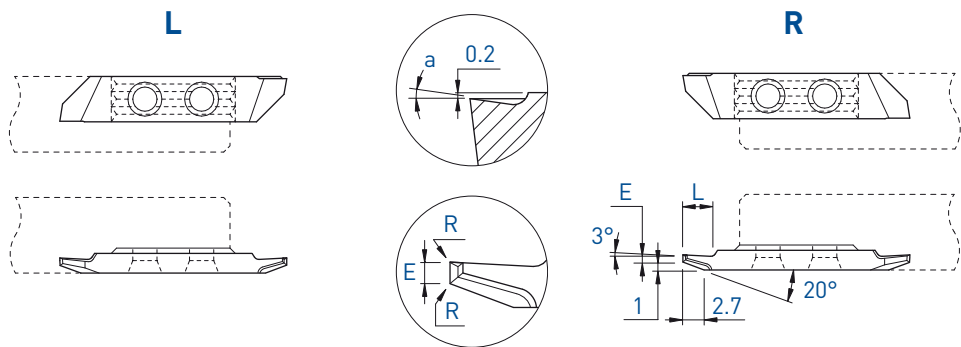
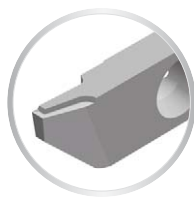
743VUX



L	L1	L2	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div>	
					KST	KN (µk10-20)
6	3.5	4	0.08	743VUX10-29°-R08	•	•
6	3.5	4	0.15	743VUX10-29°-R15	•	•



7XX-XX-B
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

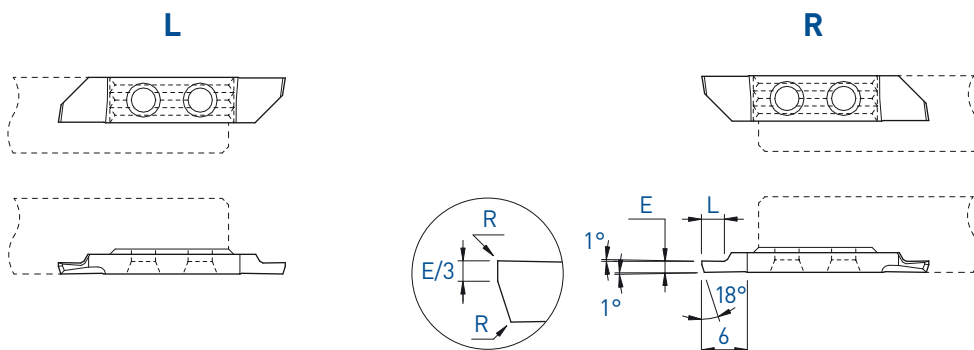
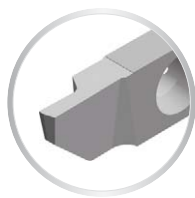


Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

				L								R			

Tournage arrière / pré-coupe
 Rückwärts drehen / vorstechen
 Back turning / pre-parting off

733P / 743P



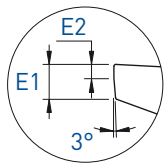
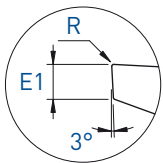
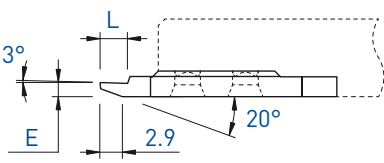
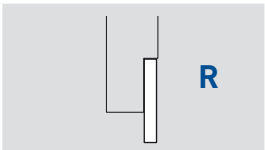
			L		R	
			P		P	
			M		M	
			N		N	
			S		S	
			N (μk20)		N (μk10)	
			HTA		HTiN	
			Art. N°		Art. N°	
E	L	R	733P-0.8		743P-0.8	
0.8	2	0	•	•	•	•
1.0	2	0	•	•	•	•
1.2	2.5	0	•	•	•	•
1.5	3	0	•	•	•	•

7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
 Auf Anfrage für B-Spannsystem, siehe Seite 1.05
 On request for B clamping system, see page 1.05

R



E	E1	E2	L	R	Art. N°	PCD
1.5	0.5	0.15	3	0	743-0.5	●
1.5	0.5	-	3	0.08	743-0.5-R08	●
1.8	0.8	0.25	4	0	743-0.8	●
1.8	0.8	-	4	0.08	743-0.8-R08	●
2.0	1	0.30	4	0	743-1.0	●
2.0	1	-	4	0.08	743-1.0-R08	●
2.2	1.2	0.35	5	0	743-1.2	●
2.2	1.2	-	5	0.08	743-1.2-R08	●
2.5	1.5	0.45	6	0	743-1.5	●
2.5	1.5	-	6	0.08	743-1.5-R08	●

Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge

7XX-XX-B

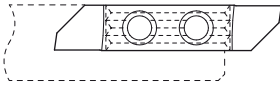
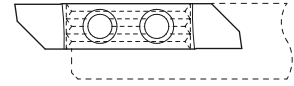
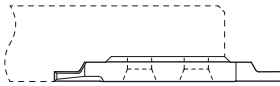
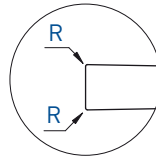
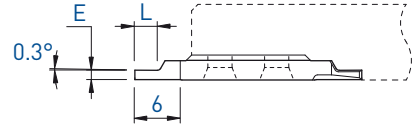
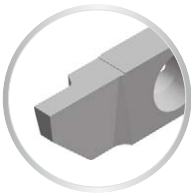


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Fonçage-tournage

Einstechen und drehen

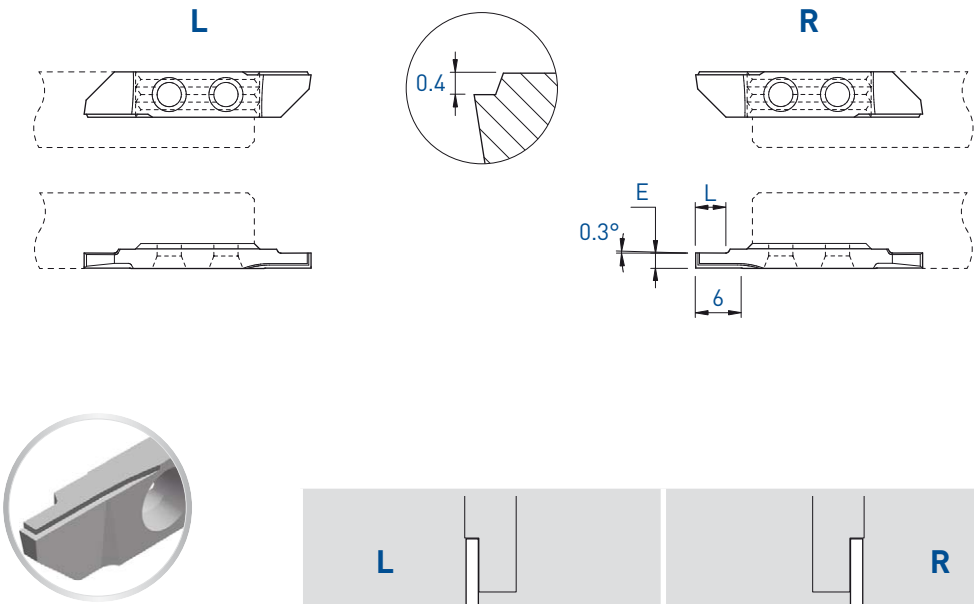
Grooving and turning

734 / 744**L****R****L****R**

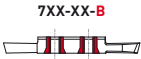
				<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>S</div></div>			<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTAX	HTiN	HN (µk10)	KST	KN (µk10-20)
0.5	1.5	0	734-0.5	●	●	●	●			744-0.5	●	●	●	●	●	●	●	●	●	●
0.6	1.8	0	734-0.6	●	●	●	●		●	744-0.6	●	●	●	●	●	●	●	●	●	●
0.75	2	0	734-0.75	●	●	●				744-0.75	●	●	●	●	●	●	●	●	●	●
0.8	2	0	734-0.8	●	●	●	●		●	744-0.8	●	●	●	●	●	●	●	●	●	●
0.8	2	0.08	-							744-0.8-R08	●	●	●	●	●	●		●	●	●
0.9	2.5	0	-							744-0.9	●	●	●	●	●	●			●	
0.95	3	0	734-0.95	●	●	●				744-0.95	●	●	●	●	●	●		●		
1.0	2.5	0	734-1.0	●	●	●	●	●	●	744-1.0	●	●	●	●	●	●	●	●	●	●
1.0	2.5	0.08	734-1.0-R08	●	●	●	●	●	●	744-1.0-R08	●	●	●	●	●	●		●		
1.2	3	0	734-1.2	●	●	●	●		●	744-1.2	●	●	●	●	●	●	●	●		
1.5	3	0	734-1.5	●	●	●	●	●	●	744-1.5	●	●	●	●	●	●	●	●	●	●
1.5	3	0.08	734-1.5-R08	●	●	●	●		●	744-1.5-R08	●	●	●	●	●	●	●	●	●	●
1.5	3	0.15	-							744-1.5-R15	●	●		●	●	●		●		
1.5	3	0.20	-							744-1.5-R20	●	●	●	●	●	●		●		
1.8	4	0	734-1.8	●	●	●	●		●	744-1.8	●	●	●	●	●	●		●		
2.0	4	0	734-2.0	●	●	●	●		●	744-2.0	●	●	●	●	●	●		●		
2.0	4	0.08	734-2.0-R08	●	●	●	●		●	744-2.0-R08	●	●	●	●	●	●		●		
2.0	4	0.15	-							744-2.0-R15	●	●		●	●	●		●		
2.0	4	0.20	-							744-2.0-R20	●	●	●	●	●	●		●		
2.5	6	0	734-2.5	●	●	●				744-2.5		●	●	●	●	●		●		

734VS / 744VS

Fonçage-tournage
Einstechen und drehen
Grooving and turning



				L						R							
E	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		
1.0	2	734VS-1.0	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	744VS-1.0	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>		
1.2	2.5	734VS-1.2	•	•	•	•	•	•	744VS-1.2	•	•	•	•		•		
1.5	3	734VS-1.5	•	•	•	•	•	•	744VS-1.5	•	•	•	•		•		
1.8	4	734VS-1.8	•	•	•	•	•	•	744VS-1.8	•	•	•					
2.0	4	734VS-2.0	•	•	•	•	•	•	744VS-2.0	•	•	•	•		•		
2.5	6	734VS-2.5	•	•	•	•	•	•	744VS-2.5	•	•	•					

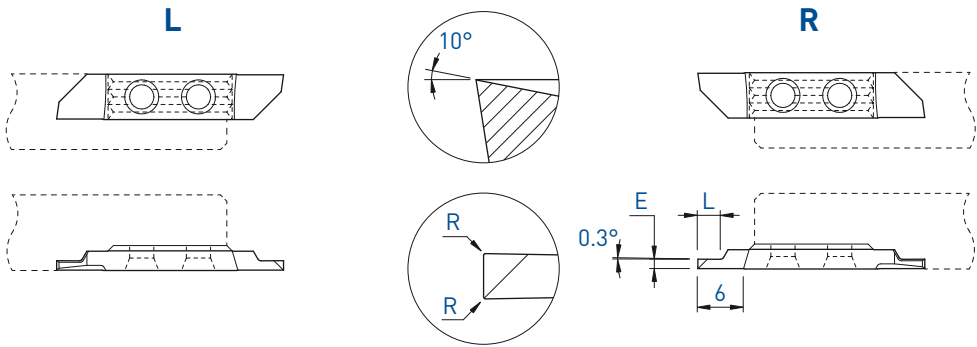
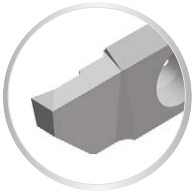
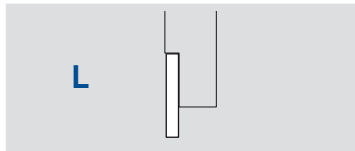
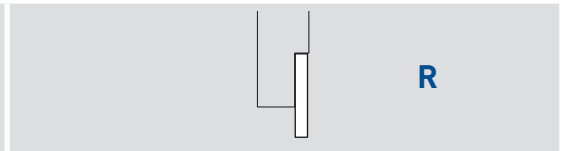


7XX-XX-B
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Fonçage-tournage

Einstechen und drehen

Grooving and turning

734X / 744X

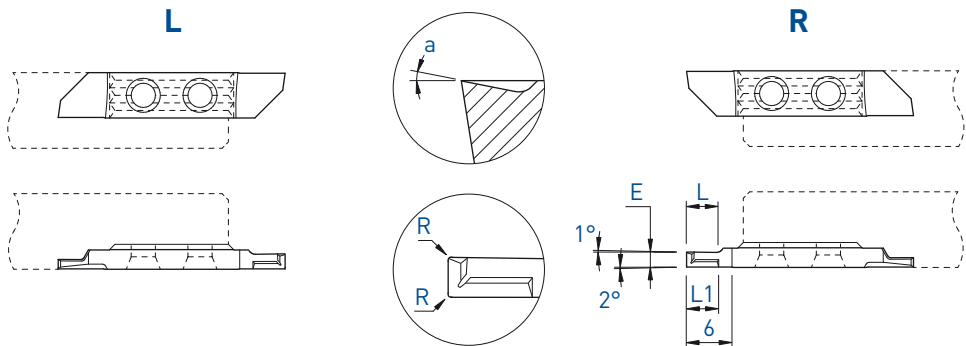
				<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>S</div></div>		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	ST	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTAX	HTiN	HN (µk10)	KST	KN (µk10-20)	
0.5	2	0								744X-0.5										●	●	
0.8	2	0	734X-0.8	●	●	●	●		●	744X-0.8		●	●	●	●	●	●	●	●	●	●	●
1.0	2.5	0	734X-1.0	●	●	●	●		●	744X-1.0		●	●	●	●	●	●	●	●	●	●	●
1.0	2.5	0.08	734X-1.0-R08	●	●	●	●		●	744X-1.0-R08	●	●	●	●	●	●	●		●	●	●	●
1.2	3	0	734X-1.2	●	●	●	●		●	744X-1.2		●	●	●	●	●	●		●	●	●	●
1.5	3	0	734X-1.5	●	●	●	●	●	●	744X-1.5		●	●	●	●	●	●	●	●	●	●	●
1.5	3	0.08	734X-1.5-R08	●	●	●	●		●	744X-1.5-R08	●	●	●	●	●	●	●		●	●	●	●
1.5	3	0.15	-							744X-1.5-R15	●	●	●	●	●	●	●		●			
1.5	3	0.20	-							744X-1.5-R20	●	●	●	●	●	●	●		●			
1.8	4	0	734X-1.8	●	●	●				744X-1.8		●	●	●	●	●	●		●			
2.0	4	0	734X-2.0	●	●	●	●		●	744X-2.0		●	●	●	●	●	●	●	●	●	●	●
2.0	4	0.08	734X-2.0-R08	●	●	●	●	●	●	744X-2.0-R08	●	●	●	●	●	●	●	●	●			
2.0	4	0.15	-							744X-2.0-R15	●	●	●	●	●	●	●		●			
2.0	4	0.20	734X-2.0-R20	●	●	●	●	●	●	744X-2.0-R20	●	●	●	●	●	●	●		●	●	●	●
2.5	6	0	734X-2.5	●	●	●	●		●	744X-2.5			●	●	●	●	●		●			●

7XX-XX-B

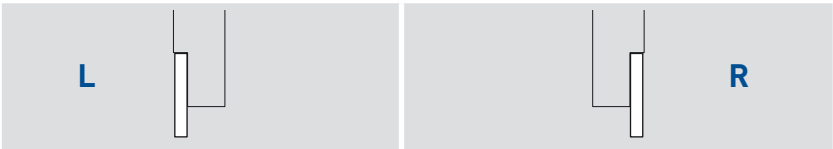
Sur demande pour serrage type B, voir page 1.05

Auf Anfrage für B-Spannsystem, siehe Seite 1.05

On request for B clamping system, see page 1.05



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

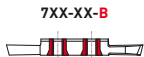


a	E	L	L1	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
						M	M	N	S	M	M		M	M	N	S	M	M
a	E	L	L1	R	Art. N°	TiAlN	TiN	N [µk20]	HTA	HTiN	HAC	Art. N°	TiAlN	TiAlX	TiN	N [µk20]	HTA	HTiN
10°	1.0	2.5	3	0.01	734ZX10-1.0	•	•					744ZX10-1.0	•	•	•	•		
	1.5	4	4	0.01	734ZX10-1.5	•	•					744ZX10-1.5	•	•			•	•
	1.5	4	4	0.08	734ZX10-1.5-R08	•	•					744ZX10-1.5-R08	•	•	•		•	
	2.0	4	4	0.01	734ZX10-2.0	•	•					744ZX10-2.0	•	•			•	
	2.0	4	4	0.08	734ZX10-2.0-R08	•	•					744ZX10-2.0-R08	•	•			•	
	2.5	6	4	0.01	734ZX10-2.5	•	•					744ZX10-2.5	•	•			•	
	2.5	6	4	0.08	-							744ZX10-2.5-R08	•	•			•	
17°	1.0	2.5	3	0.01	-							744ZX17-1.0					•	•



Arête de coupe honée
Gehonte Schneidkante
Honed edge

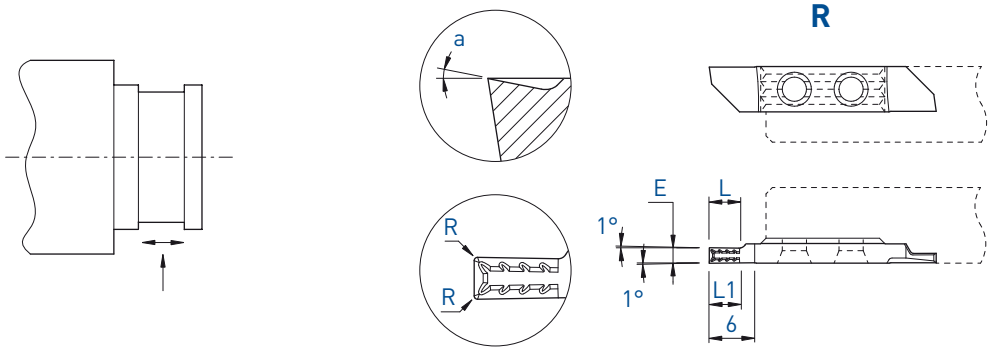
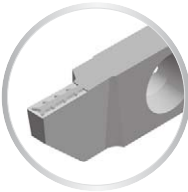
f min: 0.02 mm/U



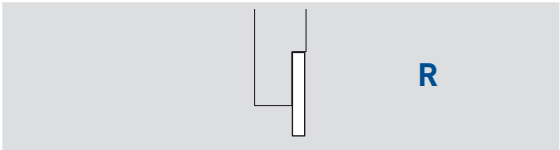
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Fonçage-tournage
Einstechen und drehen
Grooving and turning

744ZXT



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

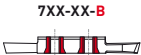


a	E	L	L1	R	Art. N°	P	P	P	P	P	P	P	P	P	P
						M	M	M	M		M	M		M	M
10°	1.0	2.5	2.5	0.01	744ZXT10-1.0	N	N		N		N	N	N	N	N
	1.5	4	4	0.01	744ZXT10-1.5	S	S	S		S	S		S	S	S
	1.5	4	4	0.08	744ZXT10-1.5-R08										
	2.0	4	4	0.01	744ZXT10-2.0										
	2.0	4	4	0.08	744ZXT10-2.0-R08										
	2.5	5	5	0.01	744ZXT10-2.5										
	2.5	5	5	0.08	744ZXT10-2.5-R08										
						ST	TiAlN	TiAlX	TiN	N [µk20]	HTA	HTiN	HN [µk10]	KST	KN [µk10-20]



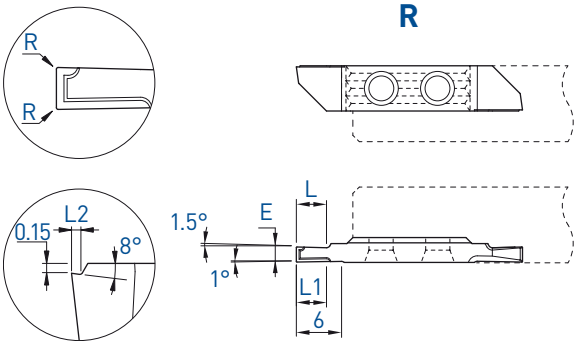
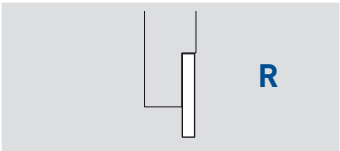
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

R



E	L	L1	L2	R	Art. N°	KCRF	KN (µk10-20)
1.0	2.5	2	0.12	0.03	744ZF-X812-1.0-R03	●	●
	2.5	2	0.24	0.03	744ZF-X824-1.0-R03	●	●
1.5	3	2.5	0.12	0.03	744ZF-X812-1.5-R03	●	●
	3	2.5	0.24	0.03	744ZF-X824-1.5-R03	●	●
	3	2.5	0.36	0.08	744ZF-X836-1.5-R08	●	●
2.0	4	3	0.24	0.03	744ZF-X812-1.5-R03	●	●
	4	3	0.36	0.08	744ZF-X824-1.5-R03	●	●
	4	3	0.36	0.15	744ZF-X836-1.5-R08	●	●
2.5	6	4	0.24	0.03	744ZF-X824-2.5-R03	●	●
	6	4	0.36	0.08	744ZF-X836-2.5-R08	●	●
	6	4	0.36	0.15	744ZF-X836-2.5-R15	●	●

7XX-XX-B

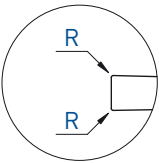
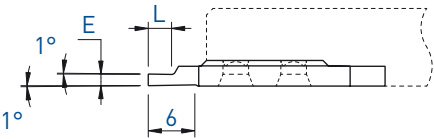
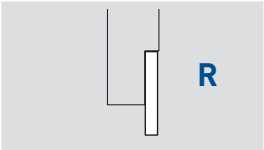


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Fonçage-tournage
Einstechen und drehen
Grooving and turning

744-PCD

R



E	L	R	Art. N°	PCD
0.8	2	0	744-0.8	●
0.8	2	0.08	744-0.8-R08	●
1.0	2.5	0	744-1.0	●
1.0	2.5	0.08	744-1.0-R08	●
1.5	3	0	744-1.5	●
1.5	3	0.08	744-1.5-R08	●
1.5	3	0.15	744-1.5-R15	●
1.5	3	0.20	744-1.5-R20	●
2.0	4	0	744-2.0	●
2.0	4	0.08	744-2.0-R08	●
2.0	4	0.15	744-2.0-R15	●
2.0	4	0.20	744-2.0-R20	●
2.5	6	0	744-2.5	●
2.5	6	0.08	744-2.5-R08	●
2.5	6	0.15	744-2.5-R15	●
2.5	6	0.20	744-2.5-R20	●

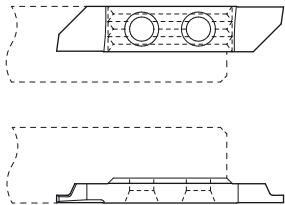
Uniquement 1 arête de coupe
Nur 1 Schneidekante
Only 1 cutting edge

7XX-XX-B

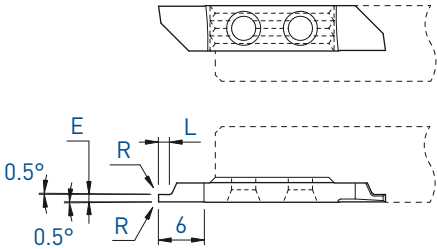
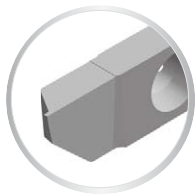


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



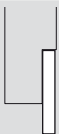
R



L



R



E ± 0.01	L	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
				TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.2	0.2	0	735-0202	•	•	•				745-0202	•	•	•	•		•
0.3	0.3	0	735-0303	•	•	•				745-0303	•	•	•	•		•
0.4	0.4	0	735-0404	•	•	•				745-0404	•	•	•	•		•

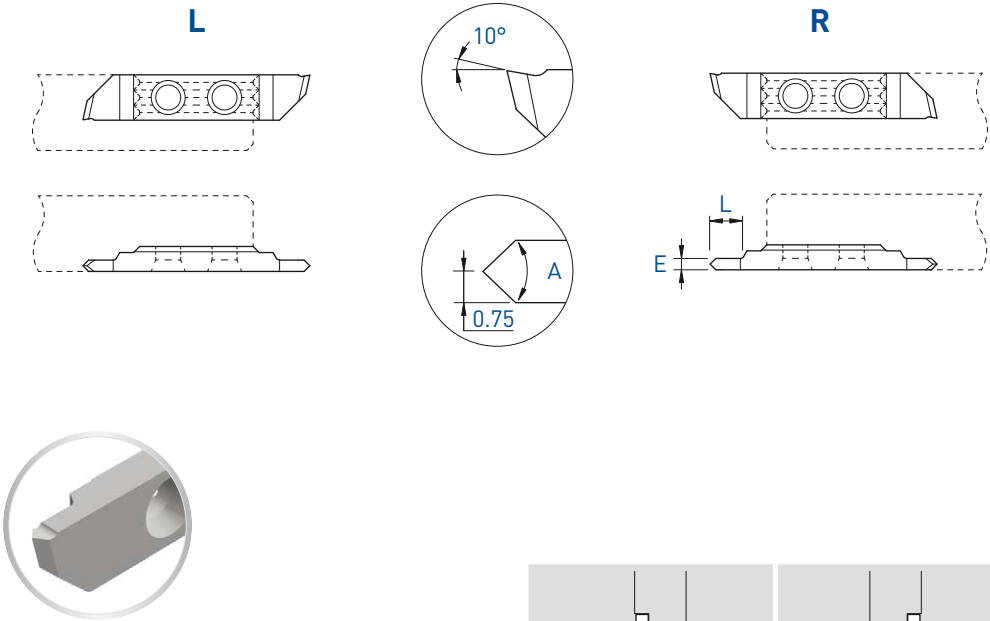
7XX-XX-B

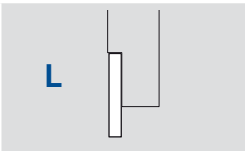
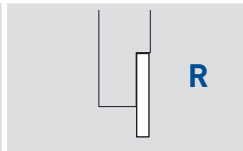


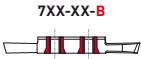
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Gorges
Einstechen
Grooving

735X-90 / 745X-90



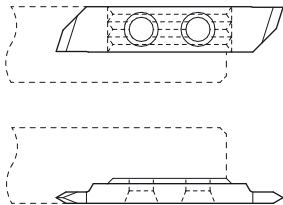
										
A	E	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div></div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div></div></div>	
90°	1.5	4	735X-90-1.5	TiAlN	TiN	N (µk20)	745X-90-1.5	TiAlN	TiN	N (µk20)
				●	●			●	●	



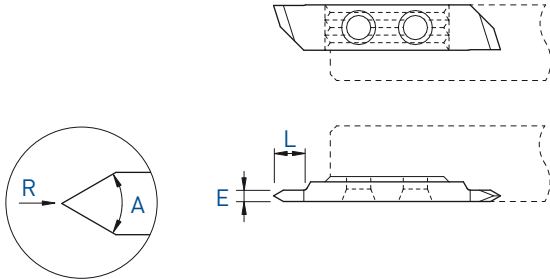
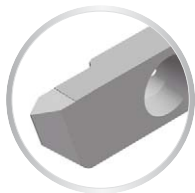
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R



Profil partiel
Teilprofil
Partial profile

L

R

A	E	L	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P	P
					TiAlN	TiN	N (µk20)	HTA	HTIN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTIN	HN (µk10)	KN (µk10-20)
60°	1.5	4	0	736-60-1.5	•	•	•				746-60-1.5	•	•	•				•
60°	1.5	4	0.02	736-60-1.5-R02	•	•	•	•	•	•	746-60-1.5-R02	•	•	•	•		•	•
60°	2.0	6	0	736-60-2.0	•	•	•				746-60-2.0	•	•	•				•
60°	2.0	6	0.02	736-60-2.0-R02	•	•	•	•	•	•	746-60-2.0-R02	•	•	•	•	•	•	
55°	1.5	4	0	736-55-1.5	•	•	•				746-55-1.5	•	•	•				
55°	1.5	4	0.02	736-55-1.5-R02	•	•	•				746-55-1.5-R02	•	•	•				
55°	2.0	6	0	736-55-2.0	•	•	•				746-55-2.0	•	•	•				
55°	2.0	6	0.02	736-55-2.0-R02	•	•	•				746-55-2.0-R02	•	•					•

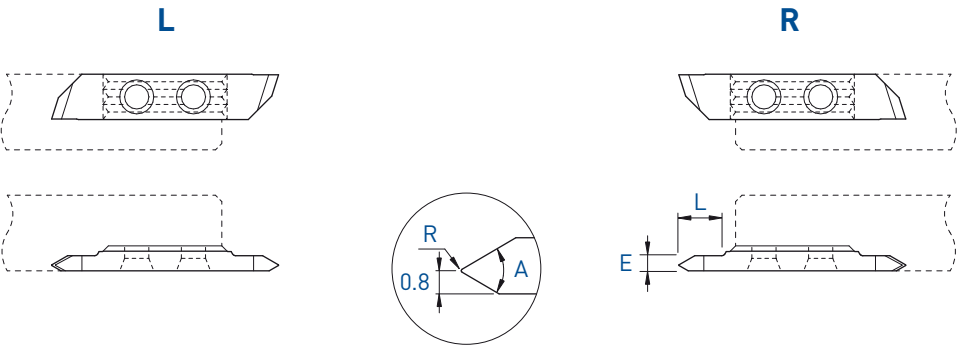
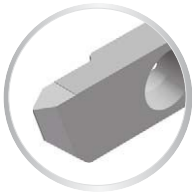
7XX-XX-B



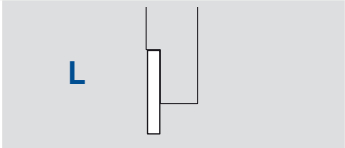
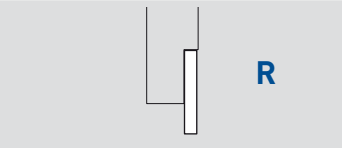
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Filetage
Gewinde drehen
Threading

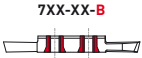
736-A60° / 746-A60°



Profil partiel
Teilprofil
Partial profile

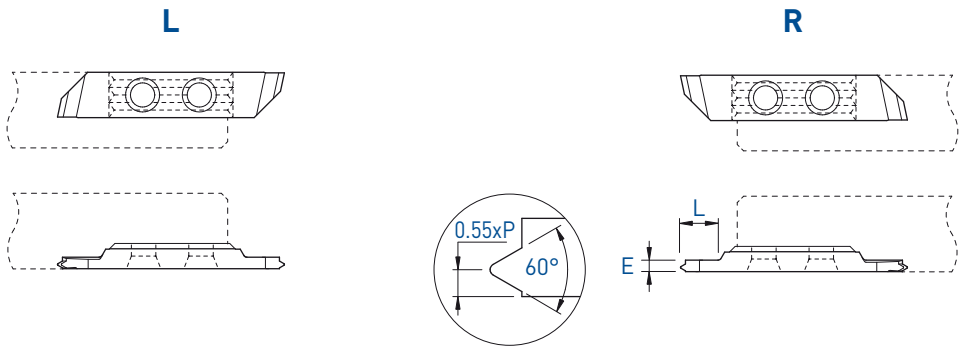
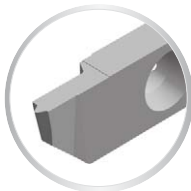
																		
A	E	L	R	Pas Steigung Pitch P	Art. N°	TiAlN P M N S	TiN P M N S	N [µk20] P S	HTA P M N S	HTiN P M N S	HN [µk10] P S	Art. N°	TiAlN P M N S	TiN P M N S	N [µk20] P S	HTA P M N S	HTiN P M N S	HN [µk10] P S
60°	2.0	6	0.06	0.50-1.50	736-A60°	●	●	●				746-A60°	●	●	●	●		●

Plaquettes de filetage avec coupe positive 2°, voir page 1.157
WSP Gewindedrehen mit positivem Schnitt 2°, siehe Seite 1.157
Threading inserts with positive cut 2°, see page 1.157

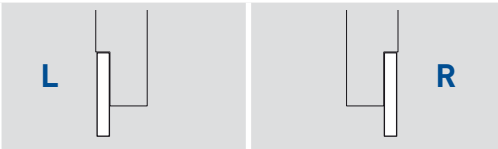


7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

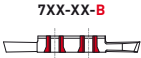


Profil complet métrique
Metrisches Vollprofil
Metric full profile



Pas Steigung Pitch P	E	L	Art. N°	P	P	P	Art. N°	P	P	P
				M	M			M	M	
				N	N			N	N	
				S		S		S		S
				TiAlN	TiN	N (µk20)		TiAlN	TiN	N (µk20)
0.25	1.0	3	736-M-0.25	•	•	•	746-M-0.25	•	•	•
0.30	1.0	3	736-M-0.30	•	•	•	746-M-0.30	•	•	•
0.35	1.0	3	736-M-0.35	•	•	•	746-M-0.35	•	•	•
0.40	1.0	3	736-M-0.40	•	•	•	746-M-0.40	•	•	•
0.45	1.0	3	736-M-0.45	•	•	•	746-M-0.45	•	•	•
0.50	1.0	3	736-M-0.50	•	•	•	746-M-0.50	•	•	•
0.60	1.0	3	736-M-0.60	•	•	•	746-M-0.60	•	•	•
0.70	1.0	3	736-M-0.70	•	•	•	746-M-0.70	•	•	•
0.75	1.0	3	736-M-0.75	•	•	•	746-M-0.75	•	•	•
0.80	1.5	4.5	736-M-0.80	•	•	•	746-M-0.80	•	•	•
1.00	1.5	4.5	736-M-1.00	•	•	•	746-M-1.00	•	•	•
1.25	1.5	4.5	736-M-1.25	•	•	•	746-M-1.25	•	•	•
1.50	2.0	6	736-M-1.50	•	•	•	746-M-1.50	•	•	•
1.75	2.0	6	736-M-1.75	•	•	•	746-M-1.75	•	•	•

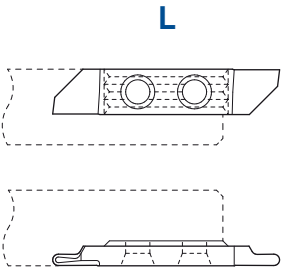
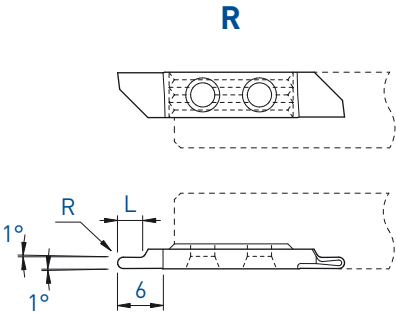
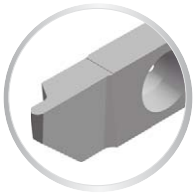
Plaquettes de filetage avec coupe positive 2°, voir page 1.158
WSP Gewindedrehen mit positivem Schnitt 2°, siehe Seite 1.158
Threading inserts with positive cut 2°, see page 1.158



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Plaquettes à rayon
Radius Wendeplatten
Radius inserts

737 / 747



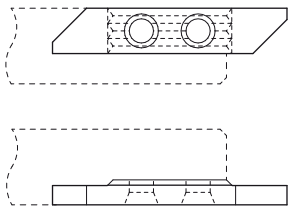
															
															
															
															
															
Art. N°					TiAlN	TiN	N (µk20)			Art. N°	TiAlN	TiN	N (µk20)		
-										747-R0.25	●	●	●		
-										747-R0.4	●	●	●		
737-R0.5					●	●	●			747-R0.5	●	●	●		
737-R0.6					●	●	●			747-R0.6	●	●	●		
737-R0.75					●	●	●			747-R0.75	●	●	●		
737-R0.8					●	●	●			747-R0.8	●	●	●		
737-R1.0					●	●	●			747-R1.0	●	●	●		

7XX-XX-B

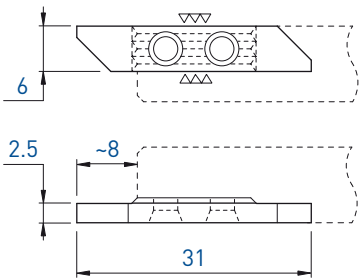
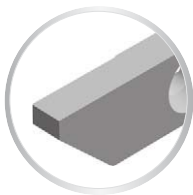


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R



L			R		
Art. N°			Art. N°		
731-E	●	●	741-E	●	●

7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

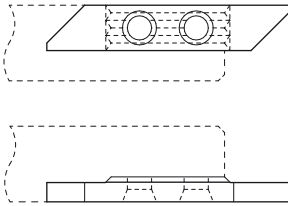
Plaquettes ébauches

WSP-Rohlinge

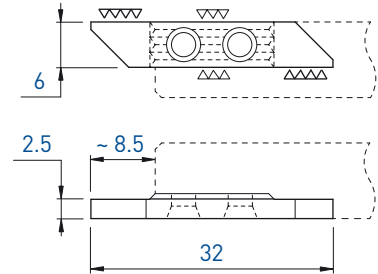
Blank inserts

731-EP / 741-EP

L



R



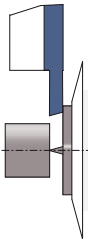
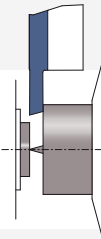
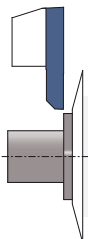
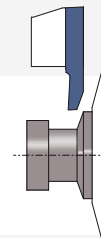
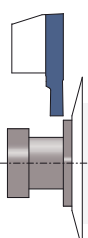
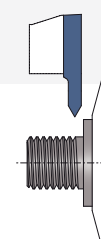
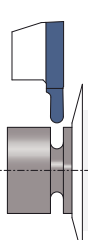
Face de coupe polie
Polierte Schneidfläche
Polished cutting face

[illegible]

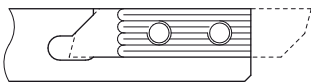
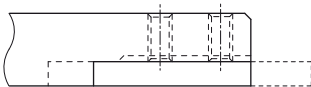
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

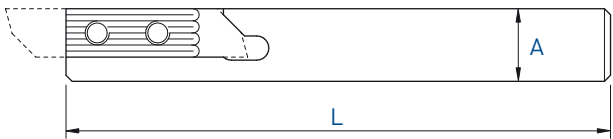
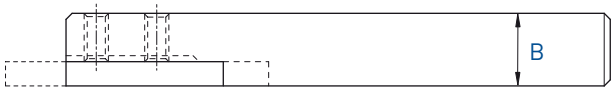
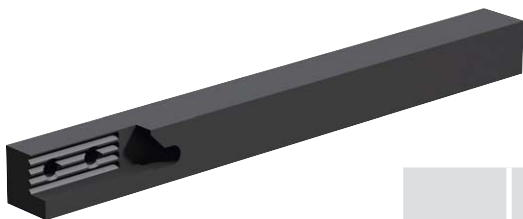
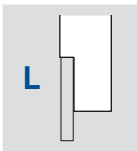
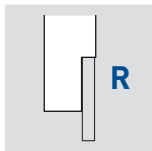
L			R		
Type		Page	Type		Page
750	750	1.92	760	760	1.92
	750-JET	1.93		760-D-JET	1.99
	750RC	1.94		760-JET	1.93
751	751	1.101		760-NOVIBRA	1.96
	751-E	1.162		760/750-D	1.97/1.98
	751-EP	1.163		760/750-AX	1.100
	751-R05	1.103	761	760LC	1.95
	751NX840	1.104		761	1.101
	751NXF	1.112/1.124		761-E	1.162
	751R	1.114		761-EP	1.163
	751R-PCD	1.127		761-PCD	1.113
	751R-R05	1.116		761-R05	1.103
	751RAS	1.126		761L	1.114
	751RD	1.125		761L-R05	1.116
	751RS	1.115		761LD	1.125
	751RU	1.122		761LS	1.115
	751RZU	1.123		761LX12	1.119
	751RX12	1.119		761LX25	1.120
	751RX25	1.120		761LX4	1.117
	751RX4	1.117		761LXF	1.118
	751RX840	1.121		761NXF	1.112/1.124
	751RXF	1.118		761NX840	1.104
	751S	1.102		761S	1.102
	751U	1.110		761U	1.110
	751X12	1.107		761ZU	1.111
	751X25	1.108		761X12	1.107
	751X4	1.105		761X25	1.108
	751XF	1.106		761X4	1.105
752	752	1.128		761X840	1.109
	752PX	1.129		761XF	1.106
	752S	1.135	762	761ZU	1.111
	752X	1.130		762	1.128
753	753	1.137		762PX	1.129
	753P	1.146		762S	1.135
	753S	1.136		762X	1.130
	753VX-15°	1.143		762VUX	1.132
	753VX-8°	1.140		762VX-800	1.131
	753VX-805	1.141		762ZF-X	1.134
	753X	1.138	763	762ZX	1.133
	753XS	1.139		763	1.137
	753ZX	1.145		763P	1.146
754	754	1.147		763S	1.136
	754VS	1.148		763VUX	1.144
	754X	1.149		763VX-15°	1.143
	754ZX	1.152		763VX-8°	1.140
	754ZXT	1.154		763VX-800	1.142
756	756	1.156		763VX-805	1.141
	756-AG60°	1.157		763X	1.138
	756-G60°	1.157		763XS	1.139
	756-M	1.158	764	763ZX	1.145
757	757	1.160		764	1.147
	757ZX	1.161		764VS	1.148
				764X	1.149
				764X5-EP	1.150
				764X10-EP	1.151
				764ZF-X	1.155
				764ZX	1.152
				764ZXB	1.153
				764ZXT	1.154
			766	766	1.156
				766-AG60°	1.157
				766-G60°	1.157
				766-M	1.158
				766ZX	1.159
			767	767	1.160
				767ZX	1.161

		750 / 760 Porte-outils Halter Holders	> 1.92
	751 / 761 Tronçonnage Abstechen Parting off		> 1.101
	752 / 762 Tournage avant Vorwärts drehen Front turning		> 1.114
	753 / 763 Tournage arrière Rückwärts drehen Back turning		> 1.128
	754 / 764 Fonçage-tournage Einstechen und drehen Grooving and turning		> 1.137
	755 / 765 Filetage Gewinde drehen Threading		> 1.147
	756 / 766 Filetage Gewinde drehen Threading		> 1.156
	757 / 767 Plaquettes à rayon Radius Wendeplatten Radius inserts		> 1.160
		Plaquettes ébauches WSP-Rohlinge Blank inserts	> 1.162

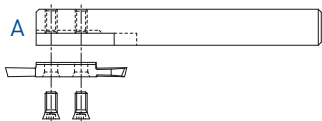
L



R

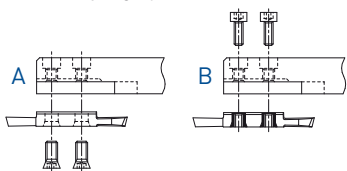


Serrage standard A
Standard Spannsystem A
Standard clamping system A



A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
10 x 10	115	A	750-10	760-10
10 x 10	115	A + B	750-10-AB	760-10-AB
10 x 10	50	A	750-10-50	760-10-50
12 x 12	130	A	750-12	760-12
12 x 12	130	A + B	750-12-AB	760-12-AB
12 x 12	90	A	750-12-90	760-12-90
12 x 12	90	A + B	750-12-90-AB	760-12-90-AB
12.7 x 12.7	130	A + B	750-12.7	760-12.7
14 x 14	130	A + B	750-14	760-14
16 x 16	130	A + B	750-16	760-16
16 x 16	75	A + B	750-16-75	760-16-75
20 x 20	120	A + B	750-20	760-20
25 x 25	140	A	760/750-25	

Serrage A + B
Spannsystem A + B
Clamping system A + B



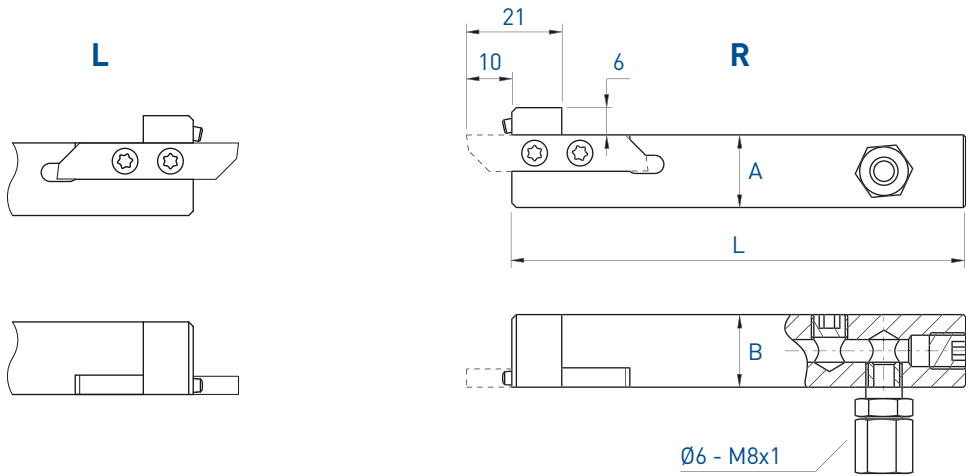
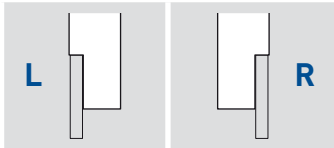
760/750-25
R + L



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

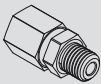
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

750-JET / 760-JET



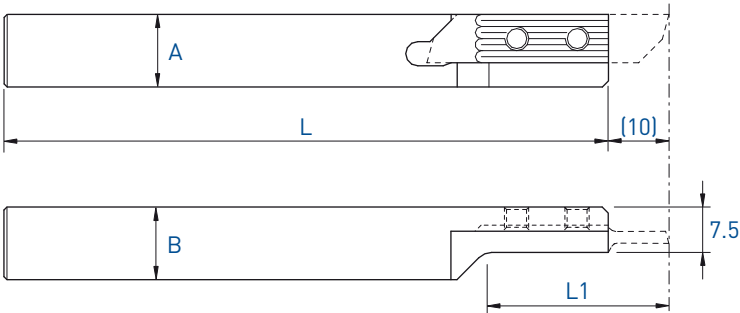
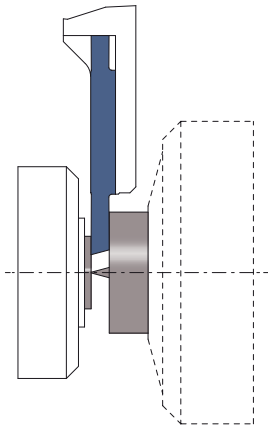
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
10 x 12	100	A + B	750-1012-JET	760-1012-JET
10 x 12	80	A + B	-	760-1012-80-JET
12 x 12	100	A + B	750-12-JET	760-12-JET
12.7 x 12.7	100	A + B	750-12.7-JET	760-12.7-JET
16 x 16	100	A + B	750-16-JET	760-16-JET
20 x 20	100	A + B	750-20-JET	760-20-JET

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

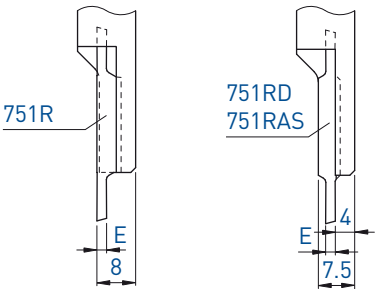
Pièces de rechange Ersatzteile Spare parts			Buses Düsen Nozzles 
	Art. N°	Art. N°	Art. N°
750-JET / 760-JET	J-M8X1-D6	JB-M8X1	JJ-M3X6-D1.5 More option see JET-Line

Utiliser des plaquettes type 751R
WSP Typ 751R verwenden
Use inserts type 751R

Voir pages 1.114 - 1.127
Siehe Seiten 1.114 - 1.127
See pages 1.114 - 1.127



<div>  L (R) Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line </div>			
A x B	L	L1	Art. N°
12 x 12	130	30	750RC-12
12.7 x 12.7	130	30	750RC-12.7
16 x 16	130	40	750RC-16



(p. 1.114 + 1.125 + 1.126)

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

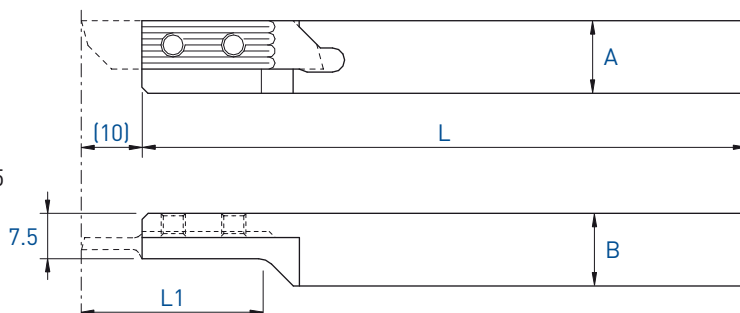
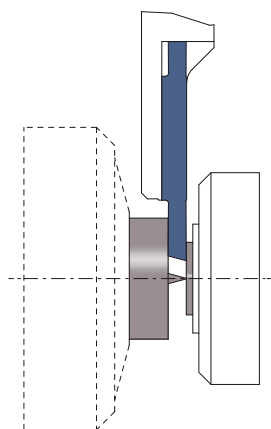
Porte-outils

Halter
Holders

760LC

Utiliser des plaquettes type 761L
WSP Typ 761L verwenden
Use insets type 761L

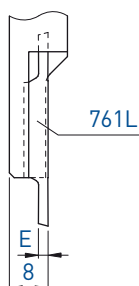
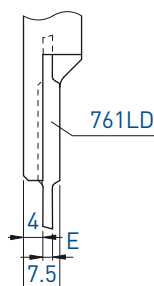
Voir pages 1.114 - 1.120 + 1.125
Siehe Seiten 1.114 - 1.120 + 1.125
See pages 1.114 - 1.120 + 1.125



R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

A x B	L	L1	Art. N°
16 x 16	130	40	760LC-16



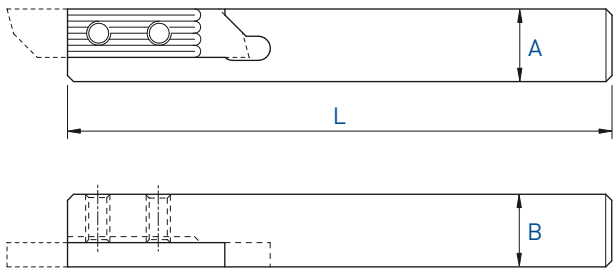
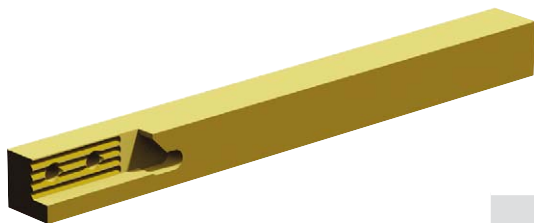
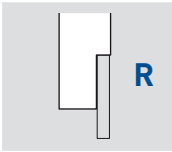
(p. 1.114)

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

760-NOVIBRA

Porte-outils en métal lourd anti-vibratoire
Schwingungsdämpfende Schwermetallhalter
Low vibration heavy metal holders

R

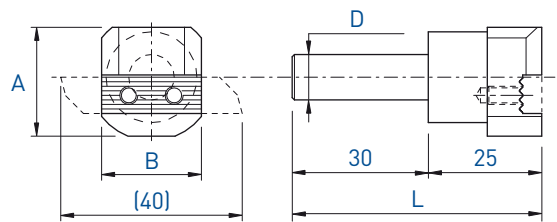
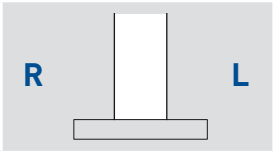


A x B	L	Serrage Spannsystem Clamping	Art. N°
10 x 10	115	A	760-10-NOVIBRA
12 x 12	115	A	760-12-NOVIBRA

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

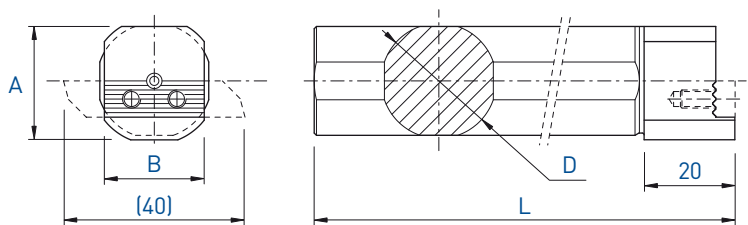
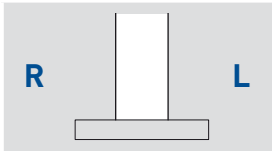
Porte-outils
Halter
Holders

760 / 750-D10



A x B	L	D	Art. N°
24 x 22	55	10	760/750-D10

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

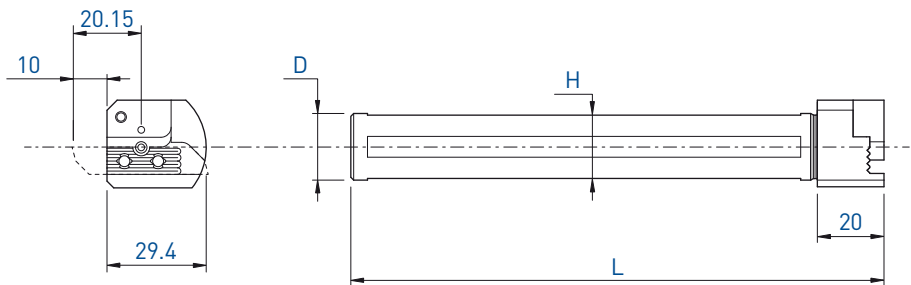
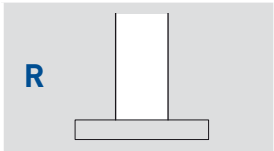


A x B	L	D	Art. N°
25 x 22	160	16	760/750-D16
25 x 22	160	19.05	760/750-D19.05
25 x 22	110	19.05	760/750-D19.05-S
25 x 22	160	20	760/750-D20
25 x 22	110	22	760/750-D22
25 x 22	200	25	760/750-D25
25 x 22	200	25.4	760/750-D25.4
25 x 22	125	25.4	760/750-D25.4-S

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils frontal avec arrosage intégré
Frontaler Halter mit integrierter Kühlmittelzufuhr
Front holder with integrated coolant supply

760-D-JET

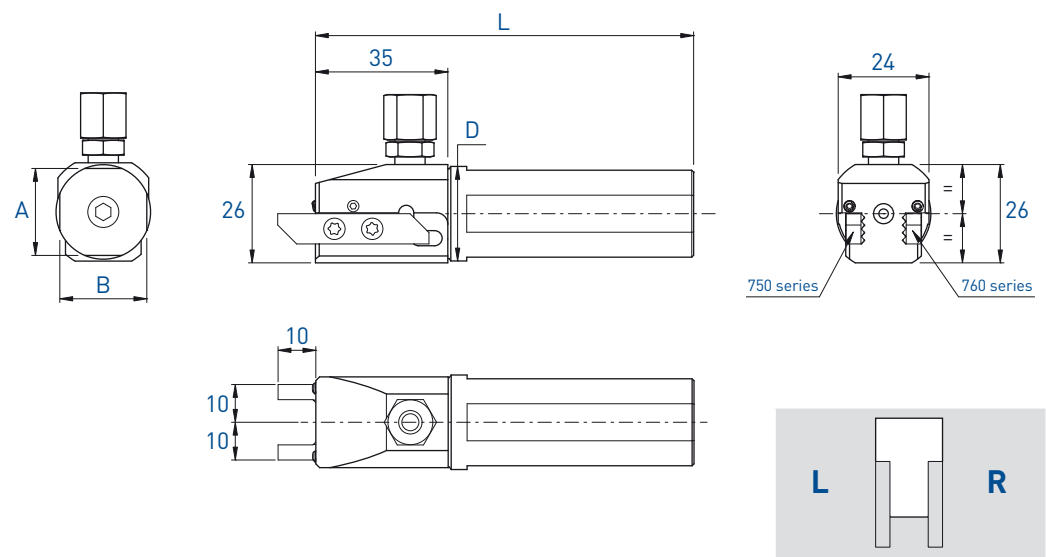


D	H	L	Art. N°
16	15	160	760-D16-160-JET
19.05	18	160	760-D19.05-160-JET
19.05	18	110	760-D19.05-110-JET
20	19	160	760-D20-160-JET
22	20	110	760-D22-110-JET
25	24	200	760-D25-200-JET
25.4	24	200	760-D25.4-200-JET
25.4	24	125	760-D25.4-125-JET

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

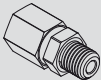
760 / 750-AX-JET

Porte-outils
Halter
Holders



A x B	L	D	Art. N°
23 x 23	100	25	760/750-AX-D25-JET
23 x 23	100	25,4	760/750-AX-D25.4-JET

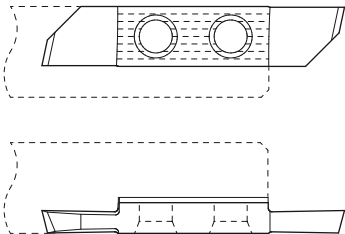
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Pièces de rechange Ersatzteile Spare parts			Buses Düsen Nozzles 
	Art. N°	Art. N°	Art. N°
760/750-AX	J-M8X1-D6	JB-M8X1	JJ-M3X6-D1.5
			More option see JET-Line

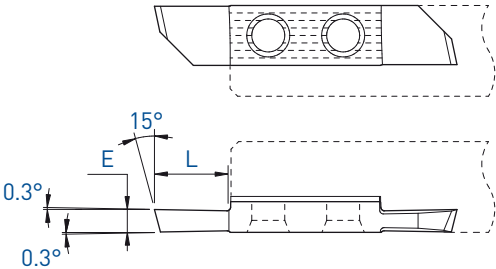
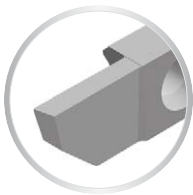
Tronçonnage
Abstechen
Parting off

751 / 761

L



R



L



R



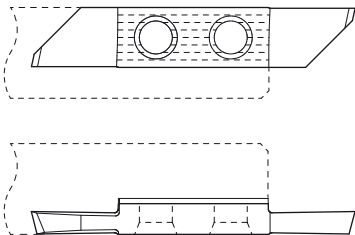
E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P	P		
			M	M		M	M			M	M	M		M	M			
			N	N		N	N	N		N	N	N		N	N	N		
			S		S	S		S		S	S		S	S		S		
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)				TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	751-1.0	●	●	●	●	●	●	761-1.0	●	●	●	●	●	●	●	●	●
1.2	5	751-1.2	●	●	●				761-1.2	●	●	●	●	●	●	●	●	●
1.5	7.5	751-1.5	●	●	●	●		●	761-1.5	●	●	●	●	●	●	●	●	●
1.8	7.5	751-1.8	●	●	●				761-1.8	●	●	●	●	●	●			●
2.0	10	751-2.0	●	●	●	●	●	●	761-2.0	●	●	●	●	●	●	●	●	●
2.2	10	751-2.2	●	●	●				761-2.2	●	●	●	●	●	●	●		●
2.5	10	751-2.5	●	●	●	●		●	761-2.5	●	●	●	●	●	●	●	●	●
3.0	10	751-3.0	●	●	●				761-3.0	●	●	●	●	●	●	●		●

7XX-XX-B

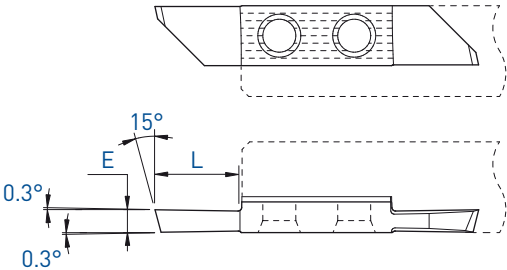
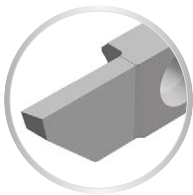


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R



				L								R					
																	
				P	P	P		P	P	P		P	P	P			
				M	M			M	M			M	M				
				N	N			N	N			N	N				
				S		S		S		S		S		S			
Art. N°				TiAlN	TiN	N [µk20]		HTA	HTiN	HN [µk10]							
751S-2.0				●	●	●		●		●		761S-2.0				●	
751S-2.2				●	●	●						761S-2.2				●	●
751S-2.5				●	●	●		●		●		761S-2.5				●	●
751S-3.0				●	●	●						761S-3.0				●	●

7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

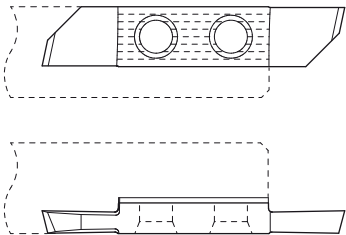
Tronçonnage

Abstechen

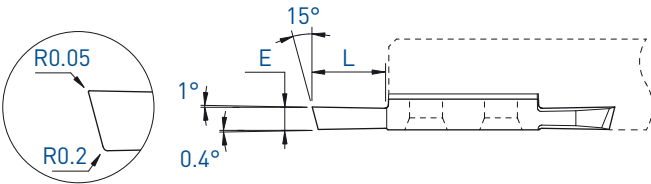
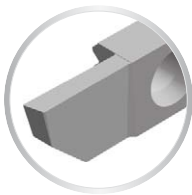
Parting off

751-R05 / 761-R05

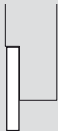
L



R



L



R



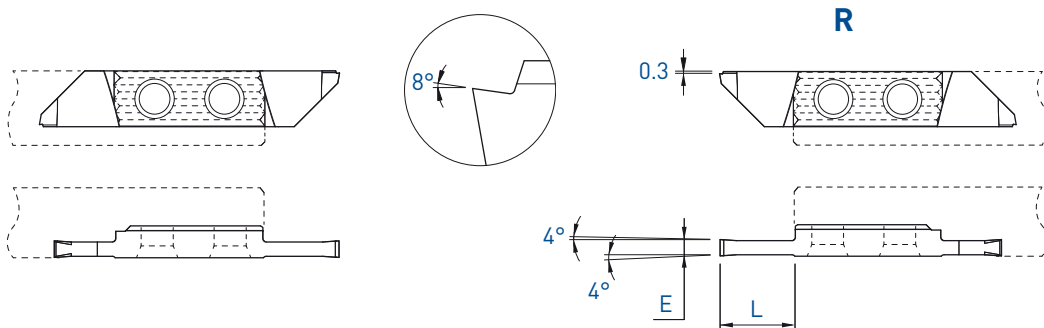
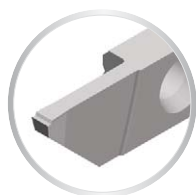
E	L	Art. N°	P	M	N	S	TiAlN	TiN	N (µk20)	P	M	N	S	HTA	HTiN	HN (µk10)
			P	M	N	S				P	M	N	S			
1.5	7.5	751-1.5-R05	•	•	•											
2.0	10	751-2.0-R05	•	•	•											
2.5	10	751-2.5-R05	•	•	•											

Art. N°	P	M	N	S	TiAlN	TiAlX	TiN	N (µk20)	P	M	N	S	HTA	HTiN	HN (µk10)
	P	M	N	S					P	M	N	S			
761-1.5-R05	•	•	•	•											
761-2.0-R05	•	•	•	•											
761-2.5-R05	•	•	•	•											

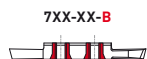
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



E	L	Art. N°	HCR-TF		Art. N°	HCR-TF	
			HN [µk10]	HN [µk10]		HN [µk10]	HN [µk10]
1.5	10	751NX840-1.5	●	●	761NX840-1.5	●	●
2.0	11	751NX840-2.0	●	●	761NX840-2.0	●	●
2.5	11	751NX840-2.5	●	●	761NX840-2.5	●	●



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

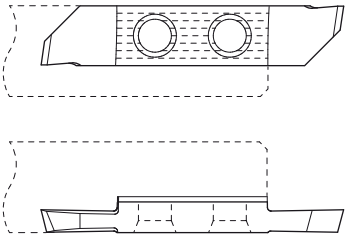
Tronçonnage

Abstechen

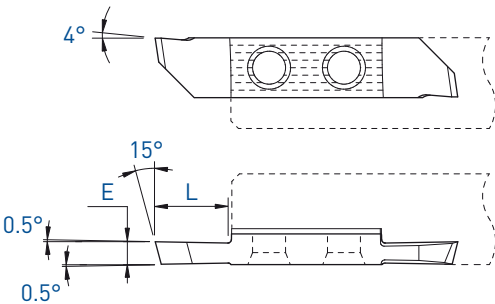
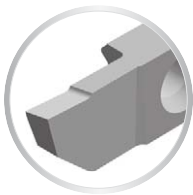
Parting off

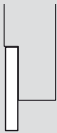
751X4 / 761X4

L



R



		L						R					
													
E	L	Art. N°	   	   	   	   	   	Art. N°	   	   	   	   	   
1.5	7.5	-						761X4-1.5	•	•	•		
2.0	10	751X4-2.0	•	•	•	•	•	761X4-2.0	•	•	•	•	•
2.5	10	-						761X4-2.5	•	•	•		

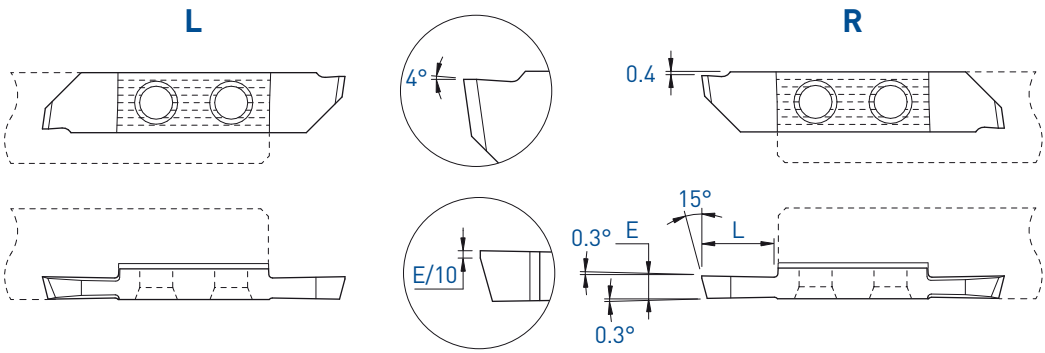
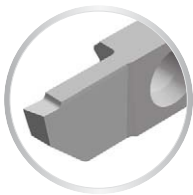
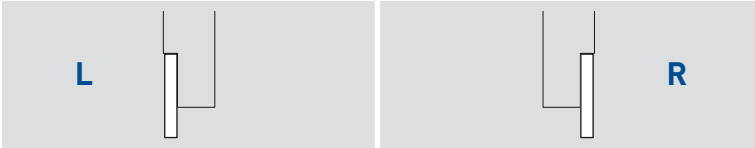
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

751XF / 761XF

Tronçonnage
Abstechen
Parting off



E	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	E	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)									
1.5	7.5	751XF-1.5	●	●	●	●		●	761XF-1.5	●	●	●	●		●	1.5	7.5	751XF-1.5	●	●	●	●		●
2.0	10	751XF-2.0	●	●	●	●	●	●	761XF-2.0	●	●	●	●	●	●	2.0	10	751XF-2.0	●	●	●	●	●	●
2.2	10	751XF-2.2	●	●	●	●	●	●	761XF-2.2	●	●	●	●	●	●	2.2	10	751XF-2.2	●	●	●	●	●	●
2.5	10	751XF-2.5	●	●	●	●	●	●	761XF-2.5	●	●	●	●			2.5	10	751XF-2.5	●	●	●	●		
3.0	10	751XF-3.0	●	●	●	●	●	●	761XF-3.0	●	●	●	●	●	●	3.0	10	751XF-3.0	●	●	●	●	●	●

7XX-XX-B



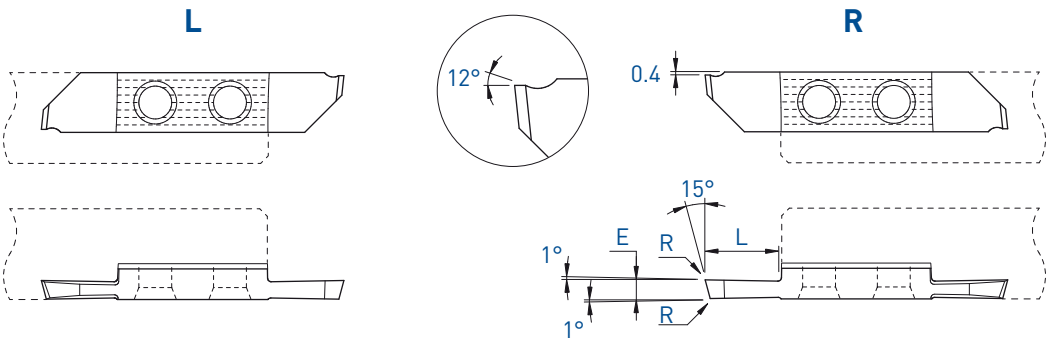
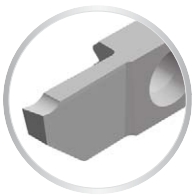
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tronçonnage

Abstechen

Parting off

751X12 / 761X12

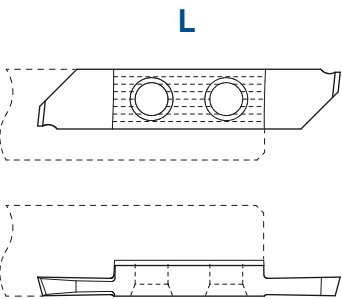
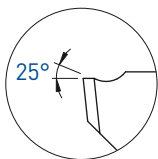
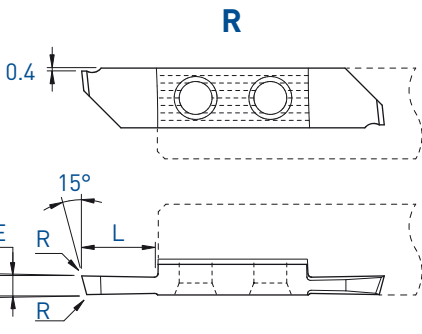
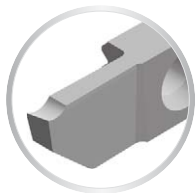
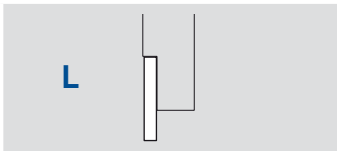
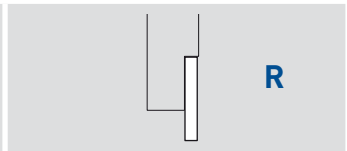


			L						R					
														
Art. N°	TiAIN	TiN	N (μk20)	HTA	HTiN	HN (μk10)	Art. N°	TiAIN	TiN	N (μk20)	HTA	HTiN	HN (μk10)	
	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>
751X12-1.5	●	●	●	●		●	761X12-1.5	●	●	●	●		●	
751X12-2.0	●	●	●	●		●	761X12-2.0	●	●	●	●		●	
751X12-2.5	●	●	●				761X12-2.5	●	●	●	●		●	

7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



E	L	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
				TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	0.03	751X25-1.5	●	●	●	●	●	●	761X25-1.5	●	●	●			
2.0	10	0.03	751X25-2.0	●	●	●				761X25-2.0	●	●	●	●		●
2.5	10	0.03	751X25-2.5	●	●	●				761X25-2.5	●	●	●	●		●

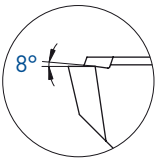
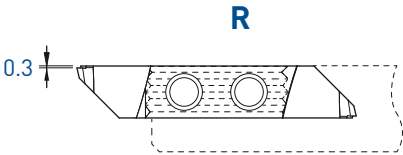
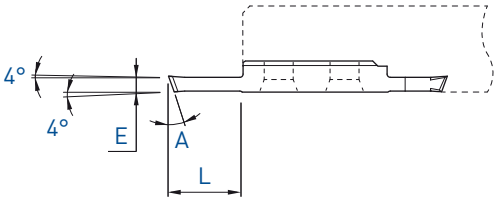
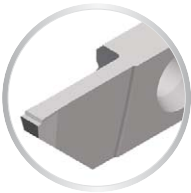
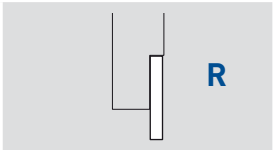
7XX-XX-B



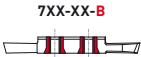
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tronçonnage
Abstechen
Parting off

761X840

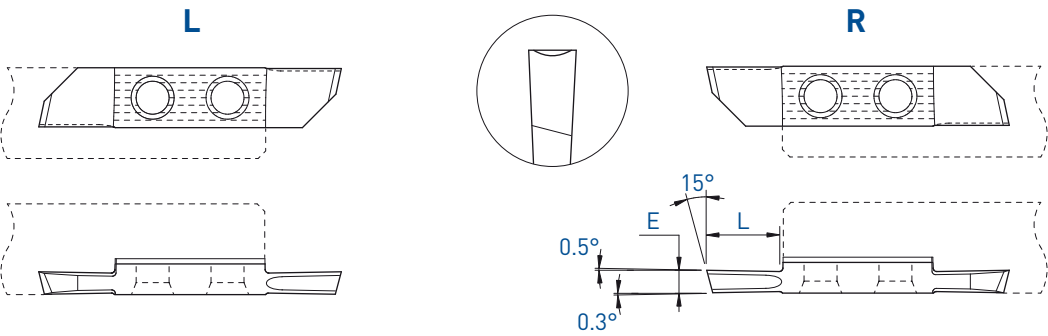
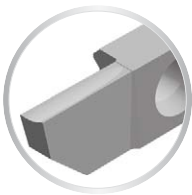


E	L	A	Art. N°	<div><div><div><div></div><div>N</div><div>S</div></div><div>HCR-TF</div><div>HN (µk10)</div></div><div><div><div></div><div>N</div><div>S</div></div><div></div><div></div><div></div></div><div><div>P</div><div></div><div></div></div></div>	
1.4	10	20°	761X840-1.4-20	●	●
2	11	5°	761X840-2.0-5	●	●
2.5	11	5°	761X840-2.5-5	●	●
1.9	11	20°	761X840-1.9-20	●	●
2.4	11	20°	761X840-2.4-20	●	●

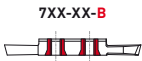


7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



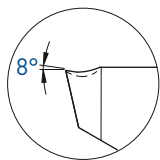
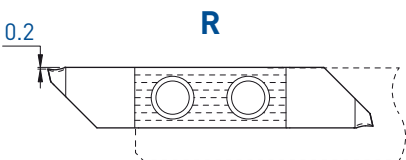
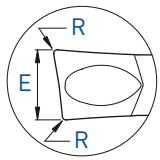
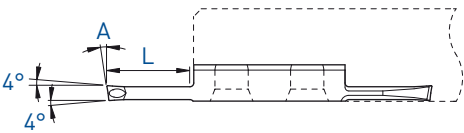
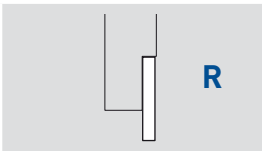
		<div>L</div>						<div>R</div>							
E	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>TiAlN</div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>TiN</div>	<div><div>P</div><div>S</div></div> <div>N (µk20)</div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>HTA</div>	<div><div>P</div><div>N</div><div>S</div></div> <div>HTiN</div>	<div><div>P</div><div>N</div><div>S</div></div> <div>HN (µk10)</div>	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>TiAlN</div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>TiN</div>	<div><div>P</div><div>S</div></div> <div>N (µk20)</div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>HTA</div>	<div><div>P</div><div>N</div><div>S</div></div> <div>HTiN</div>	<div><div>P</div><div>N</div><div>S</div></div> <div>HN (µk10)</div>
1.5	7.5	-							761U-1.5	●	●	●	●		●
2.0	10	751U-2.0	●	●	●				761U-2.0	●	●	●			●



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tronçonnage
Abstechen
Parting off

761ZU

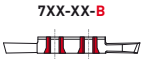


E	A	L	R	Art. N°	P	P	M	N	S	TiAlN	N (µk20)
2.0	0°	11	0.10	761ZU8-2.0-R10	•						
2.0	8°	11	0.10	761ZU8-2.0-8°-R10	•						

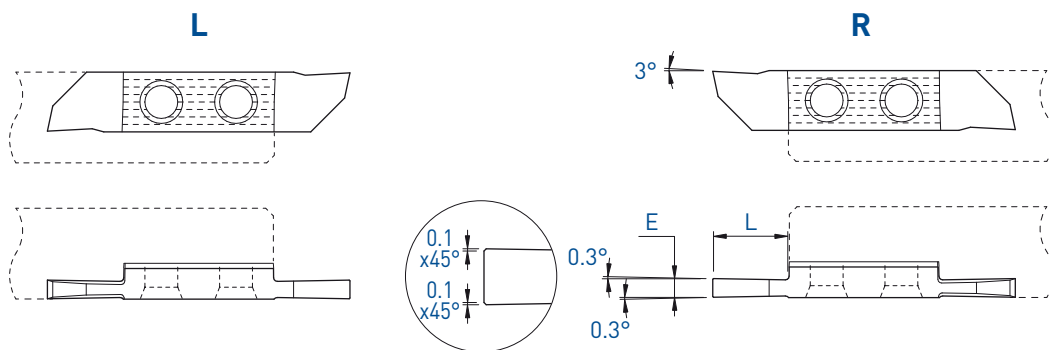
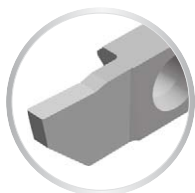


Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



L							R						
Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
751NXF-2.0	●	●	●	●		●	761NXF-2.0	●	●	●	●	●	●
751NXF-2.5	●	●	●				761NXF-2.5	●	●	●			
751NXF-3.0	●	●	●				761NXF-3.0	●	●	●			



7XX-XX-B

Sur demande pour serrage type B, voir page 1.05

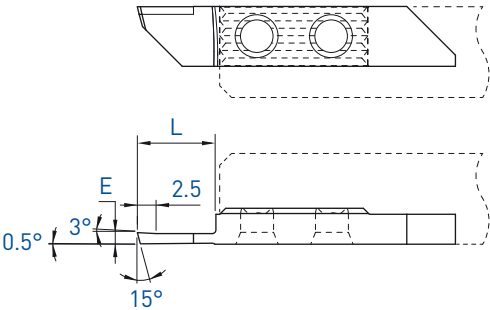
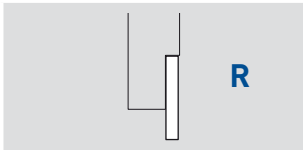
Auf Anfrage für B-Spannsystem, siehe Seite 1.05

On request for B clamping system, see page 1.05

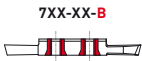
Tronçonnage
Abstechen
Parting off

761-PCD

R

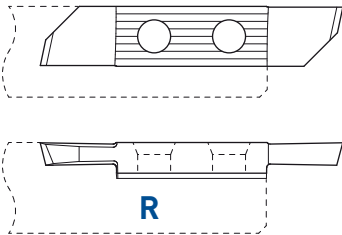


E	L	Art. N°	PCD
1.5	10	761-1.5-PCD	●
2	11	761-2.0-PCD	●
2.5	11	761-2.5-PCD	●

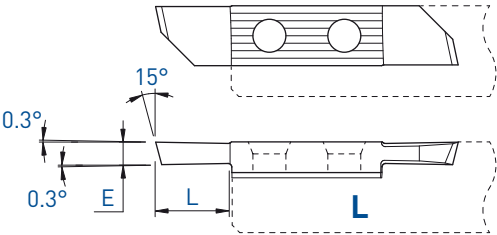


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Cut L



Cut R



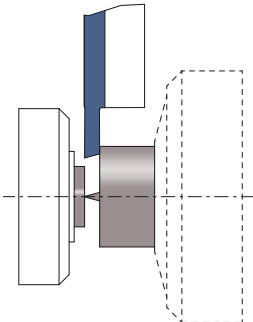
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P	P
			M	M			M	M		M	M			M	M	
			N	N			N	N		N	N			N	N	
			S		S		S			S		S		S		S
			TiAIN	TiN	N (µk20)		HTA	HTiN		TiAIN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	761L-1.0	•	•	•		•	•	751R-1.0	•	•	•	•	•		•
1.5	7.5	761L-1.5	•	•	•		•	•	751R-1.5	•	•	•	•	•		•
1.8	7.5	761L-1.8	•	•	•				751R-1.8	•	•	•	•	•		•
2.0	10	761L-2.0	•	•	•		•	•	751R-2.0	•	•	•	•	•	•	•
2.2	10	761L-2.2	•	•	•				751R-2.2	•	•	•	•			
2.5	10	761L-2.5	•	•	•		•	•	751R-2.5	•	•	•	•	•	•	•
3.0	10	761L-3.0	•	•	•				751R-3.0	•	•	•	•	•		•



Tronçonnage

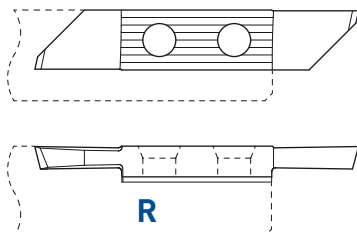
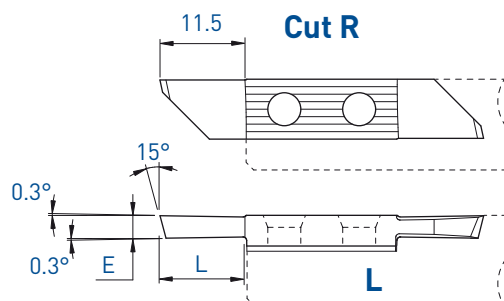
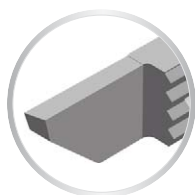
Abstechen

Parting off

Coupe déportée

Versetztes Schneiden

Cut off line

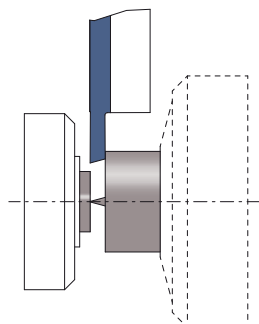
761LS / 751RS**Cut L****Cut R****R (L)**

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P	P
			M	M		M	M			M	M	M		M	M	
			N	N		N	N			N		N		N	N	N
			S		S	S		S		S	S		S	S		S
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5.5	761LS-1.0	•	•	•	•	•	•	751RS-1.0	•	•	•	•	•	•	•
1.5	8	761LS-1.5	•	•	•	•	•	•	751RS-1.5	•	•	•	•	•	•	•
2.0	11.5	761LS-2.0	•	•	•				751RS-2.0	•	•	•	•	•	•	•
2.2	11.5	761LS-2.2	•	•	•				751RS-2.2	•	•	•	•	•	•	•
2.5	11.5	761LS-2.5	•	•	•				751RS-2.5	•	•	•	•	•	•	•
3.0	11.5	761LS-3.0	•	•	•				751RS-3.0	•	•	•	•	•	•	•



761L-R05 / 751R-R05

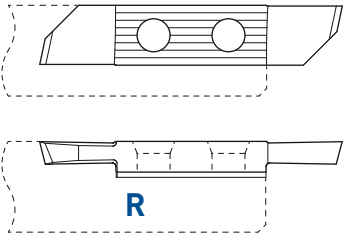
Coupe déportée

Versetztes Schneiden
Cut off line

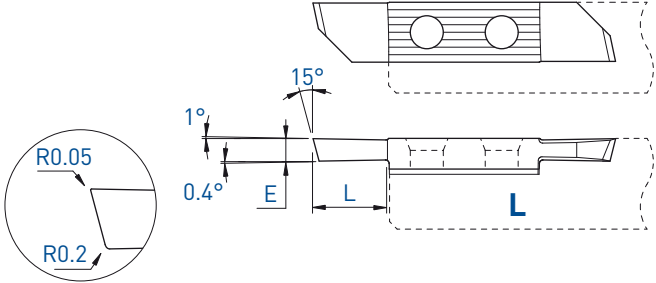
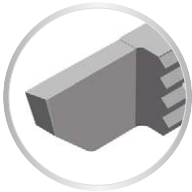
Tronçonnage

Abstechen
Parting off

Cut L



Cut R



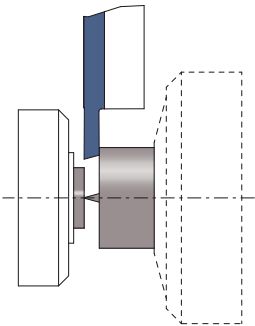
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P	P
			M	M		M	M			M	M		M	M		
			N	N		N	N	N		N		N		N	N	N
			S		S	S		S		S	S	S	S	S		S
			TiAlN	TiN	N [μk20]	HTA	HTiN	HN [μk10]		TiAlN	TiAlX	TiN	N [μk20]	HTA	HTiN	HN [μk10]
1.5	7.5	761L-1.5-R05	•	•	•				751R-1.5-R05	•	•	•	•	•		•
2.0	10	761L-2.0-R05	•	•	•				751R-2.0-R05	•	•	•	•			



Tronçonnage

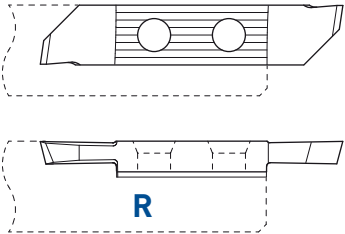
Abstechen
Parting off

Coupe déportée

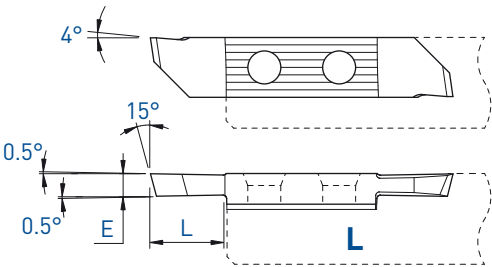
Versetztes Schneiden
Cut off line

761LX4 / 751RX4

Cut L



Cut R



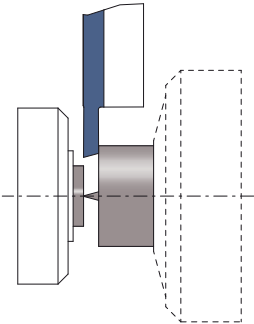
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
			M	M		M	M			M	M		M	M	
1.5	7.5	-	N	N		N	N	N	751RX4-1.5	N	N		N	N	N
			S		S	S		S		S		S	S		S
2.0	10	761LX4-2.0	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]	751RX4-2.0	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]
2.5	10	-							751RX4-2.5						



761LXF / 751RXF

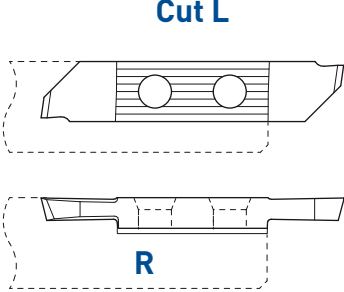
Coupe déportée

Versetztes Schneiden
Cut off line

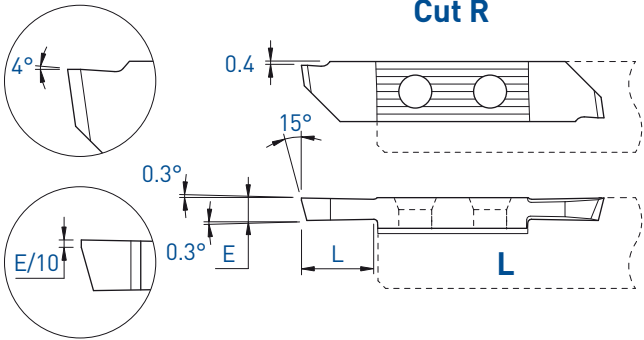
Tronçonnage

Abstechen
Parting off

Cut L



Cut R



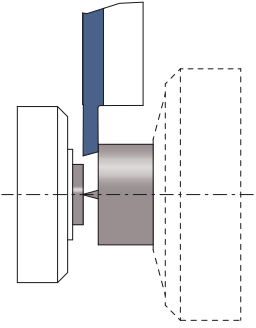
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
			M	M		M	M			M	M		M	M	
			N	N		N	N			N	N		N	N	
			S		S	S		S		S		S	S		S
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.5	7.5	-							751RXF-1.5	•	•	•	•	•	•
2.0	10	761LXF-2.0	•	•	•				751RXF-2.0	•	•	•	•	•	•
2.5	10	761LXF-2.5	•	•	•				751RXF-2.5	•	•	•	•	•	•
3.0	10	761LXF-3.0	•	•	•				751RXF-3.0	•	•	•	•	•	•



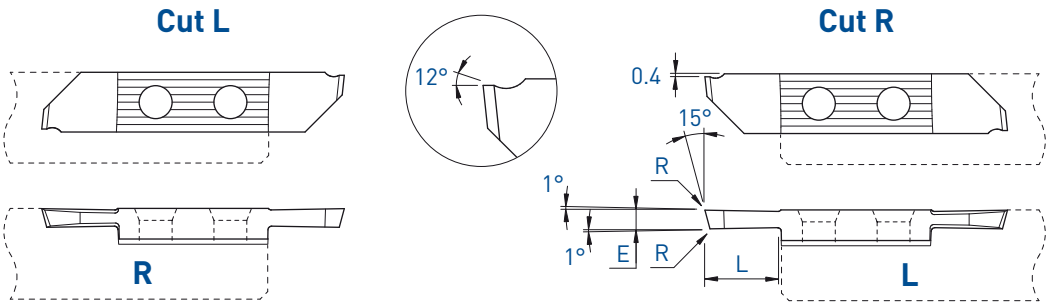
Tronçonnage

Abstechen
Parting off

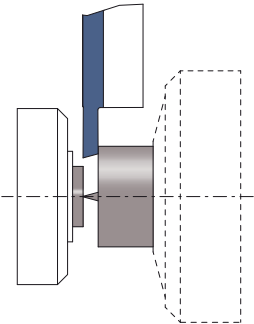
Coupe déportée

Versetztes Schneiden
Cut off line

761LX12 / 751RX12



			<div>R (L)</div> <div>Coupe à gauche déportée Versetztes Linksschneiden Left cut off line</div>						<div>L (R)</div> <div>Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line</div>							
E	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div><div>TiAlN</div><div>TiN</div><div>N (µk20)</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div><div>TiAlN</div><div>TiN</div><div>N (µk20)</div></div>	<div><div>P</div><div></div><div></div><div>S</div><div></div><div></div><div></div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div><div>HTA</div><div>HTiN</div><div>HN (µk10)</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div><div>HTA</div><div>HTiN</div><div>HN (µk10)</div></div>	<div><div>P</div><div></div><div></div><div>S</div><div></div><div></div><div></div></div>	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div><div>TiAlN</div><div>TiN</div><div>N (µk20)</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div><div>TiAlN</div><div>TiN</div><div>N (µk20)</div></div>	<div><div>P</div><div></div><div></div><div>S</div><div></div><div></div><div></div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div><div>HTA</div><div>HTiN</div><div>HN (µk10)</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div><div>HTA</div><div>HTiN</div><div>HN (µk10)</div></div>	<div><div>P</div><div></div><div></div><div>S</div><div></div><div></div><div></div></div>
1.5	7.5	0.03	-							751RX12-1.5	●	●	●			
2.0	10	0.03	761LX12-2.0	●	●	●				751RX12-2.0	●	●	●	●	●	●



761LX25 / 751RX25

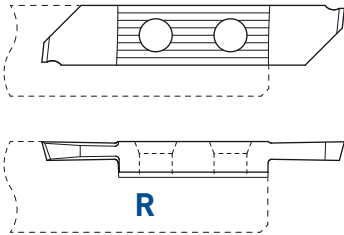
Coupe déportée

Versetztes Schneiden
Cut off line

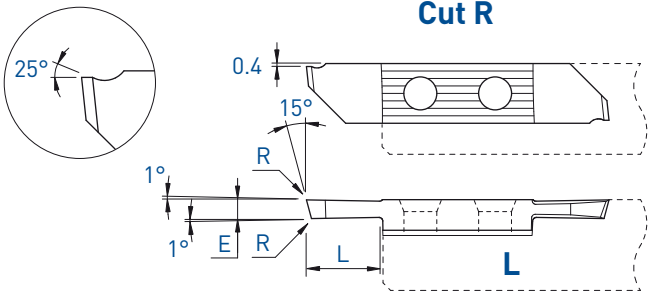
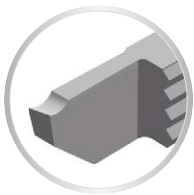
Tronçonnage

Abstechen
Parting off

Cut L



Cut R



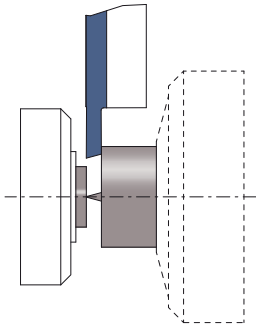
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	R	Art. N°	P	P	P	TiAlN	TiN	N (µk20)	Art. N°	P	P	P	TiAlN	TiN	N (µk20)
				M	M						M	M				
2.0	10	0.03	761LX25-2.0	N	N						N	N				
				S		S					S		S			



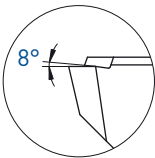
Tronçonnage

Abstechen
Parting off

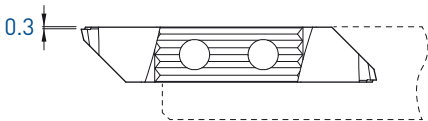
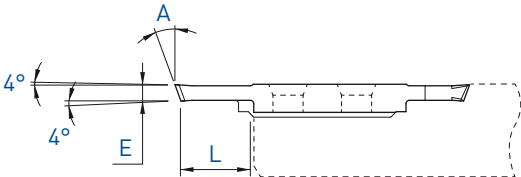
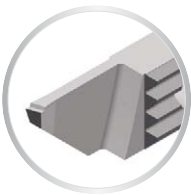
Coupe déportée

Versetztes Schneiden
Cut off line

751RX840



Cut R



L (R)

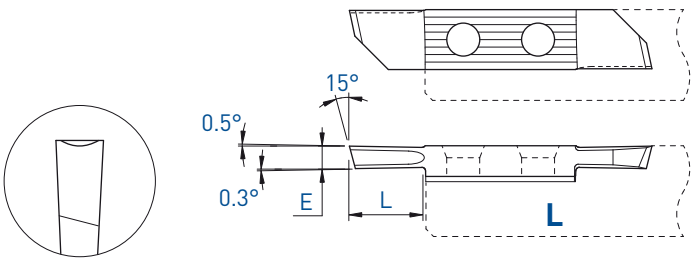
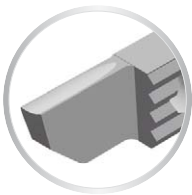
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	A	Art. N°	<div><div><div><div></div><div>N</div><div>S</div></div><div>HCR-TF</div></div><div><div><div></div><div>N</div><div>S</div></div><div>HN (µk10)</div></div></div> <div><div>P</div><div></div><div></div></div>	
1.4	10	20°	751RX840-1.4-20	●	●
1.5	10	5°	751RX840-1.5-5	●	●
2	11	5°	751RX840-2.0-5	●	●
2.5	11	5°	751RX840-2.5-5	●	●
1.9	11	20°	751RX840-1.9-20	●	●
2.4	11	20°	751RX840-2.4-20	●	●

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

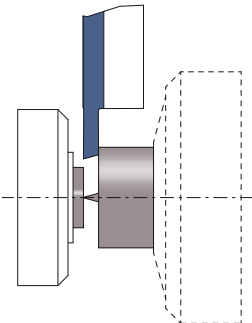
Cut R



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°			
					
					
					
			TiAlN	TiN	N [µk20]
1.5	7.5	751RU-1.5	●	●	●
2.0	10	751RU-2.0	●	●	●



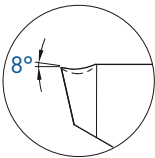
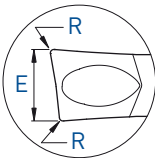
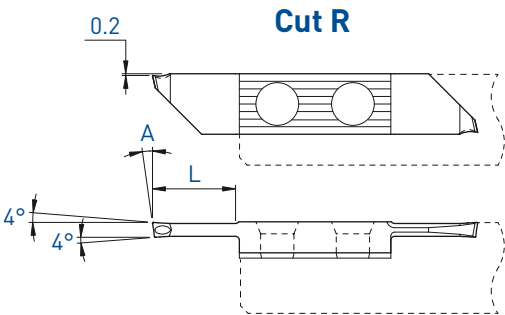
Tronçonnage

Abstechen
Parting off

Coupe déportée

Versetztes Schneiden
Cut off line

751RZU



R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

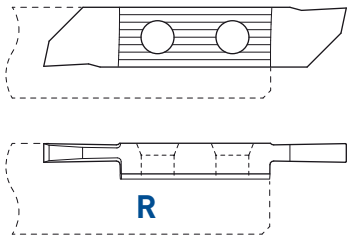
					<div><div><div>P</div><div>M</div><div>N</div><div>S</div></div><div><div>P</div><div>M</div><div>N</div><div></div></div><div><div>P</div><div></div><div></div><div>S</div></div></div>
E	A	L	R	Art. N°	TiAlN TiN N [µm20]
2.0	8°	11.0	0.10	751RZU8-2.0-8°-R10	●



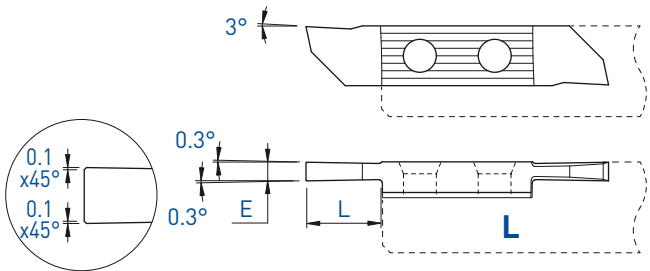
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

Cut L



Cut R



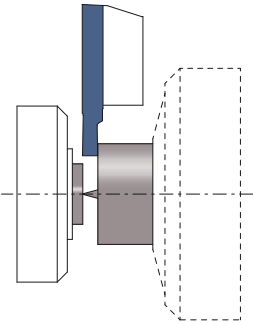
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
			M	M		M	M			M	M		M	M	
			N	N		N	N			N	N		N	N	
			S		S	S		S		S		S	S		S
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
2.0	10	761NXF-2.0	•	•	•	•		•	751NXF-2.0	•	•	•	•		•
2.5	10	761NXF-2.5	•	•	•				751NXF-2.5	•	•	•			
3.0	10	761NXF-3.0	•	•	•				751NXF-3.0	•	•	•			



Tronçonnage

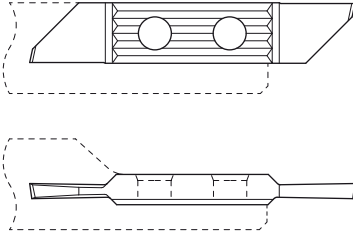
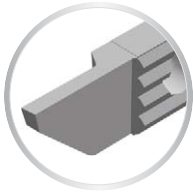
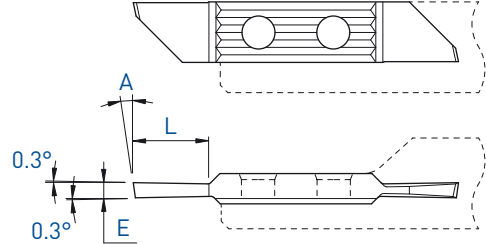
Abstechen

Parting off

Coupe déportée

Versetztes Schneiden

Cut off line

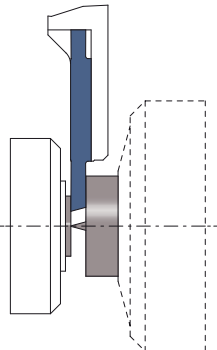
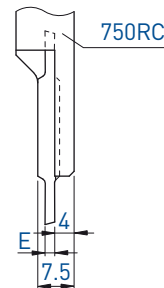
761LD / 751RD**Cut L****R****Cut R****L****R (L)**

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

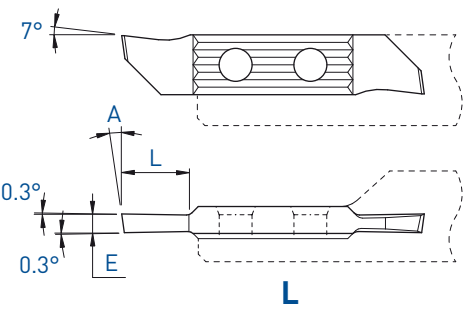
L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

				<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>			<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>		
E	A	L	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	8°	5	761LD-1.0-8°	●	●	●	●	●	●	751RD-1.0-8°	●	●	●	●	●	●
1.0	15°	5	761LD-1.0-15°	●	●	●	●	●	●	751RD-1.0-15°	●	●	●	●	●	●
1.2	8°	5	761LD-1.2-8°	●	●	●	●	●	●	751RD-1.2-8°	●	●	●	●	●	●
1.5	8°	8	761LD-1.5-8°	●	●	●	●	●	●	751RD-1.5-8°	●	●	●	●	●	●
1.5	15°	8	761LD-1.5-15°	●	●	●	●	●	●	751RD-1.5-15°	●	●	●	●	●	●
1.6	8°	8	761LD-1.6-8°	●	●	●	●	●	●	751RD-1.6-8°	●	●	●	●	●	●
1.8	8°	10	761LD-1.8-8°	●	●	●	●	●	●	751RD-1.8-8°	●	●	●	●	●	●
2.0	8°	10	761LD-2.0-8°	●	●	●	●	●	●	751RD-2.0-8°	●	●	●	●	●	●
2.0	15°	10	761LD-2.0-15°	●	●	●	●	●	●	751RD-2.0-15°	●	●	●	●	●	●
2.5	8°	10	-	●	●	●	●	●	●	751RD-2.5-8°	●	●	●	●	●	●



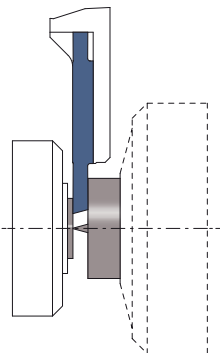
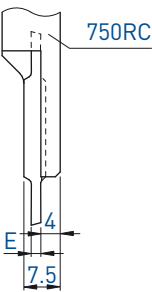
Cut R



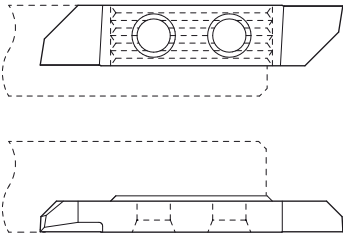
L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

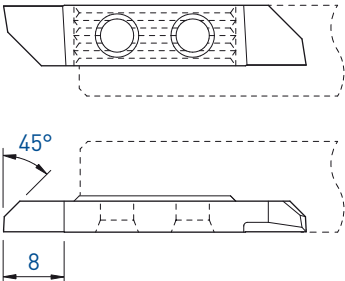
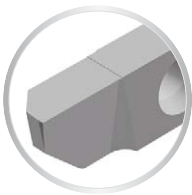
E	A	L	Art. N°	P	P	P	P	P	P
				M	M		M	M	
				N	N		N	N	N
				S		S	S		S
				TiAlN	TiN	N (μk20)	HTA	HTiN	HN (μk10)
1.6	8°	7.5	751RAS-1.6-8°	●	●	●			
1.6	15°	7.5	751RAS-1.6-15°	●	●	●	●		●
2.0	8°	9	751RAS-2.0-8°	●	●	●	●		●
2.0	15°	9	751RAS-2.0-15°	●	●	●			
2.5	8°	9	751RAS-2.5-8°	●	●	●			
2.5	15°	9	751RAS-2.5-15°	●	●	●			



L



R



L

R

A	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
			M	M		M	M			M	M		M	M	
			N	N		N	N			N	N		N	N	
			S		S	S		S		S		S	S		S
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0°	0	752	•	•	•	•		•	762	•	•	•	•		•
0°	0.20	-							762-R20	•	•	•	•		•
3°	0	752-3°	•	•	•	•		•	762-3°	•	•	•	•		•
3°	0.20	-							762-3°-R20	•	•	•	•	•	•

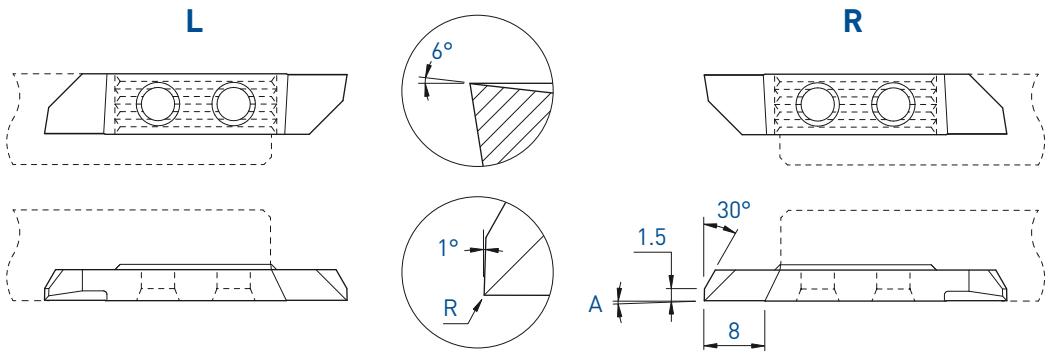
7XX-XX-B

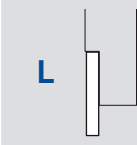
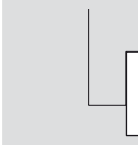


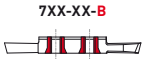
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage avant
Vorwärts drehen
Front turning

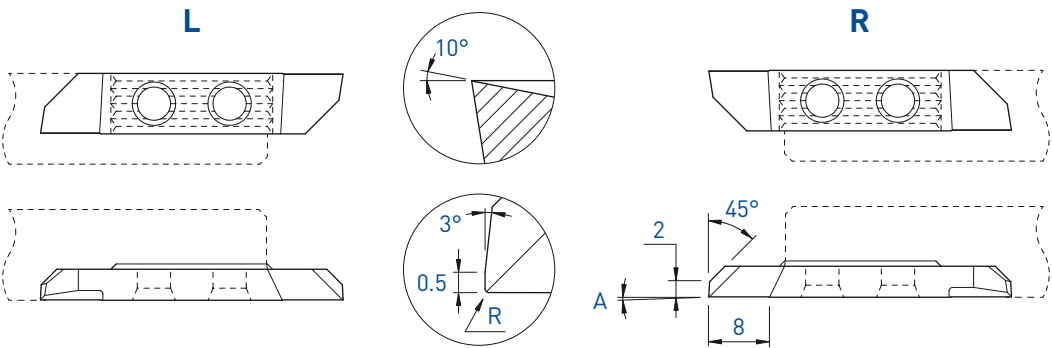
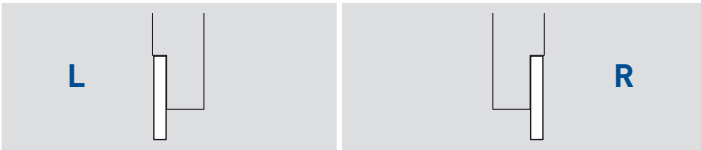
752PX / 762PX



										
A	R	Art. N°				Art. N°				
										
0°	0	752PX				762PX				
										
			TiAlN			TiAlN				
			TiN			TiN				
			N [µk20]			N [µk20]				



7XX-XX-B
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



A	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
			M	M		M	M			M	M		M	M	
			N	N		N	N			N	N		N	N	
			S		S	S		S		S		S	S		S
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0°	0	752X	•	•	•	•	•	•	762X	•	•	•	•	•	•
0°	0.20	752X-R20	•	•	•				762X-R20	•	•	•	•	•	•
3°	0	-							762X-3°	•	•	•	•	•	•
3°	0.20	-							762X-3°-R20	•	•	•	•	•	•

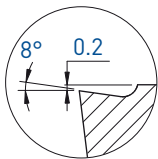
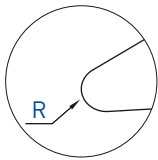
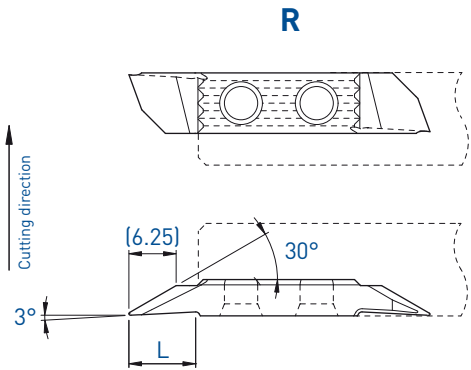
7XX-XX-B



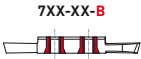
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage avant
Vorwärts drehen
Front turning

762VX-800

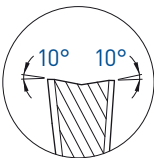
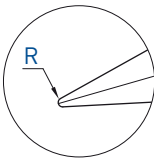
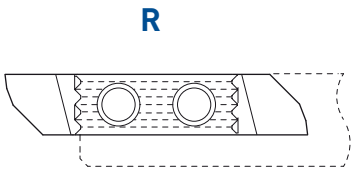
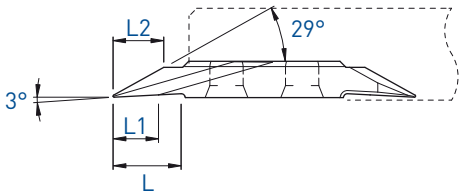
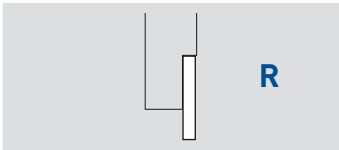


					
L	R	Art. N°			
					
					
					
			HTA	HTiN	HN (upk10)
9	0.15	762VX-800-R15	●	●	●



7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



L	L1	L2	R	Art. N°				
								
								
								
					TIAIN	N [µk20]	HTA	HN [µk10]
9	6	6.9	0.08	762VUX10-29°-R08	●	●	●	●
9	6	6.7	0.15	762VUX10-29°-R15	●	●	●	●
9	6	6.1	0.35	762VUX10-29°-R35	●	●	●	●
9	6	4.9	0.75	762VUX10-29°-R75	●	●	●	●

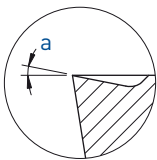
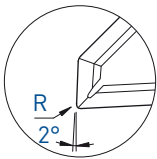
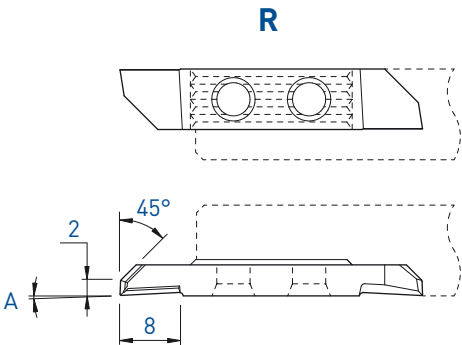
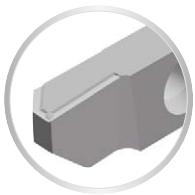
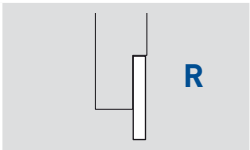
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage avant
Vorwärts drehen
Front turning

762ZX

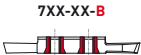


a	A	R	Art. N°	P	P	P
				M	M	
				N	N	
				S		S
				TiAlN	TiN	N [µk20]
10°	3°	0.08	762ZX10-R08	•		
	3°	0.20	762ZX10-R20	•	•	



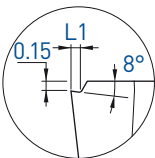
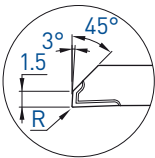
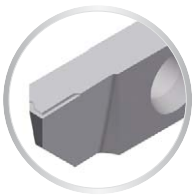
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

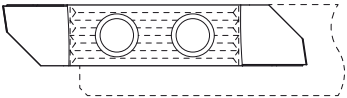
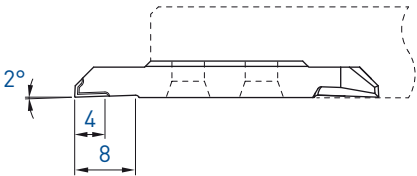
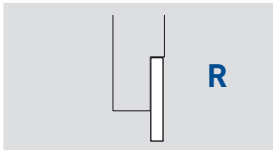


7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



R



L1	R	Art . N°	<div>☐ P ☐ M ☒ N ☒ S</div>	<div>☐ KCR ☒ KN (uk10-20)</div>
0.24	0.03	762ZF-X824-R03	•	•
0.36	0.08	762ZF-X836-R08	•	•
0.48	0.08	762ZF-X848-R08	•	•

7XX-XX-B

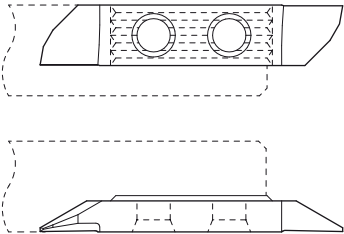


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

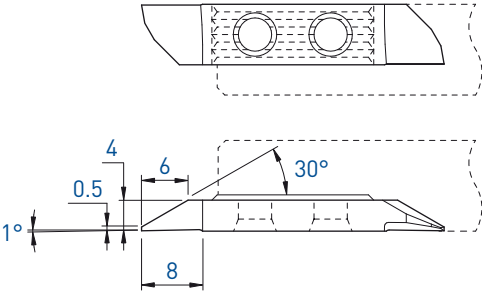
Tournage multifonction
Mehrzweck Drehen
Multifunction turning

752S / 762S

L



R

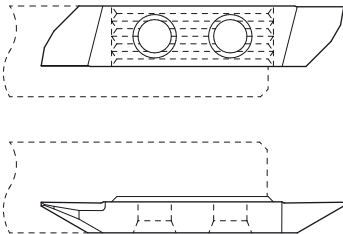


Tournage avant
Vorwärts drehen
Front turning

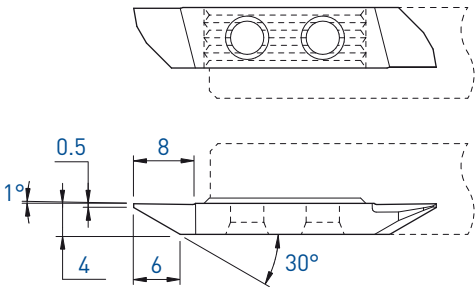
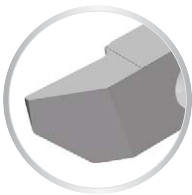
L						R						
Art. N°	TIAIN	<div>P</div> <div>M</div> <div>N</div> <div>S</div>	TIN	<div>P</div> <div>M</div> <div>N</div> <div></div>	N [µk20]	<div>P</div> <div></div> <div></div> <div>S</div>	HTA	<div>P</div> <div>M</div> <div>N</div> <div>S</div>	HTIN	<div>P</div> <div>M</div> <div>N</div> <div></div>	HN [µk10]	<div>P</div> <div></div> <div>N</div> <div>S</div>
	752S05						762S05					
	●	●	●		●		●	●	●	●	●	●

753S / 763S

L



R



Tournage arrière
Rückwärts drehen
Back turning

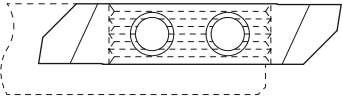
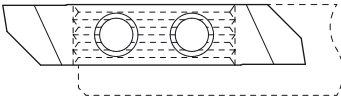
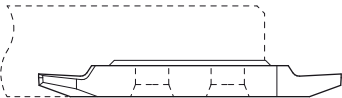
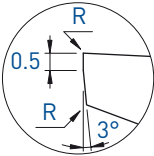
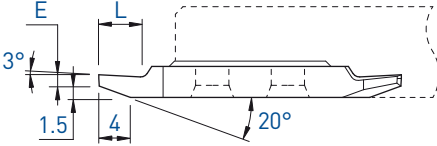
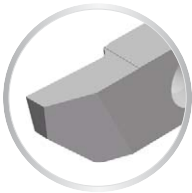
L				R										
														
Art. N°	TiAIN	TiN	N (μk20)	HTA	HTiN	HN (μk10)	Art. N°	TiAIN	TiAlX	TiN	N (μk20)	HTA	HTiN	HN (μk10)
753S05	●	●	●	●	●	●	763S05	●	●	●	●	●	●	●

Tournage arrière
Rückwärts drehen
Back turning

753 / 763

L

R



L

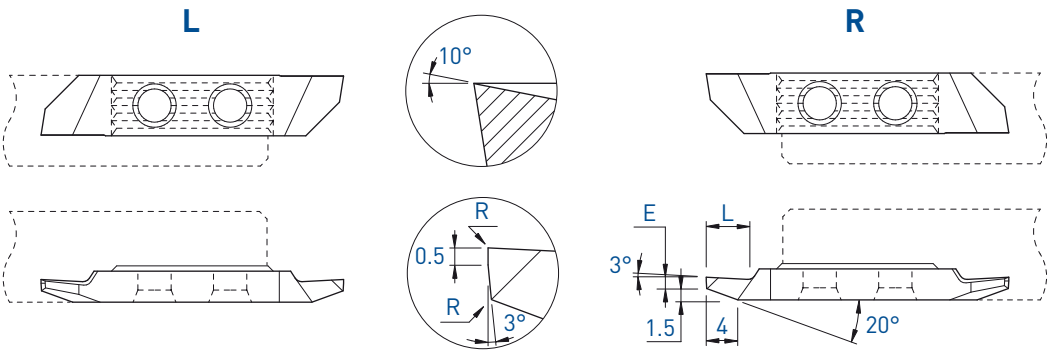
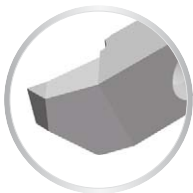
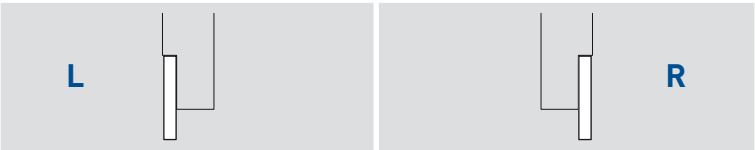
R

E	L	R	Art. N°	P	M	N	S	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]	Art. N°	P	M	N	S	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]
1.0	5	0	753-1.0	•	•	•		•						763-1.0	•	•	•		•	•	•			
1.0	5	0.08	753-1.0-R08	•	•	•								763-1.0-R08	•	•	•		•	•	•			
1.5	6	0	753-1.5	•	•	•								763-1.5	•	•	•		•	•	•			
2.0	7.5	0	753-2.0	•	•	•								763-2.0	•	•	•		•	•	•			
2.5	9	0	753-2.5	•	•	•								763-2.5	•	•	•		•	•	•			

7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



E	L	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
				TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	5	0	753X-1.0	•	•	•				763X-1.0	•	•	•	•		•
1.0	5	0.08	753X-1.0-R08	•	•	•	•		•	763X-1.0-R08	•	•	•	•		•
1.0	5	0.20	753X-1.0-R20	•	•	•				763X-1.0-R20	•	•	•			
1.5	6	0	753X-1.5	•	•	•				763X-1.5	•	•	•	•		•
1.5	6	0.20	753X-1.5-R20	•	•	•				763X-1.5-R20	•	•	•			
2.0	7.5	0	753X-2.0	•	•	•				763X-2.0	•	•	•			
2.0	7.5	0.20	753X-2.0-R20	•	•	•				763X-2.0-R20	•	•	•			
2.5	9	0	753X-2.5	•	•	•				763X-2.5	•	•	•			
2.5	9	0.20	753X-2.5-R20	•	•	•				763X-2.5-R20	•	•	•			

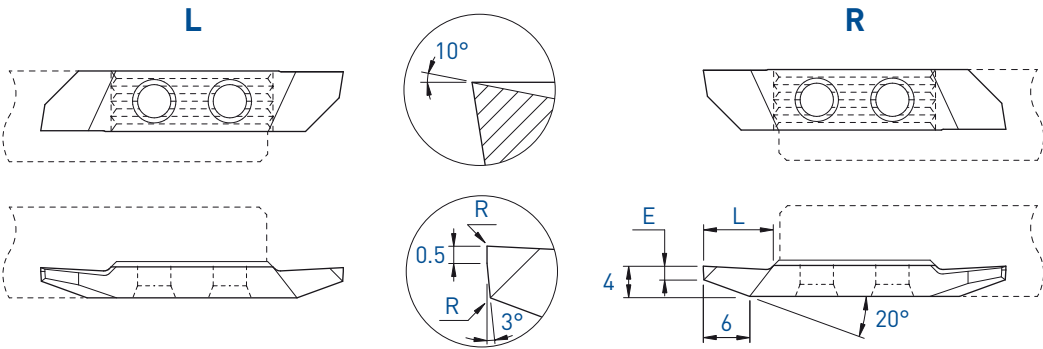
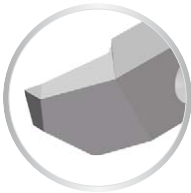
7XX-XX-B



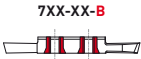
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning

753XS / 763XS



L										R									
																			
Art. N°	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]	Art. N°	TiAlN	TiN	N [µk20]	HTA	HTiN	HN [µk10]						
	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>	<div><div>P</div><div>M</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>				
753XS-1.8	●	●	●				763XS-1.8	●	●	●	●		●						
753XS-1.8-R20	●	●	●				763XS-1.8-R20	●	●	●									



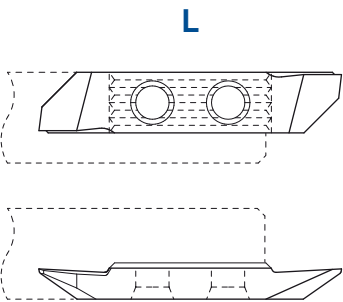
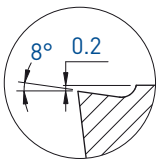
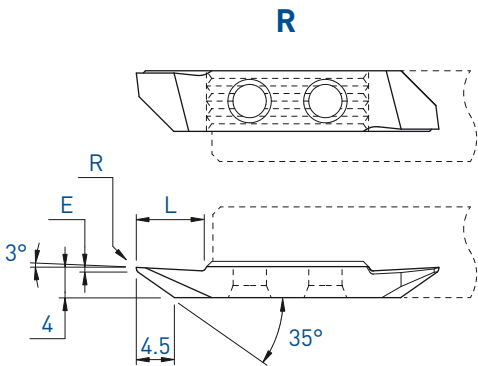
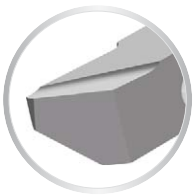
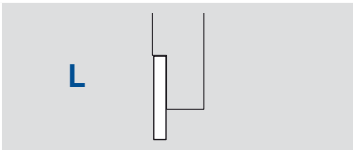
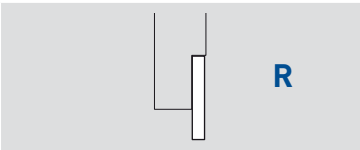
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

753VX-8° / 763VX-8°

Tournage arrière

Rückwärts drehen

Back turning



E	L	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
				TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
1.0	9	0	753VX-8°	•	•	•				763VX-8°	•	•	•	•	•	•
1.0	9	0.08	753VX-8°-R08	•	•	•				763VX-8°-R08	•	•	•	•		•
1.0	9	0.20	-							763VX-8°-R20	•	•	•			

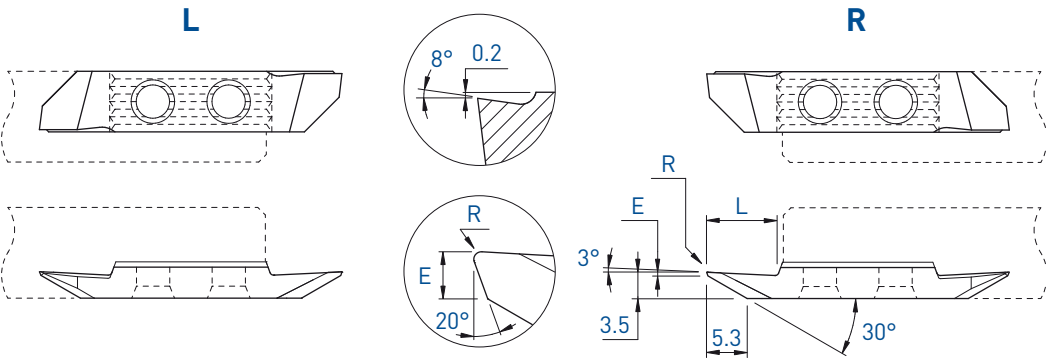
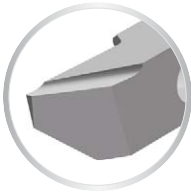
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

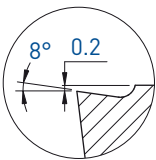
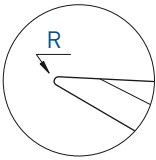
Tournage arrière
Rückwärts drehen
Back turning

753VX-805 / 763VX-805

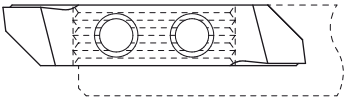
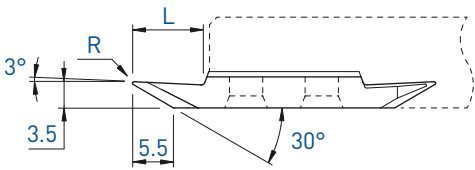
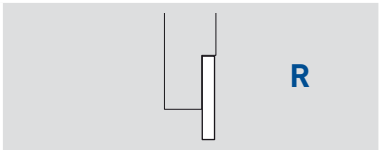


L				R																																							
																																											
	<table><tr><td>P</td><td>P</td><td>P</td></tr><tr><td>M</td><td>M</td><td></td></tr><tr><td>N</td><td>N</td><td></td></tr><tr><td>S</td><td></td><td>S</td></tr></table>	P	P	P	M	M		N	N		S		S		<table><tr><td>P</td><td>P</td><td>P</td></tr><tr><td>M</td><td>M</td><td></td></tr><tr><td>N</td><td>N</td><td>N</td></tr><tr><td>S</td><td></td><td>S</td></tr></table>	P	P	P	M	M		N	N	N	S		S			<table><tr><td>P</td><td>P</td><td>P</td></tr><tr><td>M</td><td>M</td><td></td></tr><tr><td>N</td><td>N</td><td>N</td></tr><tr><td>S</td><td></td><td>S</td></tr></table>	P	P	P	M	M		N	N	N	S		S	
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P	P	P																																									
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N	N	N																																									
S		S																																									
Art. N°	TIAIN	TIN	N [µk20]	HTA	HTIN	HN [µk10]																																					
753VX-805-R08	●	●	●	●	●																																						

	<table><tr><td>P</td><td>P</td><td>P</td></tr><tr><td>M</td><td>M</td><td></td></tr><tr><td>N</td><td>N</td><td></td></tr><tr><td>S</td><td></td><td>S</td></tr></table>	P	P	P	M	M		N	N		S		S		<table><tr><td>P</td><td>P</td><td>P</td></tr><tr><td>M</td><td>M</td><td></td></tr><tr><td>N</td><td>N</td><td>N</td></tr><tr><td>S</td><td></td><td>S</td></tr></table>	P	P	P	M	M		N	N	N	S		S			<table><tr><td>P</td><td>P</td><td>P</td></tr><tr><td>M</td><td>M</td><td></td></tr><tr><td>N</td><td>N</td><td>N</td></tr><tr><td>S</td><td></td><td>S</td></tr></table>	P	P	P	M	M		N	N	N	S		S	
P	P	P																																									
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S		S																																									
Art. N°	TIAIN	TIN	N [µk20]	HTA	HTIN	HN [µk10]																																					
763VX-805-R08	●	●	●	●		●																																					



R



L	R	Art. N°	P	P	P	P	P	P
			M	M		M	M	
			N	N		N	N	N
			S		S		S	
			TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
9	0.08	763VX-800-R08	●	●	●	●		●
9	0.20	763VX-800-R20	●	●	●	●		●

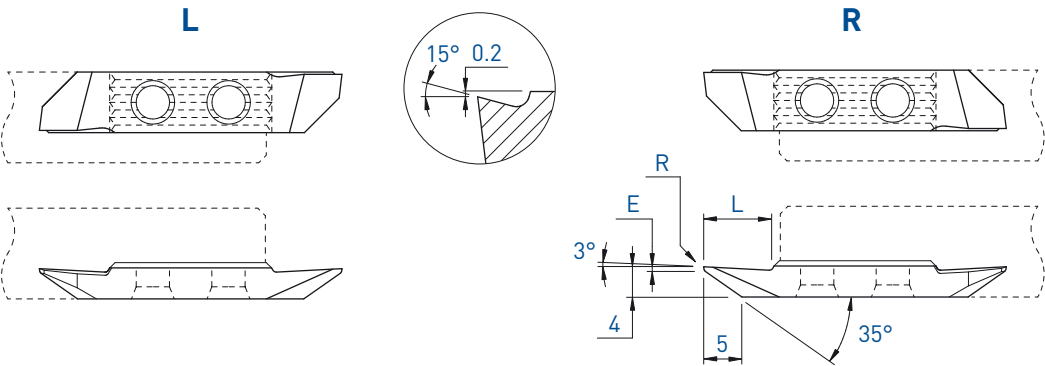
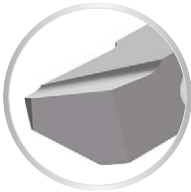
7XX-XX-B



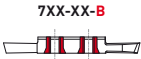
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning

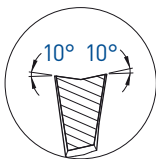
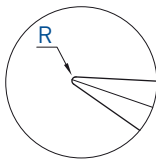
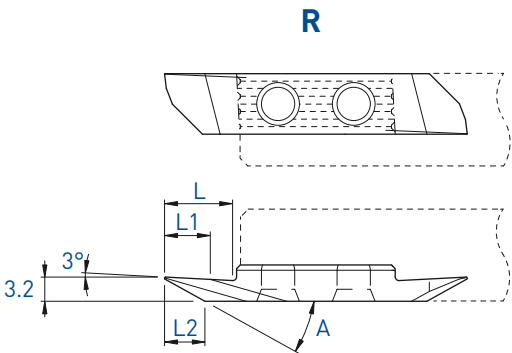
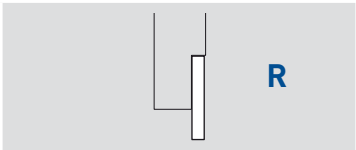
753VX-15° / 763VX-15°



				L								R							
																			
				<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> N [µk20]	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTA	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HN [µk10]					<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> N [µk20]	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTA	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HN [µk10]
Art. N°									Art. N°										
753VX-15°				●	●	●				763VX-15°				●	●	●	●		
753VX-15°-R08				●	●	●				763VX-15°-R08				●	●	●	●		



7XX-XX-B
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



L	L1	L2	A	R	Art. N°				
									
									
									
						TIAIN	N (µk20)	HTA	HN (µk10)
9	6	5.6	29°	0.05	763VUX10-29°-R05	●	●	●	●
9	6	5.5	29°	0.08	763VUX10-29°-R08	●	●	●	●
9	6	5.3	29°	0.15	763VUX10-29°-R15	●	●	●	●
9	6	4.7	29°	0.35	763VUX10-29°-R35	●	●	●	●
9	6	3.6	29°	0.75	763VUX10-29°-R75	●	●	●	●
9	6	4.2	35°	0.15	763VUX10-35°-R15	●	●	●	●
9	6	3.8	35°	0.35	763VUX10-35°-R35	●	●	●	●

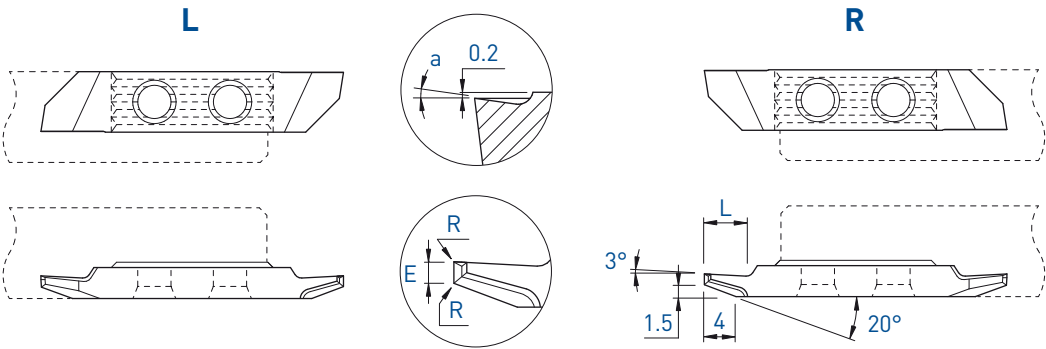
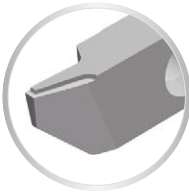
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Tournage arrière
Rückwärts drehen
Back turning

753ZX / 763ZX



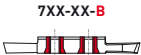
Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

L				R			
a	E	L	R	Art. N°	P M N S TiAlN TiN N [µk20]	P M N S TiAlN TiN N [µk20]	P M N S TiAlN TiN N [µk20]
10°	1.0	5	0.01	753ZX10-1.0	●	763ZX10-1.0	● ●
	1.0	5	0.08	-		763ZX10-1.0-R08	● ●
	1.0	5	0.20	-		763ZX10-1.0-R20	● ●



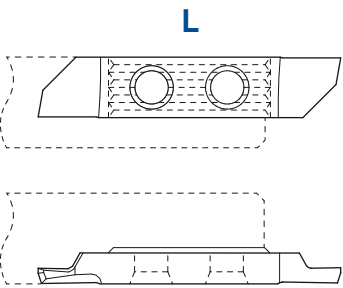
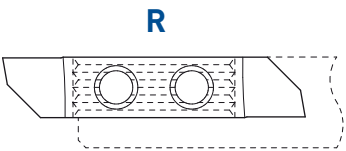
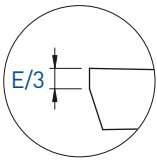
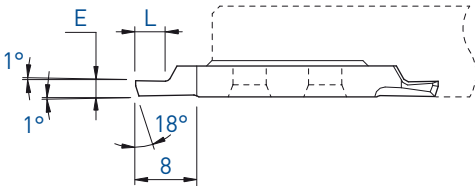
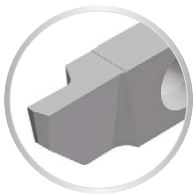
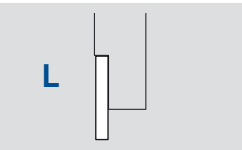
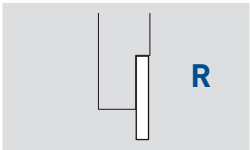
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



E	L	Art. N°	P	P	P	Art. N°	P	P	P
			M	M			M	M	
			N	N			N	N	
			S		S		S		S
			TiAlN	TiN	N [µk20]		TiAlN	TiN	N [µk20]
1.5	3	753P-1.5	•	•	•	763P-1.5	•	•	•
1.8	3.5	753P-1.8	•	•	•	763P-1.8	•	•	•
2.0	4	753P-2.0	•	•	•	763P-2.0	•	•	•
2.2	5	753P-2.2	•	•	•	763P-2.2	•	•	•
2.5	6	753P-2.5	•	•	•	763P-2.5	•	•	•
3.0	6	753P-3.0	•	•	•	763P-3.0	•	•	•

7XX-XX-B

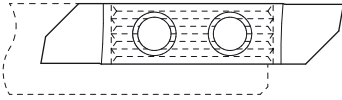
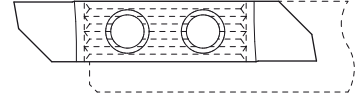
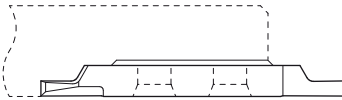
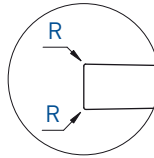
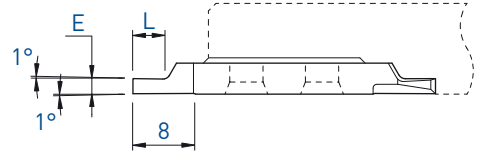
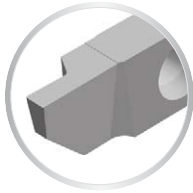


Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

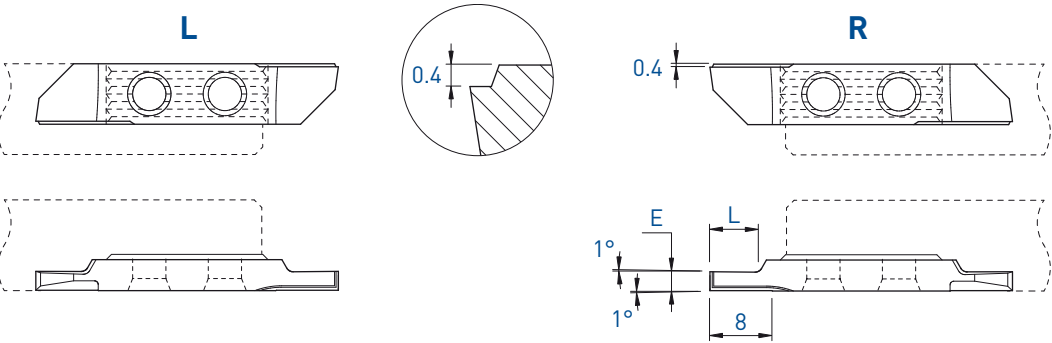
Fonçage-tournage

Einstechen und drehen

Grooving and turning

754 / 764**L****R****L****R**

				<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>			<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>N</div><div>S</div></div>	
E	L	R	Art. N°	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTiN	HN (µk10)
0.5	1.5	0	754-0.5	●	●	●				764-0.5	●	●	●	●	●	●	●
0.75	2	0	754-0.75	●	●	●				764-0.75	●	●	●	●			
0.8	2	0	-							764-0.8	●	●	●	●	●		●
0.95	3	0	754-0.95	●	●	●	●		●	764-0.95	●	●	●	●			
1.0	2.5	0	754-1.0	●	●	●		●	●	764-1.0					●	●	●
1.0	2.5	0.08	754-1.0-R08	●	●	●				764-1.0-R08	●	●	●	●			
1.2	3	0	754-1.2	●	●	●				764-1.2	●	●	●	●	●		●
1.5	3	0	754-1.5	●	●	●	●		●	764-1.5	●	●	●	●	●	●	●
1.5	3	0.08	754-1.5-R08	●	●	●	●		●	764-1.5-R08		●	●	●	●		●
1.5	3	0.15	-							764-1.5-R15	●	●		●	●		●
1.5	3	0.20	-							764-1.5-R20	●	●	●	●	●	●	●
1.8	4	0	754-1.8	●	●	●				764-1.8	●	●	●	●			
2.0	4	0	754-2.0	●	●	●	●	●	●	764-2.0	●	●	●	●	●	●	●
2.0	4	0.08	754-2.0-R08	●	●	●	●		●	764-2.0-R08	●	●	●	●	●		●
2.0	4	0.15	-							764-2.0-R15	●	●		●			●
2.0	4	0.20	754-2.0-R20	●	●	●				764-2.0-R20	●	●	●	●	●	●	●
2.5	6	0	754-2.5	●	●	●				764-2.5	●	●	●	●	●	●	●
2.5	6	0.15	-							764-2.5-R15	●	●		●	●		●
2.5	6	0.20	-							764-2.5-R20	●	●	●	●	●		●
3.0	6	0	754-3.0	●	●	●	●		●	764-3.0	●	●	●	●	●		●
3.0	6	0.08	754-3.0-R08	●	●	●				764-3.0-R08	●	●	●	●	●		●
3.0	6	0.15	-							764-3.0-R15	●	●		●	●		●
3.0	6	0.20	754-3.0-R20	●	●	●	●		●	764-3.0-R20	●	●	●	●			
4.0	8	0	754-4.0	●	●	●	●	●	●	764-4.0	●	●	●	●	●		●



L							R						
													
Art. N°							Art. N°						
	TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)
754VS-1.0	●	●	●				764VS-1.0	●	●	●			
754VS-1.2	●	●	●	●		●	764VS-1.2	●	●	●			
754VS-1.5	●	●	●				764VS-1.5	●	●	●			
754VS-2.0	●	●	●				764VS-2.0	●	●	●			
754VS-2.5	●	●	●				764VS-2.5	●	●	●	●		●
754VS-3.0	●	●	●				764VS-3.0	●	●	●			

7XX-XX-B



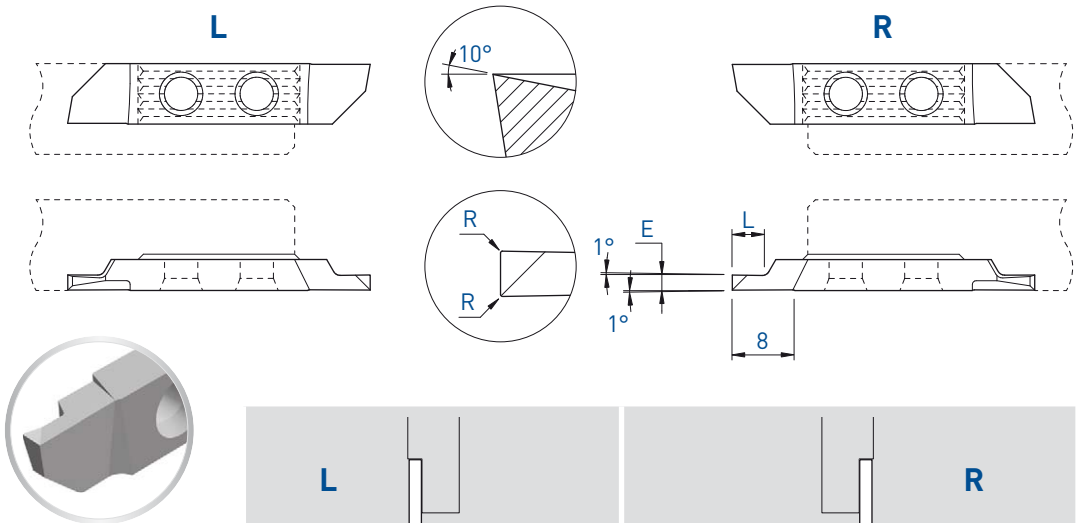
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

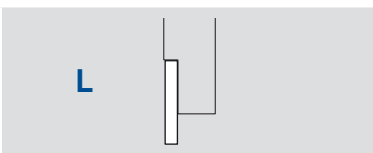
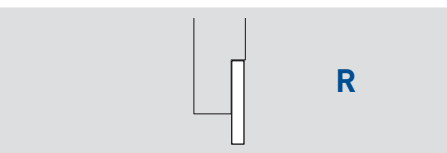
Fonçage-tournage

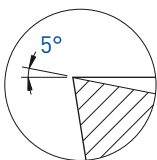
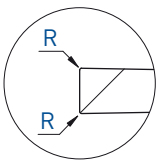
Einstechen und drehen

Grooving and turning

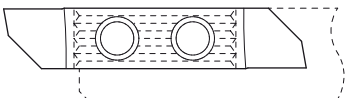
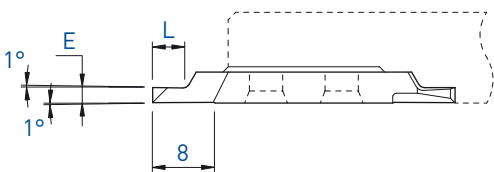
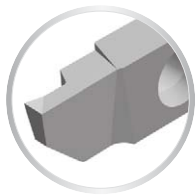
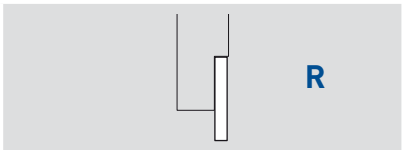
754X / 764X



																		
E	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiN	<div><div>P</div><div></div><div></div><div>S</div></div> N (µk20)	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTA	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTiN	<div><div>P</div><div></div><div>N</div><div>S</div></div> HN (µk10)	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> ST	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div>P</div><div>M</div><div></div><div>S</div></div> TiAlX	<div><div>P</div><div></div><div>N</div><div>S</div></div> TiN	<div><div>P</div><div></div><div></div><div>S</div></div> N (µk20)	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTA	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTiN	<div><div>P</div><div></div><div>N</div><div>S</div></div> HN (µk10)
1.0	2.5	0	754X-1.0	●	●	●	●	●	●	764X-1.0		●	●	●	●	●	●	●
1.0	2.5	0.08	754X-1.0-R08	●	●	●	●		●	764X-1.0-R08	●					●	●	●
1.0	2.5	0.20	-							764X-1.0-R20	●	●	●	●	●			
1.2	3	0	754X-1.2	●	●	●				764X-1.2		●	●	●	●	●		●
1.2	3	0.08	-							764X-1.2-R08	●	●	●	●	●			
1.5	3	0	754X-1.5	●	●	●	●		●	764X-1.5		●	●	●	●	●	●	●
1.5	3	0.08	754X-1.5-R08	●	●	●	●		●	764X-1.5-R08	●	●	●	●	●	●		●
1.5	3	0.15	-							764X-1.5-R15	●	●	●	●	●	●		●
1.5	3	0.20	754X-1.5-R20	●	●	●				764X-1.5-R20	●	●	●	●	●	●	●	●
1.8	4	0	754X-1.8	●	●	●				764X-1.8		●	●	●	●	●		●
1.8	4	0.20	-							764X-1.8-R20	●	●	●	●	●			
2.0	4	0	754X-2.0	●	●	●	●		●	764X-2.0		●	●	●	●	●	●	●
2.0	4	0.08	754X-2.0-R08	●	●	●	●		●	764X-2.0-R08	●	●	●	●	●	●	●	●
2.0	4	0.15	-							764X-2.0-R15	●	●	●	●	●			
2.0	4	0.20	754X-2.0-R20	●	●	●	●		●	764X-2.0-R20	●	●	●	●	●	●	●	●
2.0	4	0.35	-							764X-2.0-R35	●	●	●	●	●	●	●	●
2.5	6	0	754X-2.5	●	●	●	●	●	●	764X-2.5			●	●	●	●	●	●
2.5	6	0.15	-							764X-2.5-R15	●	●	●	●	●			●
2.5	6	0.20	754X-2.5-R20	●	●	●	●		●	764X-2.5-R20	●	●	●	●	●	●	●	●
2.5	6	0.35	-							764X-2.5-R35	●	●	●	●	●	●	●	●
3.0	6	0	754X-3.0	●	●	●				764X-3.0		●	●	●	●	●		●
3.0	6	0.08	754X-3.0-R08	●	●	●				764X-3.0-R08	●	●	●	●	●	●		●
3.0	6	0.15	-							764X-3.0-R15	●	●	●	●	●			
3.0	6	0.20	754X-3.0-R20	●	●	●				764X-3.0-R20	●	●	●	●	●	●	●	●
3.0	6	0.35	-							764X-3.0-R35	●	●	●	●	●	●	●	●
4.0	8	0	754X-4.0	●	●	●				764X-4.0		●	●	●	●	●		●
4.0	8	0.20	754X-4.0-R20	●	●	●				764X-4.0-R20	●	●	●	●	●	●	●	●
4.0	8	0.35	-							764X-4.0-R35	●	●	●	●	●	●	●	●



R



E	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div>				
				ST	TiAlN	TiAlX	TiN	N (µk20)
1.5	3	0.08	764X5-1.5-R08-EP	•	•	•	•	•
2.0	4	0.08	764X5-2.0-R08-EP	•	•	•	•	•
2.5	6	0.08	764X5-2.5-R08-EP	•	•	•	•	•
2.5	6	0.15	764X5-2.5-R15-EP	•	•	•	•	•
3.0	6	0.08	764X5-3.0-R08-EP	•	•	•	•	•
3.0	6	0.15	764X5-3.0-R15-EP	•	•	•	•	•
4.0	8	0.15	764X5-4.0-R15-EP	•	•	•	•	•
4.0	8	0.35	764X5-4.0-R35-EP	•	•	•	•	•



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

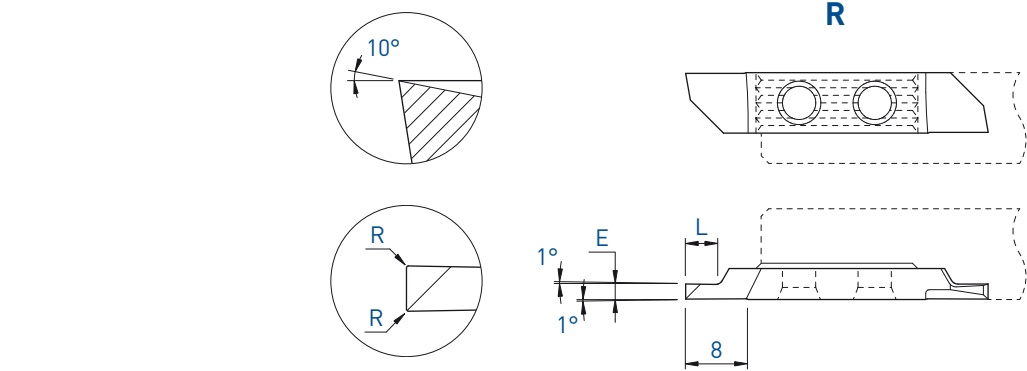
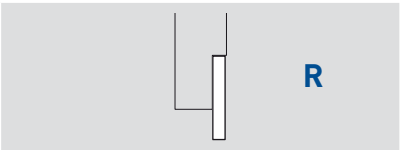
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Fonçage-tournage
Einstechen und drehen
Grooving and turning

764X10-EP

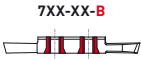


E	L	R	Art. N°	P	P	P	P	P
				M	M	M	M	
				N	N		N	
				S	S	S		S
				ST	TiAlN	TiAlX	TiN	N [µk20]
1.5	3	0.08	764X10-1.5-R08-EP	•	•	•	•	•
2.0	4	0.08	764X10-2.0-R08-EP	•	•	•	•	•
2.5	6	0.08	764X10-2.5-R08-EP	•	•	•	•	•
2.5	6	0.15	764X10-2.5-R15-EP	•	•	•	•	•
3.0	6	0.08	764X10-3.0-R08-EP	•	•	•	•	•
3.0	6	0.15	764X10-3.0-R15-EP	•	•	•	•	•
4.0	8	0.15	764X10-4.0-R15-EP	•	•	•	•	•
4.0	8	0.35	764X10-4.0-R35-EP	•	•	•	•	•

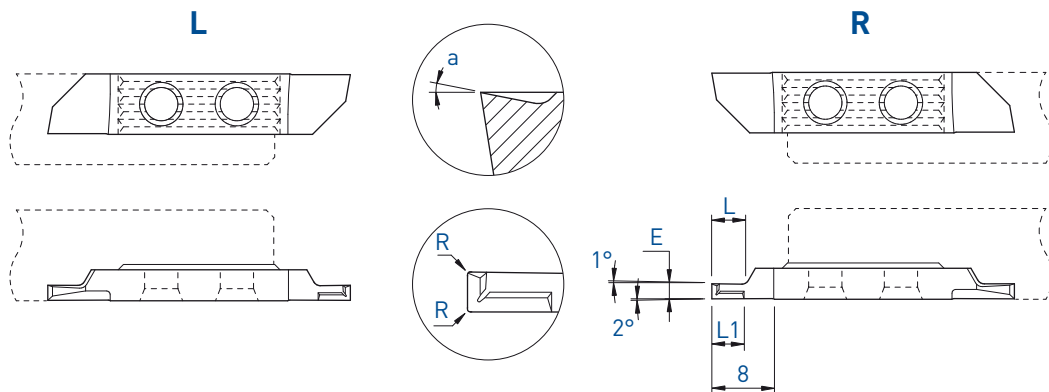
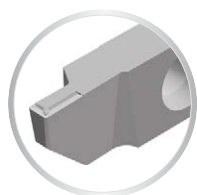


Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U



7XX-XX-B
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

					L						R					
a	E	L	L1	R	Art. N°	P M N S	P M N S	P M N S	P M N S	P M N S	Art. N°	P M N S	P M N S	P M N S	P M N S	P M N S
10°	1.5	4	4	0.03	754ZX10-1.5-R03	•					764ZX10-1.5-R03	•	•	•		
	1.5	4	4	0.08	754ZX10-1.5-R08	•					764ZX10-1.5-R08	•	•	•		
	2.0	4	4	0.08	754ZX10-2.0-R08	•					764ZX10-2.0-R08	•	•	•		
	2.0	4	4	0.20	-						764ZX10-2.0-R20	•	•	•		
	2.5	5	5	0.08	754ZX10-2.5-R08	•	•				764ZX10-2.5-R08	•	•	•		
	2.5	5	5	0.20	-						764ZX10-2.5-R20	•	•	•		
	3.0	6	6	0.08	754ZX10-3.0-R08	•					764ZX10-3.0-R08	•	•	•		
	3.0	6	6	0.20	-						764ZX10-3.0-R20	•	•	•		
25°	4.0	6	6	0.20	-						764ZX10-4.0-R20	•	•			
	2.0	4	4	0.08	-						764ZX25-2.0-R08				•	•
	2.0	4	4	0.20	-						764ZX25-2.0-R20				•	•
	2.5	5	5	0.08	-						764ZX25-2.5-R08				•	•
	2.5	5	5	0.20	-						764ZX25-2.5-R20				•	•

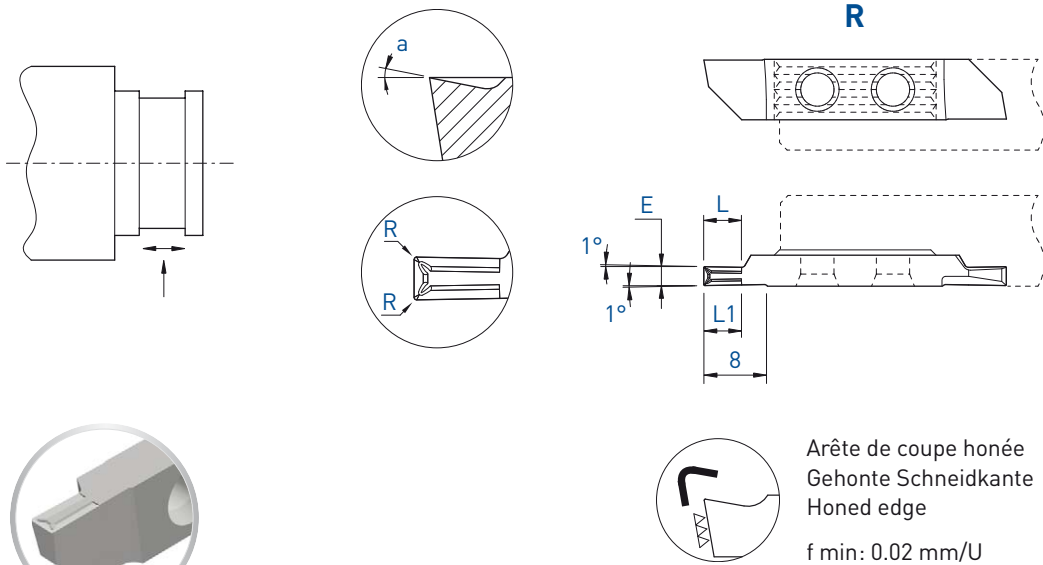
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Fonçage-tournage
Einstechen und drehen
Grooving and turning

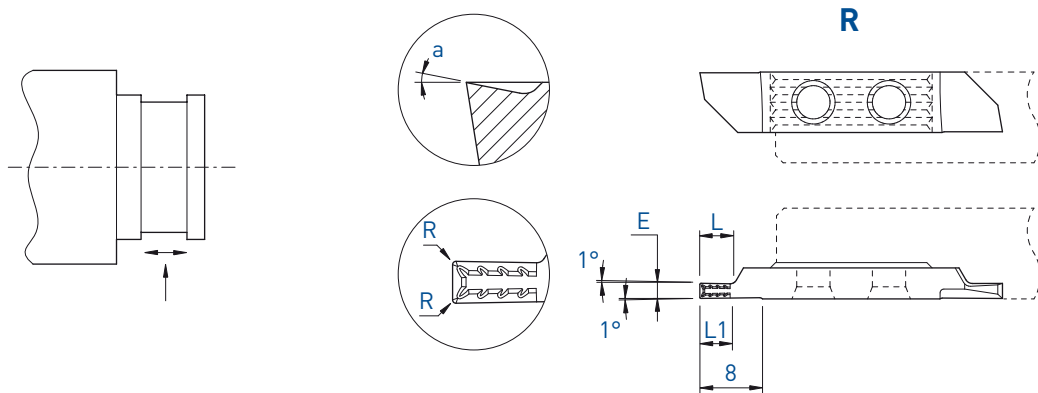
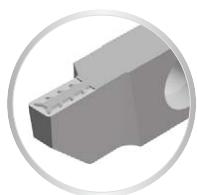
764ZXB



					<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></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754ZXT / 764ZXT

Fonçage-tournage
Einstechen und drehen
Grooving and turning



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

					L				R			
a	E	L	L1	R	Art. N°	P M N S	P M N S	P M N S	Art. N°	P M N S	P M N S	P M N S
10°	1.5	4	4	0.03	-				764ZXT10-1.5-R03	●	●	●
	1.5	4	4	0.08	754ZXT10-1.5-R08	●			764ZXT10-1.5-R08	●	●	●
	1.5	4	4	0.20	754ZXT10-1.5-R20	●			-			
	2.0	4	4	0.08	754ZXT10-2.0-R08	●			764ZXT10-2.0-R08	●	●	●
	2.0	4	4	0.20	754ZXT10-2.0-R20	●			764ZXT10-2.0-R20	●	●	●
	2.0	4	4	0.40	-				764ZXT10-2.0-R40	●	●	●
	2.5	5	5	0.08	754ZXT10-2.5-R08	●			764ZXT10-2.5-R08	●	●	●
	2.5	5	5	0.20	754ZXT10-2.5-R20	●			764ZXT10-2.5-R20	●	●	●
	2.5	5	5	0.40	-				764ZXT10-2.5-R40	●	●	●
	3.0	6	6	0.08	754ZXT10-3.0-R08	●	●		764ZXT10-3.0-R08	●	●	●
	3.0	6	6	0.20	-				764ZXT10-3.0-R20	●	●	●
	3.0	6	6	0.40	-				764ZXT10-3.0-R40	●	●	●
	4.0	8	8	0.20	-				764ZXT10-4.0-R20	●	●	●
	4.0	8	8	0.40	-				764ZXT10-4.0-R40	●	●	●
	4.0	8	8	0.80	-				764ZXT10-4.0-R80	●	●	●

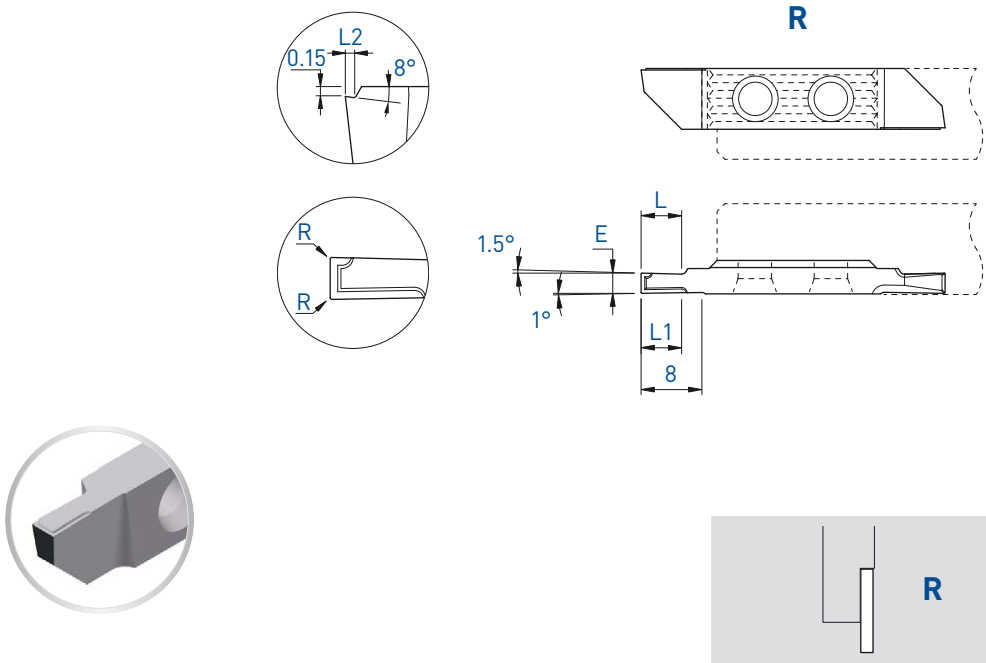
7XX-XX-B



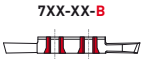
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Fonçage-tournage
Einstechen und drehen
Grooving and turning

764ZF-X



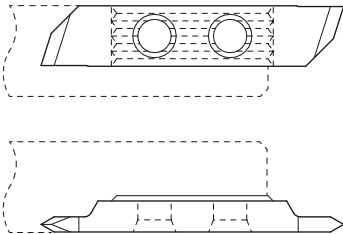
E	L	L1	L2	R	Art. N°	<div><div><div></div><div></div><div>N</div><div>S</div></div><div><div>P</div><div>M</div><div>N</div><div>S</div></div></div> <div>KCR KN (µk'10-20)</div>	
1.5	3	2.5	0.24	0.08	764ZF-X824-1.5-R08	●	●
1.5	3	2.5	0.36	0.08	764ZF-X836-1.5-R08	●	●
2.0	4	3	0.24	0.08	764ZF-X824-2.0-R08	●	●
2.0	4	3	0.36	0.08	764ZF-X836-2.0-R08	●	●
2.0	4	3	0.48	0.15	764ZF-X848-2.0-R15	●	●
2.5	6	4	0.24	0.08	764ZF-X824-2.5-R08	●	●
2.5	6	4	0.36	0.08	764ZF-X836-2.5-R08	●	●
2.5	6	4	0.48	0.15	764ZF-X848-2.5-R15	●	●
3.0	6	4	0.36	0.08	764ZF-X836-3.0-R08	●	●
3.0	6	4	0.48	0.15	764ZF-X848-3.0-R15	●	●



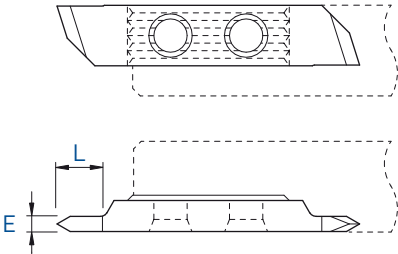
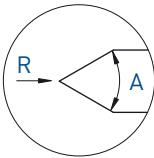
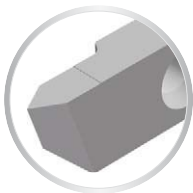
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L

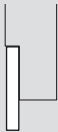


R



Profil partiel
Teilprofil
Partial profile

L



R



A	E	L	R	Art. N°	P	P	P	P	P	P	Art. N°	P	P	P	P	P	P
					TiAlN	M	M	N	S	N [µk20]		TiAlN	M	M	N	S	N [µk10]
60°	2.0	6	0	756-60-2.0	•	•	•				766-60-2.0	•	•	•			
60°	2.0	6	0.02	756-60-2.0-R02	•	•	•			•	766-60-2.0-R02	•	•	•			•
60°	3.0	8	0	756-60-3.0	•	•	•				766-60-3.0	•	•	•			
60°	3.0	8	0.02	756-60-3.0-R02	•	•	•			•	766-60-3.0-R02	•	•	•			•
55°	2.0	6	0	756-55-2.0	•	•	•				766-55-2.0	•	•	•			
55°	2.0	6	0.02	756-55-2.0-R02	•	•	•				766-55-2.0-R02	•	•	•			
55°	3.0	8	0	756-55-3.0	•	•	•				766-55-3.0	•	•	•			
55°	3.0	8	0.02	756-55-3.0-R02	•	•	•				766-55-3.0-R02	•	•	•			

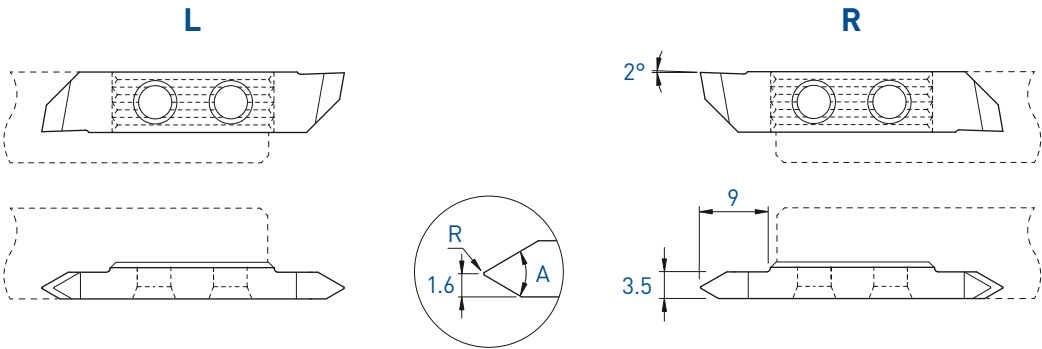
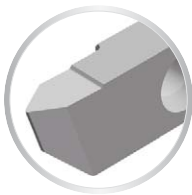
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

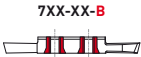
Filetage
Gewinde drehen
Threading

756-AG60° / 766-AG60°
756-G60° / 766-G60°



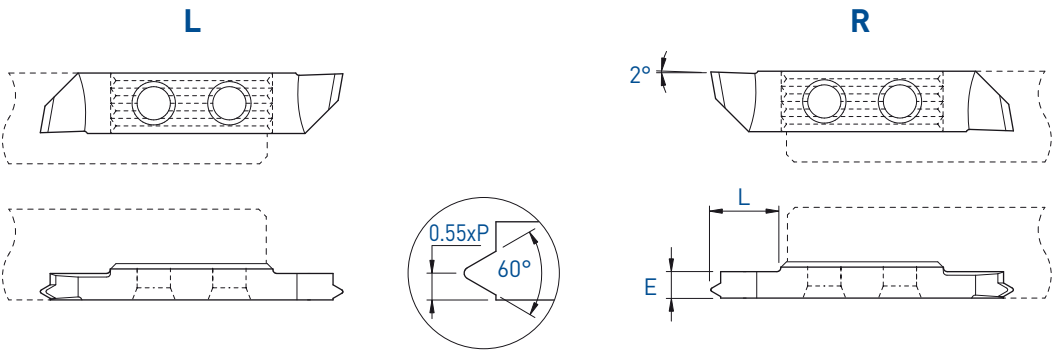
Profil partiel
Teilprofil
Partial profile

			L			R		
			P			P		
			M			M		
			N			N		
			S			S		
			TiAlN			TiAlN		
			TiN			TiN		
			N [µk20]			N [µk20]		
A	R	Pas Steigung Pitch P	Art. N°			Art. N°		
60°	0.06	0.50-1.50	756-AG60°	•	•	766-AG60°	•	•
60°	0.20	1.75-3.00	756-G60°	•	•	766-G60°	•	•

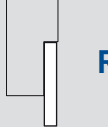


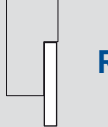
7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

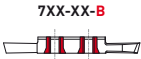


Profil complet métrique
Metrisches Vollprofil
Metric full profile

									
Art. N°				TiAlN		TiN		N [µk20]	
756-M-0.80				●		●		●	
756-M-1.00				●		●		●	
756-M-1.25				●		●		●	
756-M-1.50				●		●		●	
756-M-1.75				●		●		●	
756-M-2.00				●		●		●	

									
Art. N°				TiAlN		TiN		N [µk20]	
766-M-0.80				●		●		●	
766-M-1.00				●		●		●	
766-M-1.25				●		●		●	
766-M-1.50				●		●		●	
766-M-1.75				●		●		●	
766-M-2.00				●		●		●	

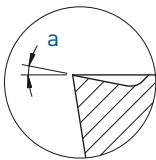
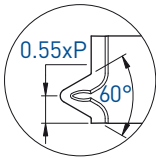
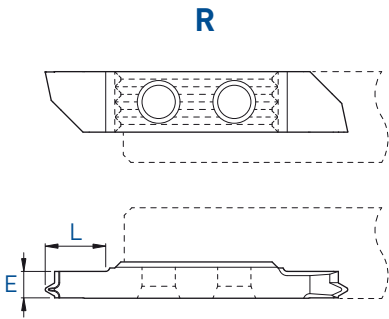
Pour de plus petits pas, voir page 1.86
Für kleinere Steigungen, siehe Seite 1.86
For smaller pitches, see page 1.86



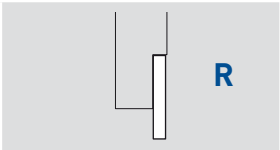
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Filetage
Gewinde drehen
Threading

766ZX



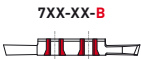
Profil partiel
Teilprofil
Partial profile



a	E	L	P	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div>	
					ST	TIALN
10°	2.5	8	0.80	766ZX10-M-0.80	●	●
	2.5	8	1.00	766ZX10-M-1.00	●	●
	2.5	8	1.25	766ZX10-M-1.25	●	●
	3.5	9	1.50	766ZX10-M-1.50	●	●
	3.5	9	1.75	766ZX10-M-1.75	●	●
	3.5	9	2.00	766ZX10-M-2.00	●	●

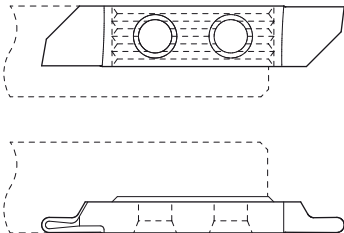


Arête de coupe honée
Gehonte Schneidkante
Honed edge

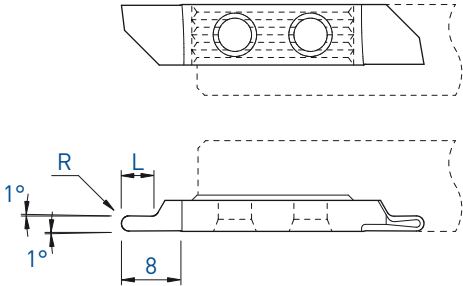


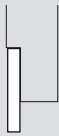
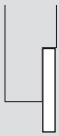
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R



		L			R		
							
R	L	Art. N°	P M N S	P M N S	Art. N°	P M N S	P M N S
			TiAlN	TiN N [µk20]		TiAlN	TiN N [µk20]
0.5	2.5	757-R0.5	●	●	767-R0.5	●	●
1.0	4	757-R1.0	●	●	767-R1.0	●	●
1.5	6	757-R1.5	●	●	767-R1.5	●	●
2.0	8	757-R2.0	●	●	767-R2.0	●	●

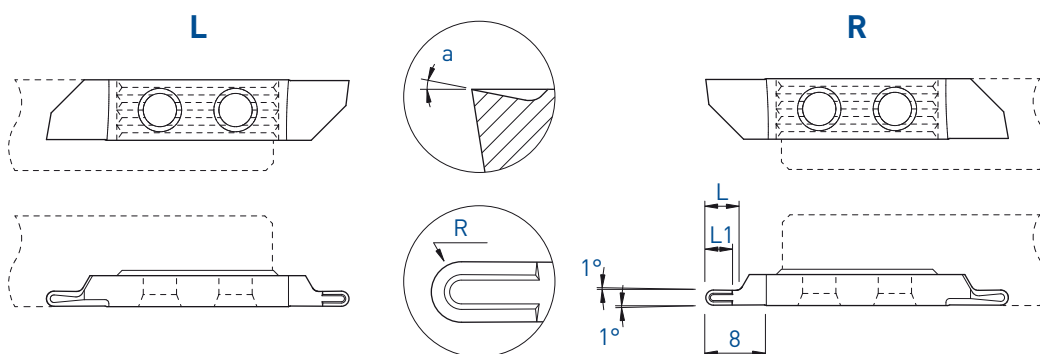
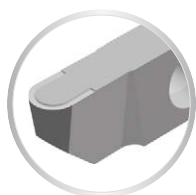
7XX-XX-B



Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Plaquettes à rayon
Radius Wendeplatten
Radius inserts

757ZX / 767ZX



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip-control

				L				R			
a	R	L	L1	Art. N°	P M N S	P M N S	P M N S	Art. N°	P M N S	P M N S	P M N S
10°	1.0	4	3.5	757ZX10-R1.0	•	•	•	767ZX10-R1.0	•	•	•
	1.5	6	4.0	757ZX10-R1.5	•	•	•	767ZX10-R1.5	•	•	•
	2.0	8	4.5	757ZX10-R2.0	•	•	•	767ZX10-R2.0	•	•	•



Arête de coupe honée
Gehonte Schneidkante
Honed edge

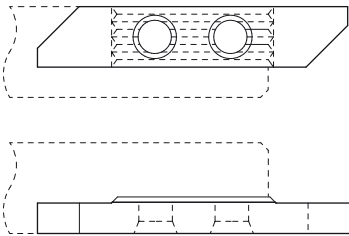
f min: 0.02 mm/U

7XX-XX-B

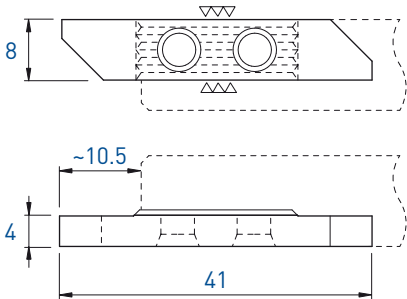
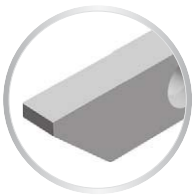


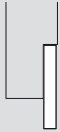
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L



R



L			R		
					
Art. N°	P	P	Art. N°	P	P
	☐	☐		☐	☐
	N	N		N	N
	S	S		S	S
	N [µk20]	HN [µk10]		N [µk20]	HN [µk10]
751-E	•	•	761-E	•	•

7XX-XX-B



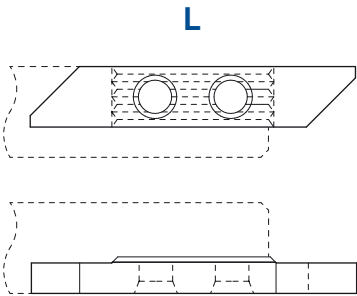
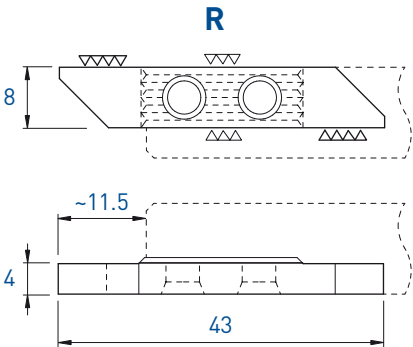
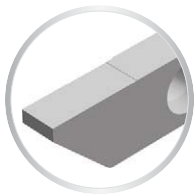
Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

Plaquettes ébauches

WSP-Rohlinge

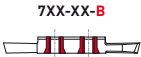
Blank inserts

751-EP / 761-EP



Face de coupe polie
Polierte Schneidfläche
Polished cutting face

L						R					
Art. N°						Art. N°					
751-EP	•	•	•	•	•	761-EP	•	•	•	•	•



7XX-XX-B

Sur demande pour serrage type B, voir page 1.05
Auf Anfrage für B-Spannsystem, siehe Seite 1.05
On request for B clamping system, see page 1.05

L			R		
Type		Page	Type		Page
770	770	1.166	780	780	1.167
	770-JET	1.167		780-JET	1.167
	770RC	1.168	781	781	1.169
771	771	1.169		781-E	1.175
	771-E	1.175		781L	1.171
	771R	1.171		781LXF	1.173
	771RD	1.174		781XF	1.170
	771RU	1.172			
	771RXF	1.173			
	771XF	1.170			

770 / 780

Porte-outils
Halter
Holders

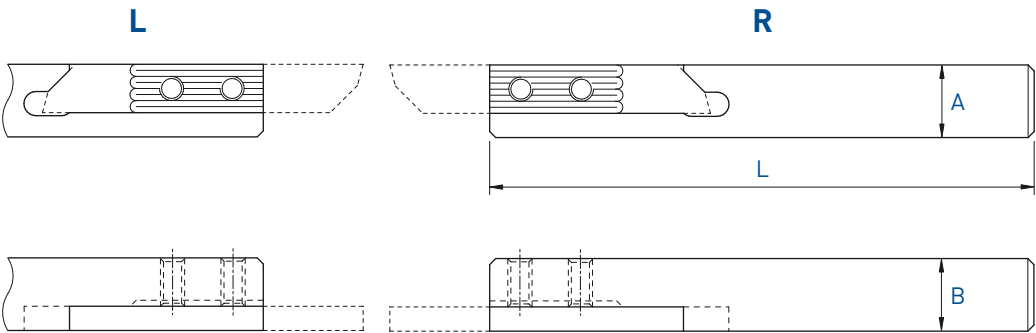
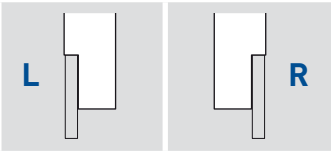
> **1.166****771 / 781**

Tronçonnage
Abstechen
Parting off

> **1.169****781L / 771R**

Tronçonnage - coupe déportée
Abstechen - versetztes Schneiden
Parting off - cut off line

> **1.171**

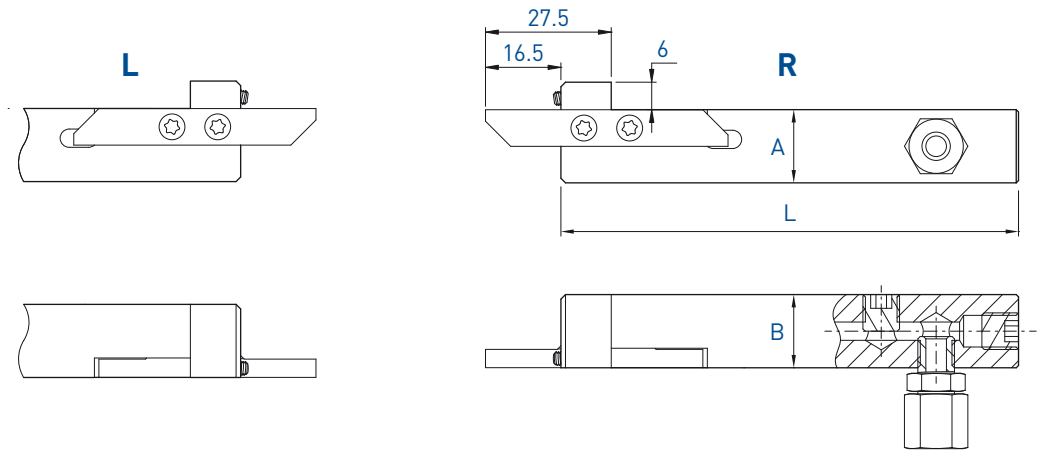


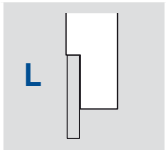
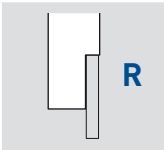
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
10 x 10	115	A	770-10	780-10
12 x 12	130	A	770-12	780-12
12 x 12	90	A	770-12-90	780-12-90
12.7 x 12.7	130	A	770-12.7	780-12.7
14 x 14	130	A	770-14	780-14
16 x 16	130	A	770-16	780-16
16 x 16	75	A	770-16-75	780-16-75
20 x 20	120	A	770-20	780-20
25 x 25	140	A	770-25	780-25

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

770-JET / 780-JET

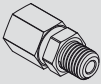


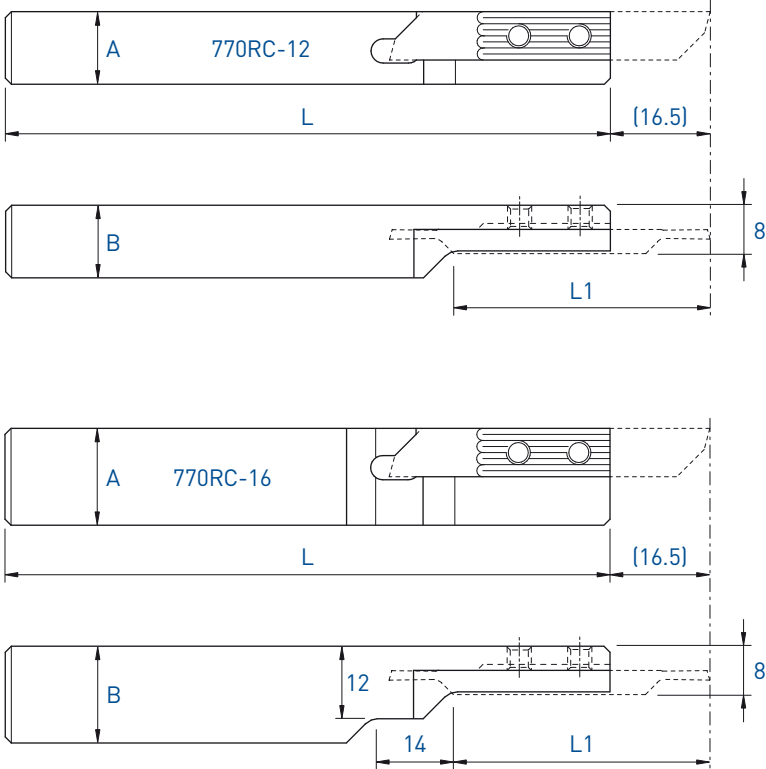
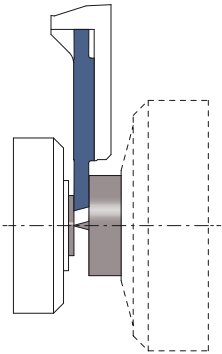
				
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
16 x 16	100	A	770-16-JET	780-16-JET

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

Pièces de rechange Ersatzteile Spare parts			Buses Düsen Nozzles 
	Art. N°	Art. N°	Art. N°
770-JET / 780-JET	J-M8X1-D6	JB-M8X1	JJ-M3X6-D1.5
More option see JET-Line			



Utiliser des plaquettes type 771R
WSP Typ 771R verwenden
Use inserts type 771R

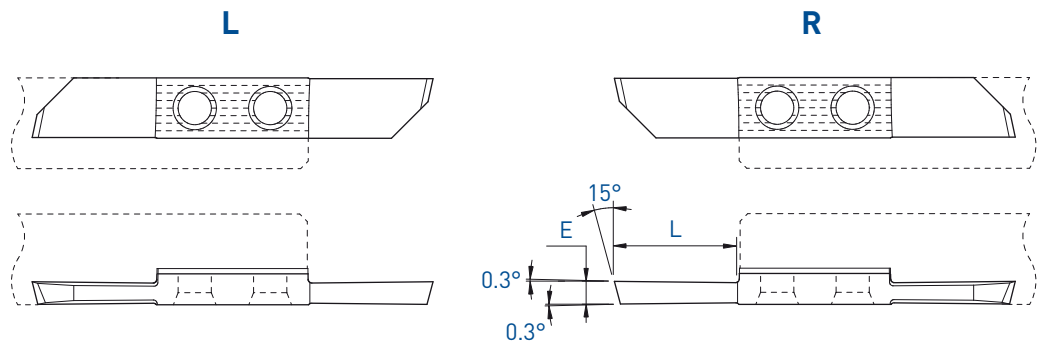
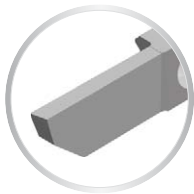
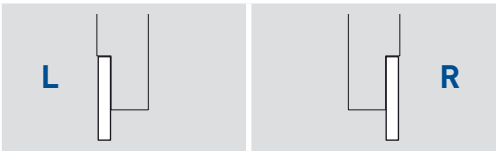
Voir pages 1.171 - 1.174
Siehe Seiten 1.171 - 1.174
See pages 1.171 - 1.174

<div><div>L (R)</div><div>Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line</div></div>				
A x B	L	L1	Serrage Spannsystem Clamping	Art. N°
12 x 12	130	42	A	770RC-12
16 x 16	130	42	A	770RC-16

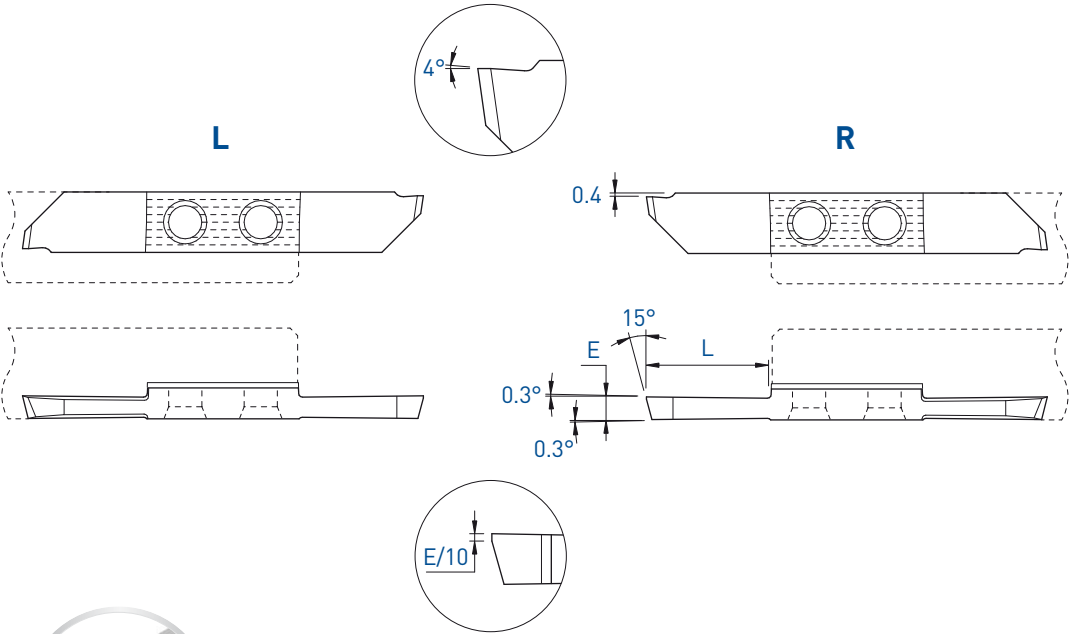
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Tronçonnage
Abstechen
Parting off

771 / 781



			P	P	P		P	P	P
			M	M			M	M	
			N	N			N	N	
			S		S		S		S
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
1.5	16	-				781-1.5	●	●	●
2.0	16	771-2.0	●	●	●	781-2.0	●	●	●
2.5	16	771-2.5	●	●	●	781-2.5	●	●	●
3.0	16	771-3.0	●	●	●	781-3.0	●	●	●
3.5	16	771-3.5	●	●	●	781-3.5	●	●	●



E	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>			Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>		
			TiAlN	TiN	N [µk20]		TiAlN	TiN	N [µk20]
2.0	16	-				781XF-2.0	•	•	•
2.5	16	771XF-2.5	•	•	•	781XF-2.5	•	•	•
3.0	16	771XF-3.0	•	•	•	781XF-3.0	•	•	•
3.5	16	771XF-3.5	•	•	•	781XF-3.5	•	•	•

Tronçonnage

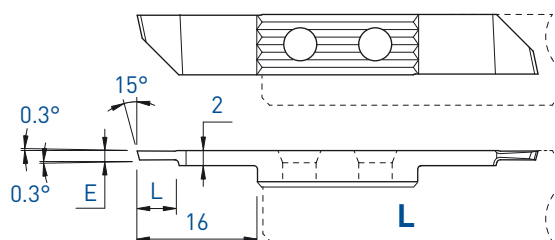
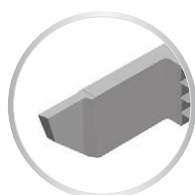
Abstechen

Parting off

Coupe déportée

Versetztss Schneiden

Cut off line

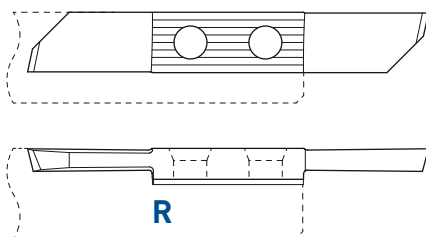
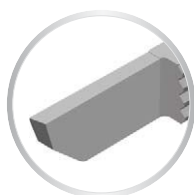
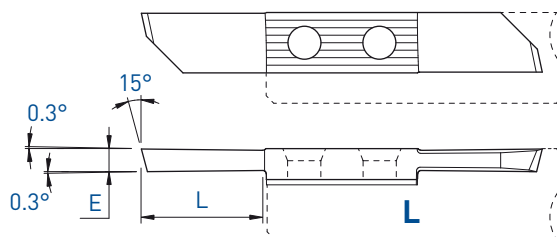
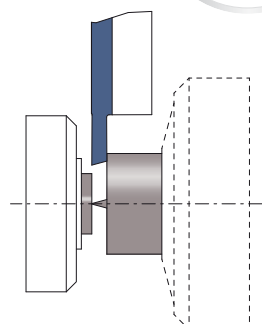
781L / 771R**Cut R**



L (R)

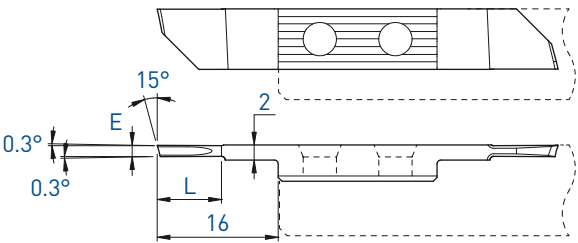
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div></div> </div> <div> <div>P</div> <div></div> <div></div> <div>S</div> </div>					
			TiAlN	TiN	N (µk20)			
			1.0	5	771R-1.0	●	●	●
			1.2	5	771R-1.2	●	●	●
			1.5	8.5	771R-1.5	●	●	●

Cut L**Cut R**

		<div>R (L)</div> <div>Coupe à gauche déportée Versetztss Linksschneiden Left cut off line</div>				<div>L (R)</div> <div>Coupe à droite déportée Versetztss Rechtsschneiden Right cut off line</div>			
			<div>P</div> <div>M</div> <div>N</div> <div>S</div>	<div>P</div> <div>M</div> <div>N</div> <div></div>	<div>P</div> <div></div> <div>S</div>		<div>P</div> <div>M</div> <div>N</div> <div>S</div>	<div>P</div> <div>M</div> <div>N</div> <div></div>	<div>P</div> <div></div> <div>S</div>
E	L	Art. N°	TiAlN	TiN	N (µk20)	Art. N°	TiAlN	TiN	N (µk20)
2.0	16	781L-2.0	●	●	●	771R-2.0	●	●	●
2.5	16	781L-2.5	●	●	●	771R-2.5	●	●	●
3.0	16	781L-3.0	●	●	●	771R-3.0	●	●	●
3.5	16	781L-3.5	●	●	●	771R-3.5	●	●	●

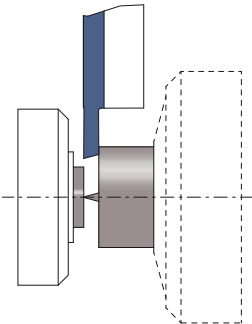
Cut R



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

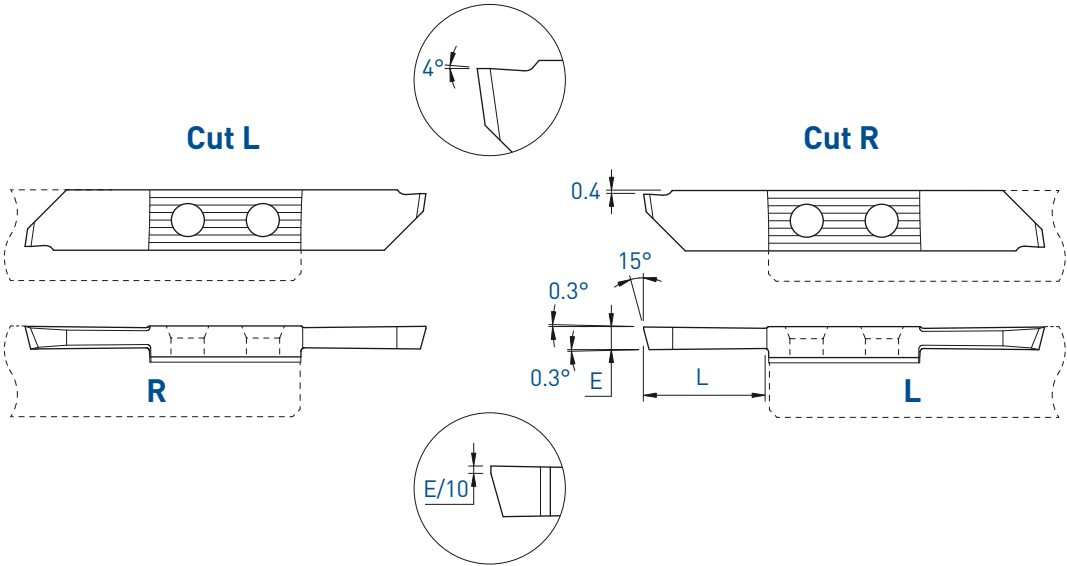
E	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div></div><div>S</div></div>		
			TiAlN	TiN	N (µk20)		
			1.0	5	771RU-1.0	●	●
			1.5	8.5	771RU-1.5	●	●



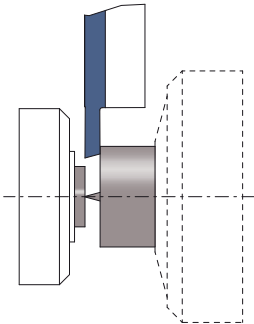
Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

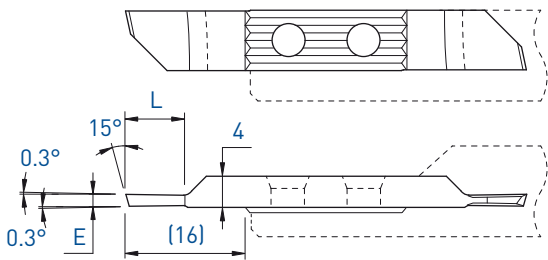
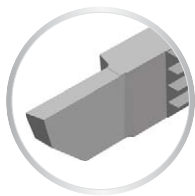
781LXF / 771RXF



		<div>R (L)</div> <div></div>			<div>L (R)</div> <div></div>					
		Coupe à gauche déportée Versetztes Linksschneiden Left cut off line			Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line					
E	L	Art. N°	<div>P</div>	<div>P</div>	<div>P</div>	Art. N°	<div>P</div>	<div>P</div>	<div>P</div>	
			<div>M</div>	<div>M</div>	<div></div>		<div>M</div>	<div>M</div>	<div></div>	
			<div>N</div>	<div>N</div>	<div></div>		<div>N</div>	<div>N</div>	<div></div>	
			<div>S</div>	<div></div>	<div>S</div>		<div>S</div>	<div></div>	<div>S</div>	
		TiAlN			TiN			N (µk20)		
2.0	16	-				771RXF-2.0	●	●	●	
2.5	16	781LXF-2.5	●	●	●	771RXF-2.5	●	●	●	
3.0	16	781LXF-3.0	●	●	●	771RXF-3.0	●	●	●	
3.5	16	781LXF-3.5	●	●	●	771RXF-3.5	●	●	●	



Cut R



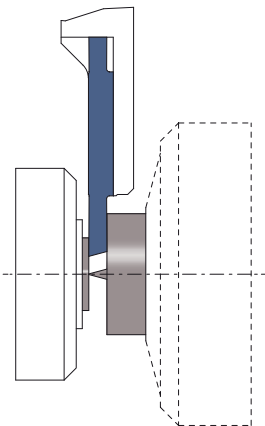
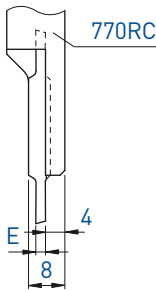
L (R)

Coupe à droite déportée

Versetztes Rechtsschneiden

Right cut off line

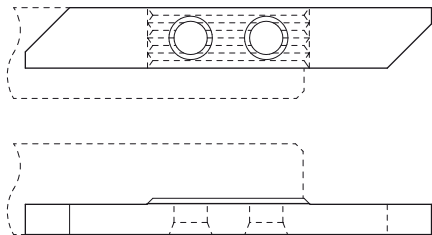
E	L	Art. N°	<table> <tr> <td>P</td> <td>P</td> <td>P</td> </tr> <tr> <td>M</td> <td>M</td> <td></td> </tr> <tr> <td>N</td> <td>N</td> <td></td> </tr> <tr> <td>S</td> <td></td> <td>S</td> </tr> </table>	P	P	P	M	M		N	N		S		S
P	P	P													
M	M														
N	N														
S		S													
			<table> <tr> <td>TiAlN</td> <td>TiN</td> <td>N [µk20]</td> </tr> </table>	TiAlN	TiN	N [µk20]									
TiAlN	TiN	N [µk20]													
1.2	5	771RD-1.2	● ● ●												
1.5	7.5	771RD-1.5	● ● ●												
2.0	10	771RD-2.0	● ● ●												



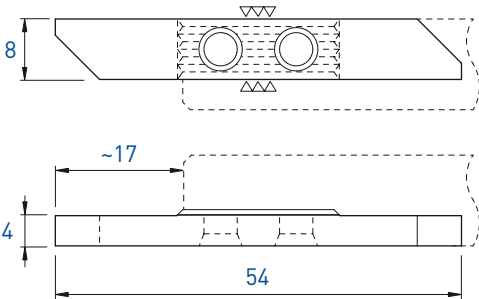
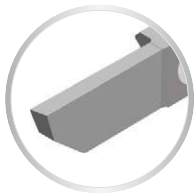
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

771-E / 781-E

L

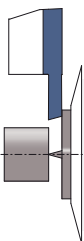


R

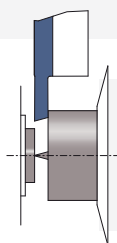


L		R	
Art. N°	P	Art. N°	P
	☐		☐
	S		S
N [µk20]		N [µk20]	
771-E	●	781-E	●

L			R		
Type		Page	Type		Page
7050	7050	1.178	7060	7060	1.178
	7051	1.179		7061	1.179
	7051-E	1.183		7061-E	1.183
	7051R	1.181		7061L	1.181
	7051RXF	1.182		7061LXF	1.182
	7051XF	1.180		7061XF	1.180

**7051 / 7061**

Tronçonnage
Abstechen
Parting off

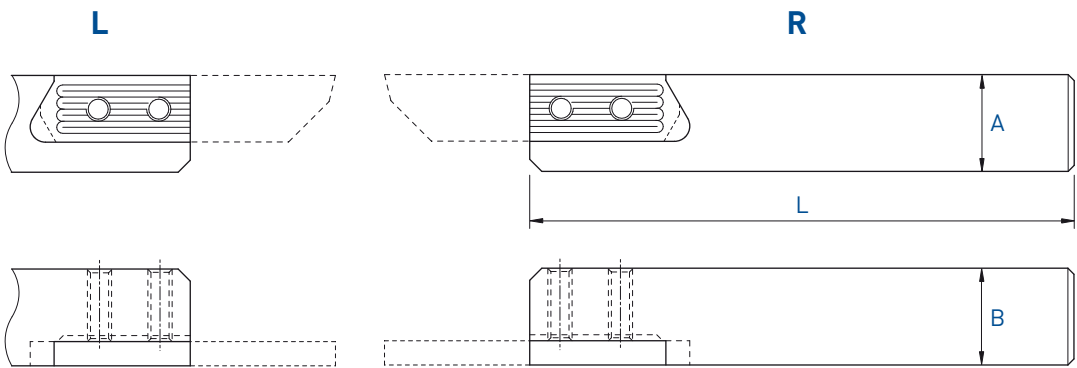
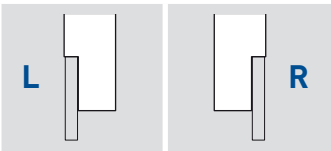
> **1.179****7051R / 7061L**

Tronçonnage - coupe déportée
Abstechen - versetztes Schneiden
Parting off - cut off line

> **1.181**

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

> **1.183**

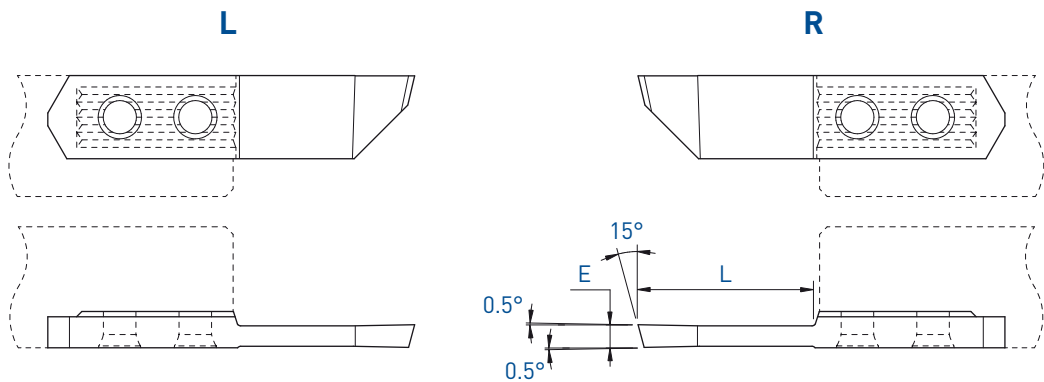
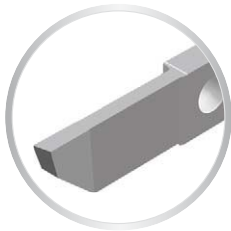


A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
16 x 16	130	A	7050-16	7060-16
16 x 16	75	A	7050-16-75	7060-16-75
20 x 20	120	A	7050-20	7060-20
25 x 25	140	A	7050-25	7060-25

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Tronçonnage
Abstechen
Parting off

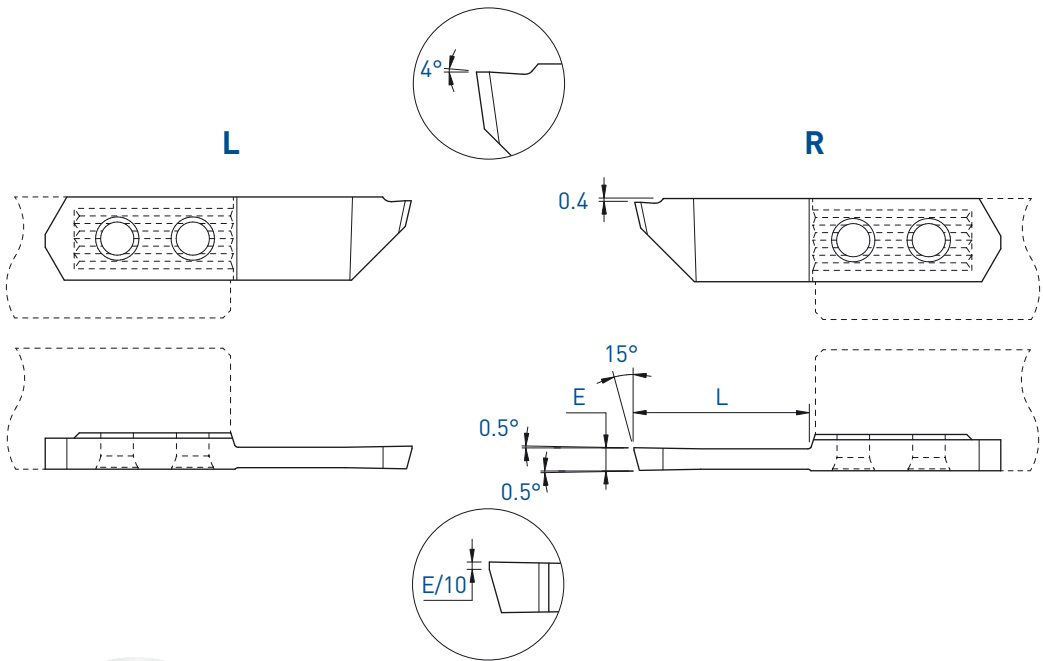
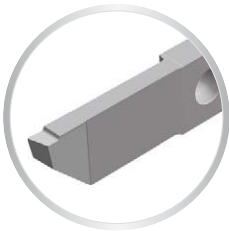
7051 / 7061

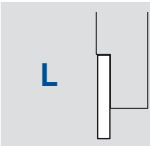
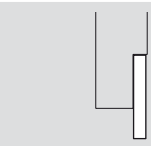


		L			R		
							
E	L	Art. N°	P M N S	P M N S	P M N S	Art. N°	P M N S
			TiAlN	TiN	N (µk20)		TiAlN
2.5	22	-				7061-2.5	• • •
3.0	22	7051-3.0	•	•	•	7061-3.0	• • •
3.5	22	-				7061-3.5	• • •

7051XF / 7061XF

Tronçonnage
Abstechen
Parting off



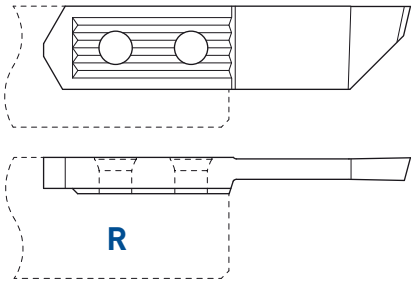
																																					
E	L	Art. N°	<table><tr><td>P</td><td>P</td><td>P</td></tr><tr><td>M</td><td>M</td><td></td></tr><tr><td>N</td><td>N</td><td></td></tr><tr><td>S</td><td></td><td>S</td></tr></table>	P	P	P	M	M		N	N		S		S	<table><tr><td>TiAlN</td><td>TiN</td><td>N (µk20)</td></tr></table>	TiAlN	TiN	N (µk20)	Art. N°	<table><tr><td>P</td><td>P</td><td>P</td></tr><tr><td>M</td><td>M</td><td></td></tr><tr><td>N</td><td>N</td><td></td></tr><tr><td>S</td><td></td><td>S</td></tr></table>	P	P	P	M	M		N	N		S		S	<table><tr><td>TiAlN</td><td>TiN</td><td>N (µk20)</td></tr></table>	TiAlN	TiN	N (µk20)
P	P	P																																			
M	M																																				
N	N																																				
S		S																																			
TiAlN	TiN	N (µk20)																																			
P	P	P																																			
M	M																																				
N	N																																				
S		S																																			
TiAlN	TiN	N (µk20)																																			
3.0	22	7051XF-3.0	● ● ●	7061XF-3.0	● ● ●																																

Tronçonnage
Abstechen
Parting off

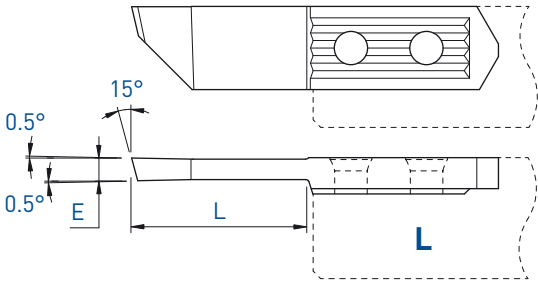
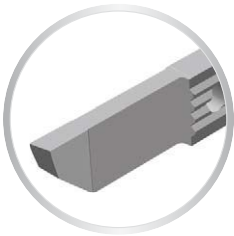
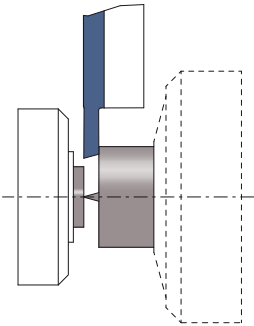
Coupe déportée
Versetztes Schneiden
Cut off line

7061L / 7051R

Cut L



Cut R



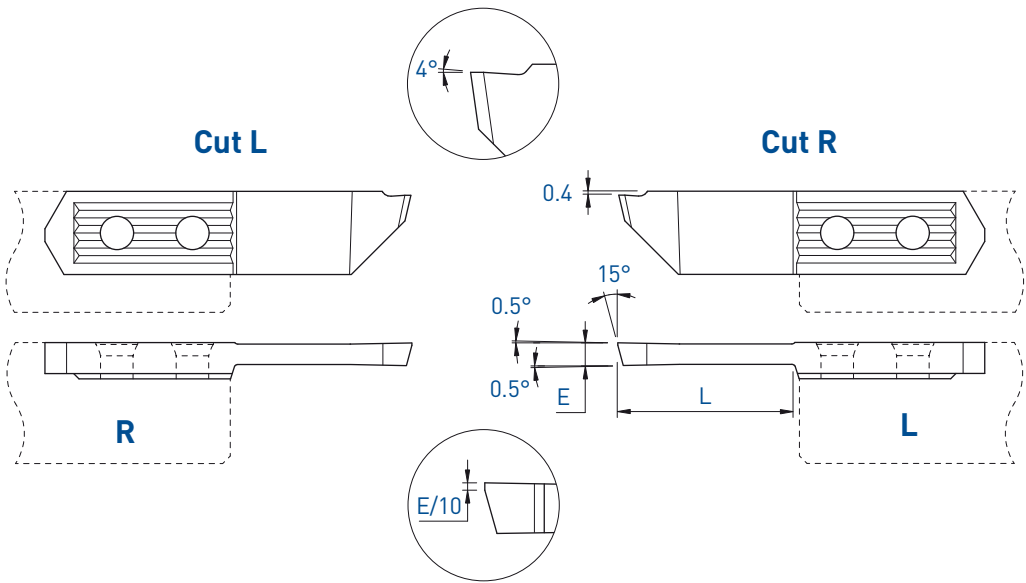
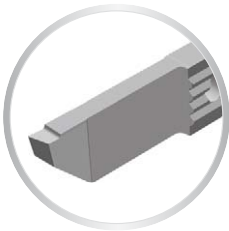
R (L)

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

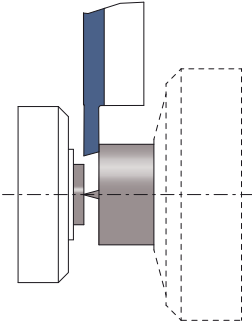
L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>			Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>		
			TiAIN	TiN	N [µk20]		TiAIN	TiN	N [µk20]
2.5	22	-				7051R-2.5	●	●	●
3.0	22	7061L-3.0	●	●	●	7051R-3.0	●	●	●
3.5	22	-				7051R-3.5	●	●	●

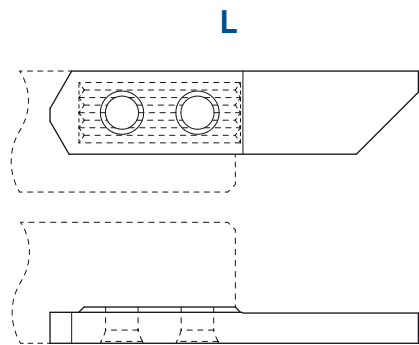
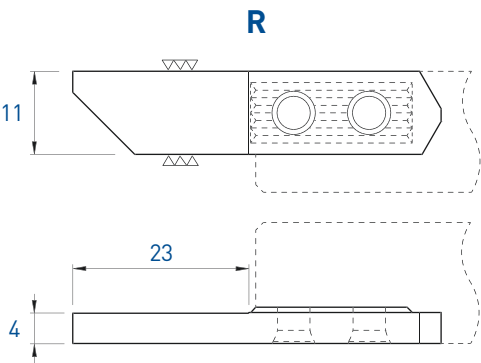
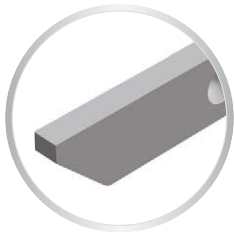


		<div>R (L)</div> <div>Coupe à gauche déportée Versetztes Linksschneiden Left cut off line</div>			<div>L (R)</div> <div>Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line</div>				
E	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div>P</div><div>M</div><div>N</div><div></div></div> TiN	<div><div>P</div><div></div><div></div><div>S</div></div> N (µk20)	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div>P</div><div>M</div><div>N</div><div></div></div> TiN	<div><div>P</div><div></div><div></div><div>S</div></div> N (µk20)
3.0	22	7061LXF-3.0	●	●	●	7051RXF-3.0	●	●	●



Plaquettes ébauches
WSP-Rohlinge
Blank inserts

7051-E / 7061-E



L		R	
Art. N°	☐ P	Art. N°	☐ P
	☐		☐
	☒ S		☒ S
	N [μk20]		N [μk20]
7051-E	•	7061-E	•

L			R		
Type		Page	Type		Page
W750	W750	1.186	W760	W760	1.186
	W750-JET	1.187		W760-JET	1.187
W751	W751-E5	1.188	W761	W761-E5	1.188
	W751-E6	1.190		W761-E6	1.190
	W751-EP5	1.189		W761-EP5	1.189
	W751-EP6	1.191		W761-EP6	1.191

W750 / W760

Porte-outils
Halter
Holders

> **1.186**

W750-JET / W760-JET

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

> **1.187**

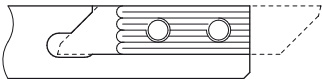
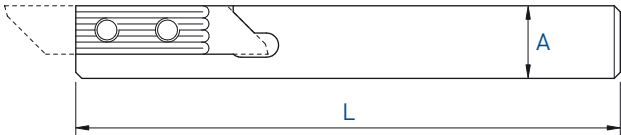
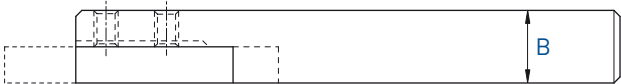
W751-E / W761-E

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

> **1.188**

L

R



L

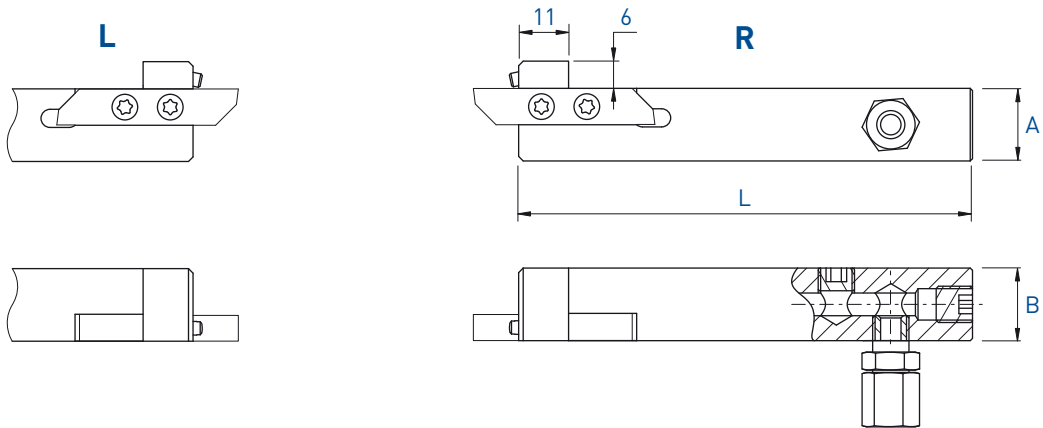
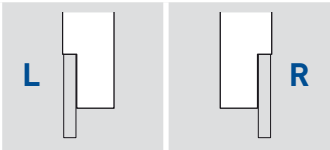
R

A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
12 x 12	130	A	W750-12	W760-12
16 x 16	130	A	W750-16	W760-16
20 x 20	120	A	W750-20	W760-20

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

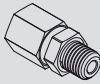
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

W750-JET / W760-JET



A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
16 x 16	100	A	W750-16-JET	W760-16-JET
20 x 20	100	A	W750-20-JET	W760-20-JET

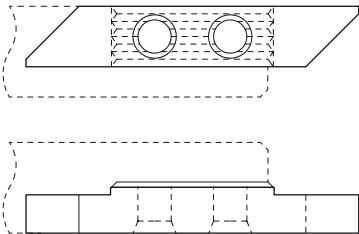
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Pièces de rechange Ersatzteile Spare parts			Buses Düsen Nozzles 
	Art. N°	Art. N°	Art. N°
W750-JET / W760-JET	J-M8X1-D6	JB-M8X1	JJ-M3X6-D1.5
More option see JET-Line			

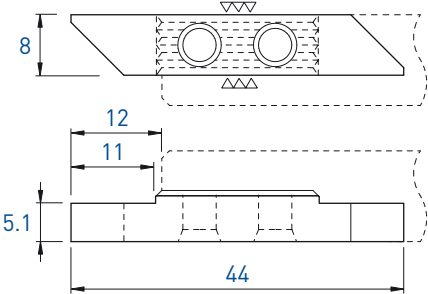
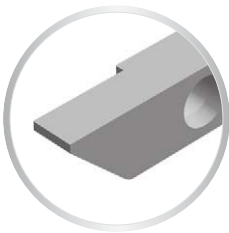
W751-E5 / W761-E5

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

L



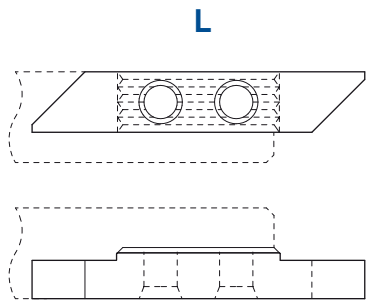
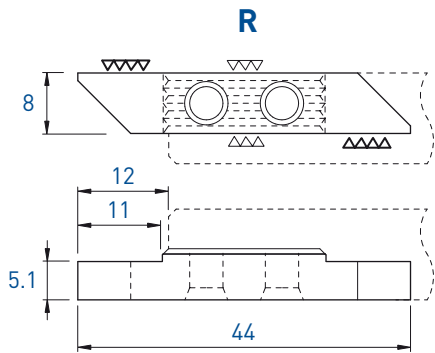
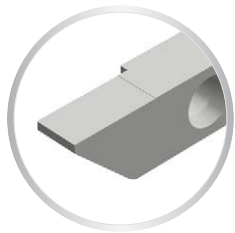
R



L		R	
	☐		☐
	☐		☐
	☒		☒
Art. N°	N [µk20]	Art. N°	N [µk20]
W751-E5	●	W761-E5	●

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

W751-EP5 / W761-EP5

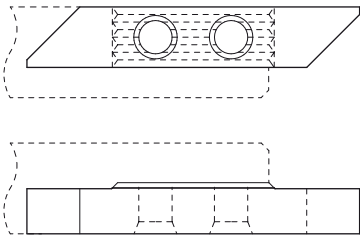


L		R	
Art. N°	P	Art. N°	P
	S		S
	N [µk20]		N [µk20]
W751-EP5	●	W761-EP5	●

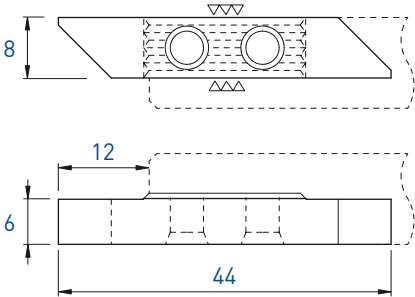
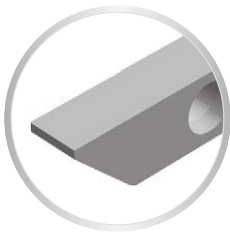
W751-E6 / W761-E6

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

L



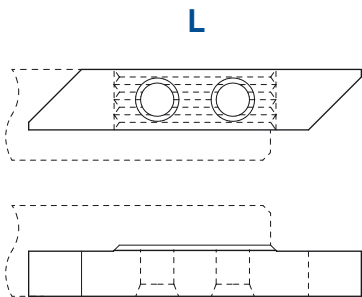
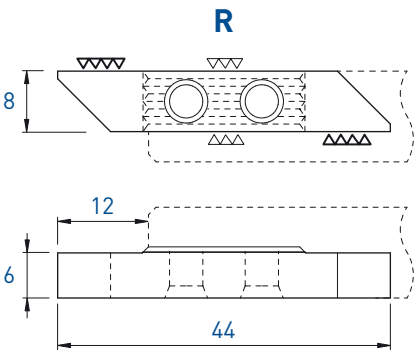
R



L		R	
	N [μk20]		N [μk20]
	Art. N°		Art. N°
W751-E6	●	W761-E6	●

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

W751-EP6 / W761-EP6



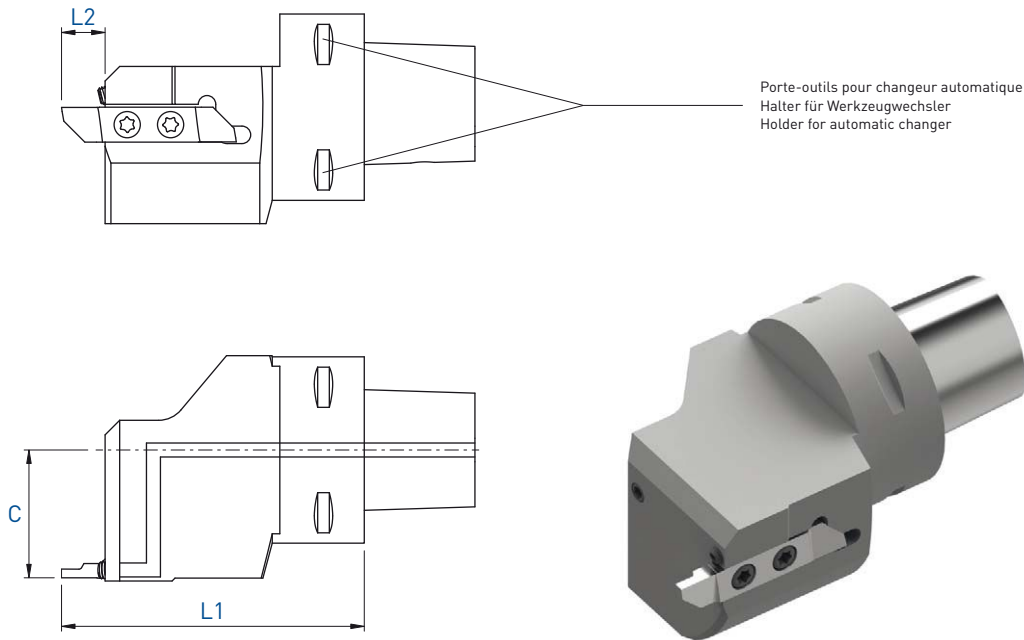
L		R	
Art. N°	P	Art. N°	P
	S		S
	N [µk20]		N [µk20]
W751-EP6	●	W761-EP6	●

Polygonal interface PSC3 / PSC4 / HSK			> 1.193
740Z / 760Z	Porte-outils pour usinage déporté Halter für versetzte Bearbeitung Tool holder for off line machining		> 1.200
Star	SL7/10-JET		> 1.201
Tornos	DECO 7/10 - EvoDECO 10	R	> 1.202
	DECO 7/10 - EvoDECO 10	L	> 1.204
	DECO 13 - EvoDECO 16 DECO 20 - EvoDECO 20/32		> 1.206
	MultiSwiss 6x16		> 1.208
	AS14 / SAS16		> 1.209
	SwissNano		> 1.210
Schütte			> 1.211
Arno			> 1.212

Interfaces polygonales PSC
Polygonale Schnittstellen PSC
Polygonal interfaces PSC

R

PSC3 / PSC4

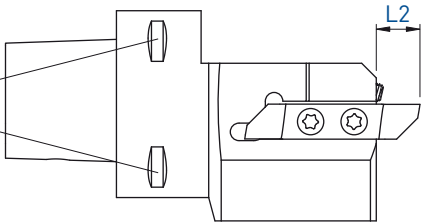
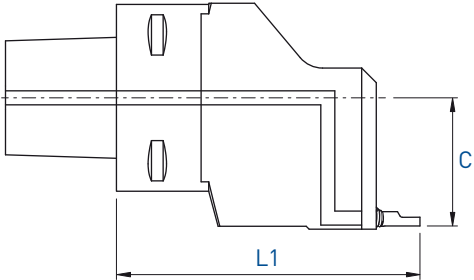


Type	Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	C	L2	Art. N°	Buses Düsen Nozzles
							Art. N°
PSC3	740	> 1.43	52	22	7.5	PSC3-740-22052-G	JJ-M3X6-D1.5
PSC3	760	> 1.101	59	22	10	PSC3-760-22059-G	
PSC4	740	> 1.43	62	27	7.5	PSC4-740-27062-G	
PSC4	760	> 1.101	67	27	10	PSC4-760-27067-G	

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Options	
	
Art. N°	Art. N°
HSK-40-JET-M12X1	C-HSK-40-JET

Porte-outils pour changeur automatique
Halter für Werkzeugwechsler
Holder for automatic changer



Type	Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	C	L2	Art. N°	Buses Düsen Nozzles
							Art. N°
PSC3	730	> 1.43	52	22	7.5	PSC3-730-22052-G	JJ-M3X6-D1.5
PSC3	750	> 1.101	59	22	10	PSC3-750-22059-G	
PSC4	730	> 1.43	62	27	7.5	PSC4-730-27062-G	
PSC4	750	> 1.101	67	27	10	PSC4-750-27067-G	

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Options	
Art. N°	Art. N°
HSK-40-JET-M12X1	C-HSK-40-JET

Porte-outils

Halter
Holders

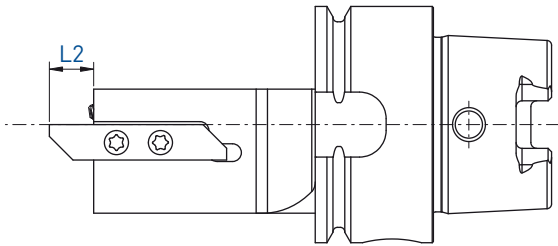
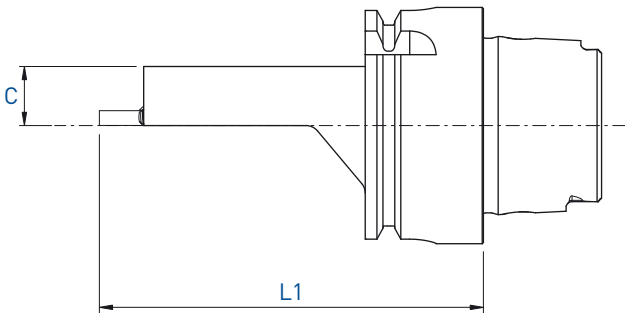
Bumotec

R

HSK-A40-S191

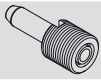


Utilisable sur toutes les machines
avec broches HSK-T ou HSK-A
Einsetzbar auf allen Maschinen,
mit HSK-T oder HSK-A Pin
Usable on all machines with HSK-T
or HSK-A spindles



Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	C	Art. N°	Buses Düsen Nozzles 
						Art. N°
740	> 1.43	65	7.5	15	HSK-A40-S191-740-0065-JET	JJ-M3X6-D1.5
760	> 1.101	70	10	15	HSK-A40-S191-760-0070-JET	JJ-M3X6-D1.5

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Options	
	
Art. N°	Art. N°
HSK-40-JET-M12X1	C-HSK-40-JET

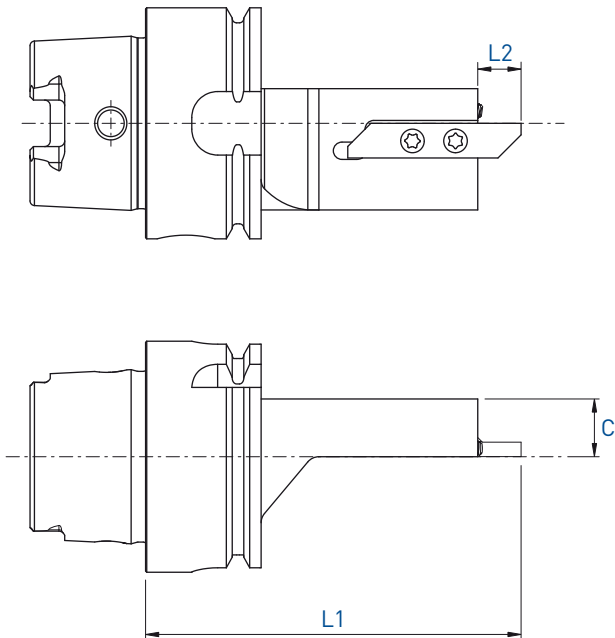
HSK-T40

L

Porte-outils
Halter
Holders

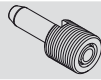


Utilisable sur toutes les machines avec
broches HSK-T ou HSK-A
Einsetzbar auf allen Maschinen,
mit HSK-T oder HSK-A Pin
Usable on all machines with HSK-T
or HSK-A spindles



Plaquettes type WSP Type Insert type	Pages Seiten Pages	L1	L2	C	Art. N°	Buses Düsen Nozzles 
						Art. N°
730	> 1.43	65	7.5	10	HSK-T40-730-0065-JET	JJ-M3X6-D1.5

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Options	
	
Art. N°	Art. N°
HSK-40-JET-M12X1	C-HSK-40-JET

Porte-outils

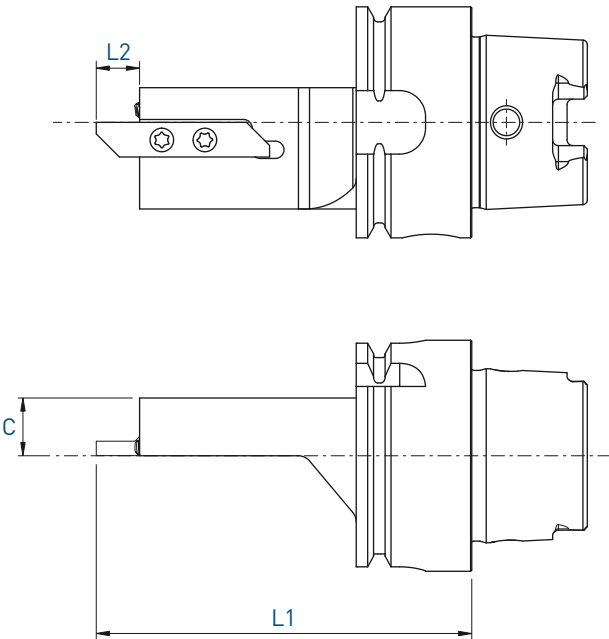
Halter
Holders

R

HSK-T40

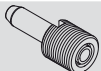


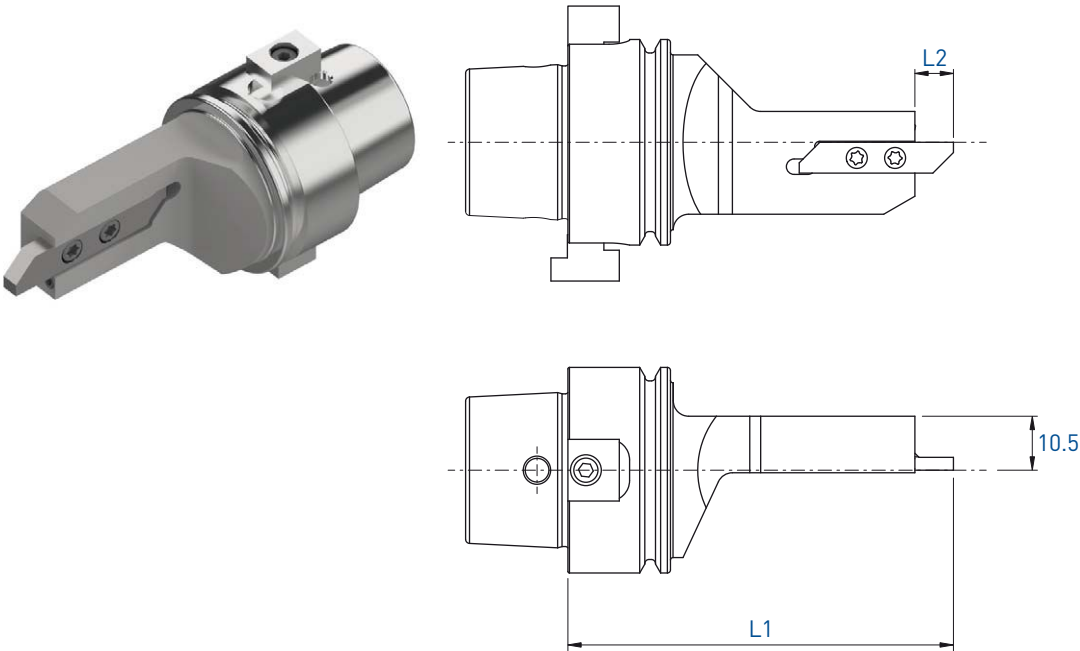
Utilisable sur toutes les machines
avec broches HSK-T ou HSK-A
Einsetzbar auf allen Maschinen,
mit HSK-T oder HSK-A Pin
Usable on all machines with HSK-T
or HSK-A spindles



Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	C	Art. N°	Buses Düsen Nozzles 
						Art. N°
740	> 1.43	65	7.5	10	HSK-T40-740-0065-JET	JJ-M3X6-D1.5
760	> 1.101	70	10	15	HSK-T40-760-0070-JET	JJ-M3X6-D1.5

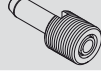
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Options	
	
Art. N°	Art. N°
HSK-40-JET-M12X1	C-HSK-40-JET



Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	Art. N°	Buses Düsen Nozzles 
					Art. N°
730	> 1.43	75	7.5	HSK-E40-730-0075-JET-WM	JJ-M3X6-D1.5
750	> 1.101	75	10	HSK-E40-750-0075-JET-WM	JJ-M3X6-D1.5

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

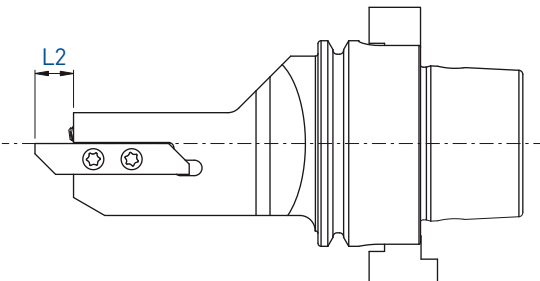
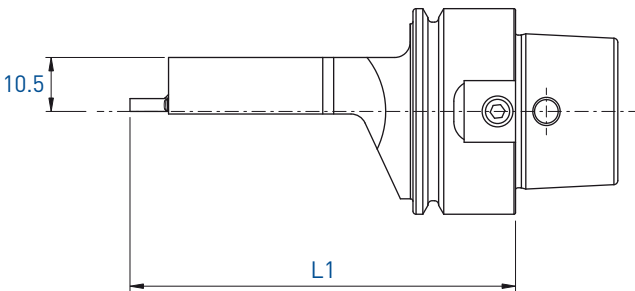
Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	Art. N°
HSK-40-JET-M12X1	C-HSK-40-JET

Porte-outils pour machines Willemin-Macodel

Halter für Willemin Macodel-Maschine
Holders for Willemin Macodel-machine

R

HSK-E40-WM

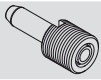


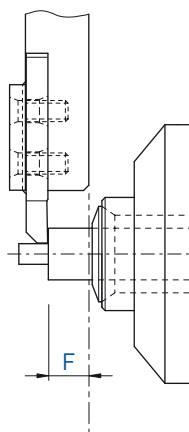
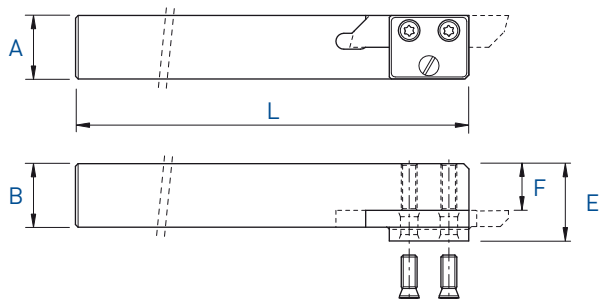
Plaquettes type WSP Typ Insert type	Pages Seiten Pages	L1	L2	Art. N°	Buses Düsen Nozzles 
					Art. N°
740	> 1.43	75	7.5	HSK-E40-740-0075-JET-WM	JJ-M3X6-D1.5
760	> 1.101	75	10	HSK-E40-760-0075-JET-WM	JJ-M3X6-D1.5

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	Art. N°
HSK-40-JET-M12X1	C-HSK-40-JET



740 Series

A x B	L	F	E	Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
12 x 12	130	9.5	14.5	740Z-12	741 - 747	> 1.43
16 x 16	130	13.5	18.5	740Z-16	741 - 747	> 1.43

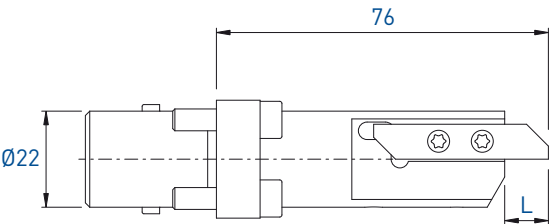
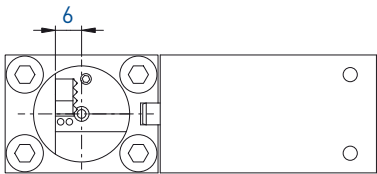
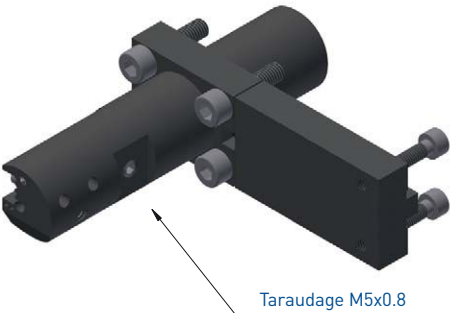
760 Series

A x B	L	F	E	Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
12 x 12	130	8	15	760Z-12	761 - 767	> 1.101
16 x 16	130	12	19	760Z-16	761 - 767	> 1.101

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils pour machine Star avec arrosage intégré
Halter für Star Maschine mit integrierter Kühlmittelzufuhr
Holders for Star machine with integrated coolant supply

SL7/10-JET

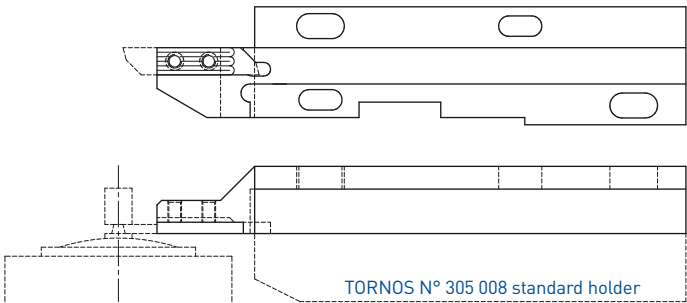


Taraudage M5x0.8

Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740-SL7/10-JET	740	> 1.43
760-SL7/10-JET	760	> 1.101

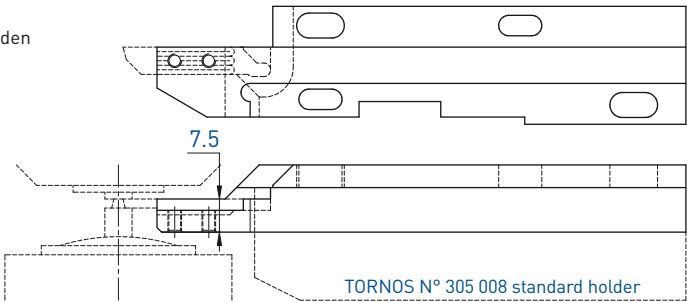
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Coupe à droite
Rechtsschneiden
Right hand cut



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740-DEC010	741 - 747	> 1.43

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
730R-DEC010	731R / 731N	1.51 - 1.58

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils pour machine Tornos

Halter für Tornos Maschine

Holders for Tornos machine

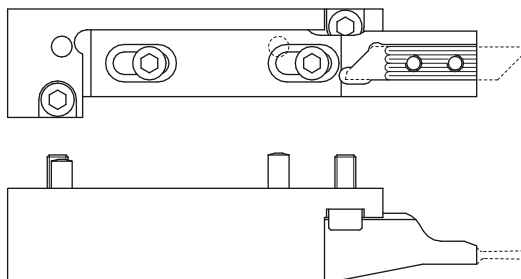
R

DECO 7/10
EvoDECO 10

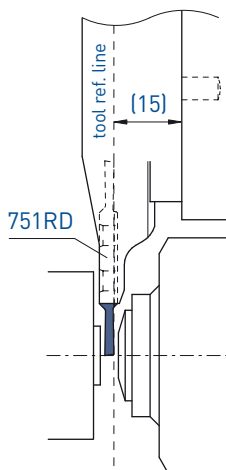
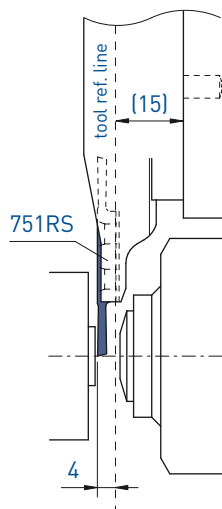
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off



Réglable en longueur
Längseinstellbar
Adjustable length

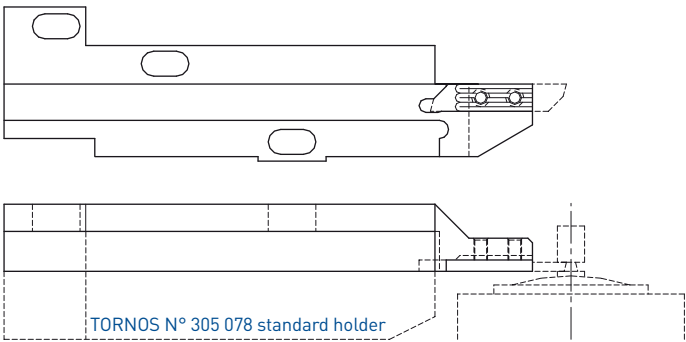


Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
750R-DECO10	751R / 751N	> 1.104



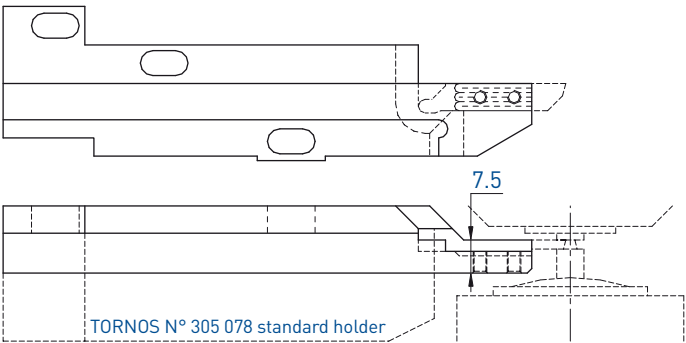
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Coupe à gauche
Linksschneiden
Left hand cut



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
730-DEC010	731 - 737	> 1.43

Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740L-DEC010	741L / 741N	> 1.49

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils pour machine Tornos

Halter für Tornos Maschine

Holders for Tornos machine

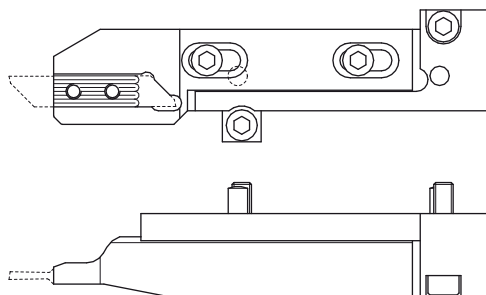
L

DECO 7/10
EvoDECO 10

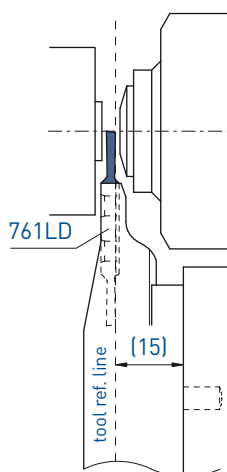
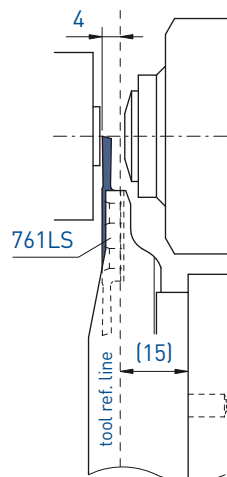
Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off



Réglable en longueur
Längseinstellbar
Adjustable length



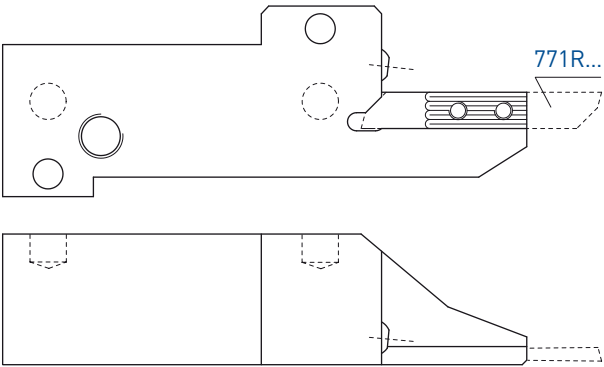
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
760L-DECO10	761L / 761N	1.104 - 1.125



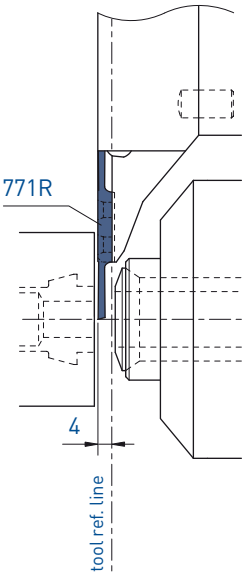
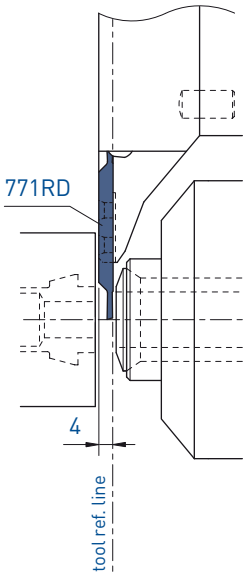
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

DECO 13
EvoDECO 16

Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
770R-DEC013	771R	1.171 - 1.174



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

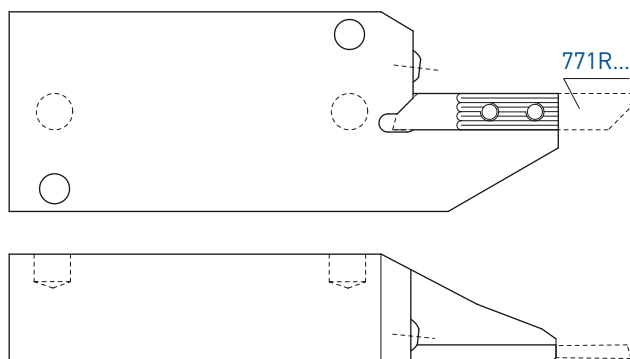
Porte-outils pour machine Tornos

Halter für Tornos Maschine

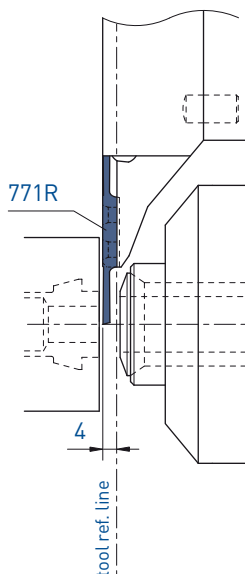
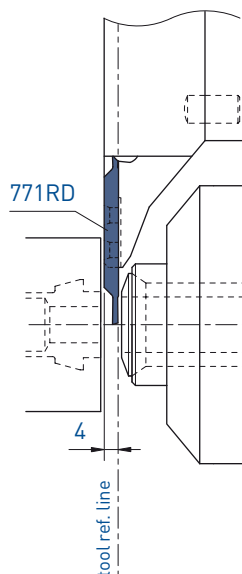
Holders for Tornos machine

DECO 20
EvoDECO 20/32

Pour le tronçonnage de petites pièces
Zum Abstechen von kleinen Werkstücken
For small parts parting off

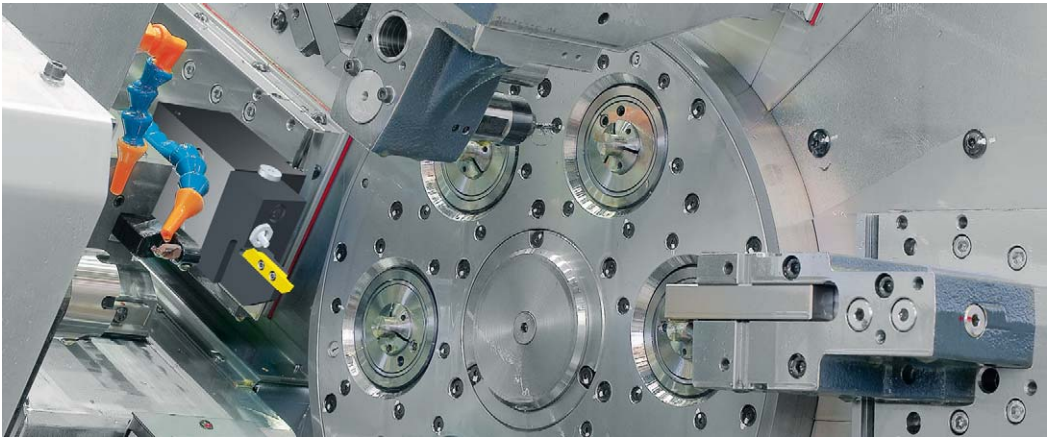
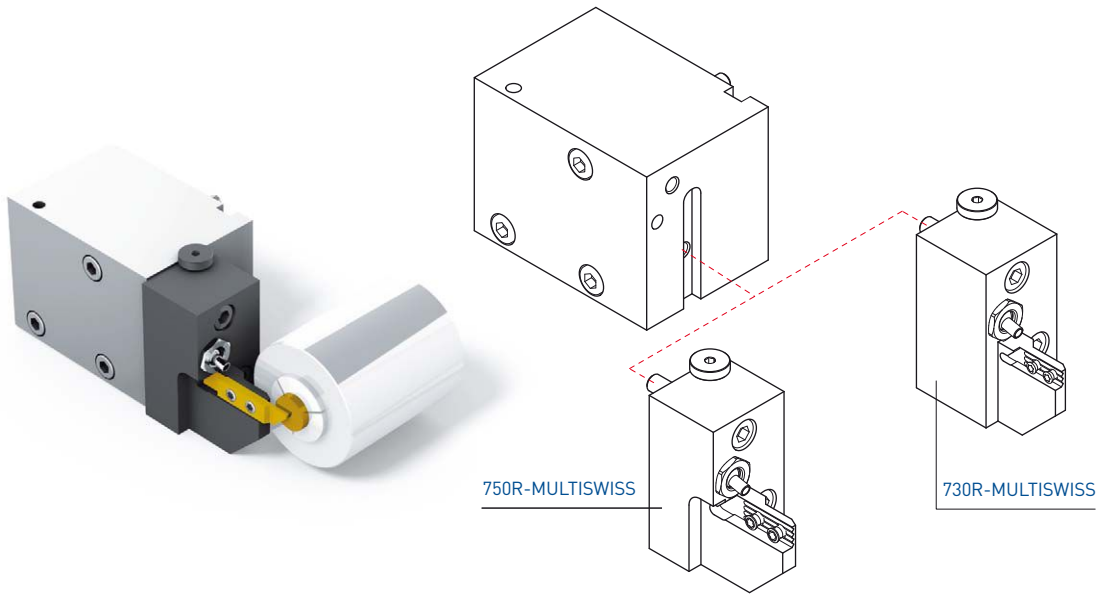


Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
770R-DECO20	771R	1.171 - 1.174



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

MultiSwiss 6x16



Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

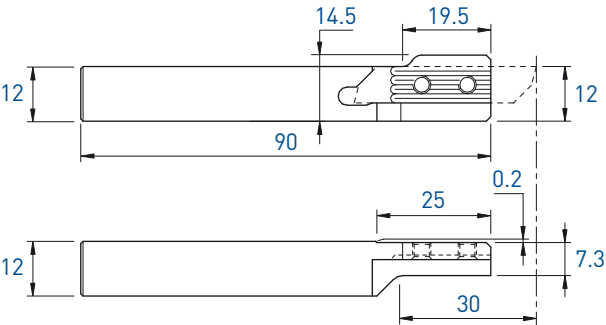
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
730R-MULTISWISS	731R / 731N	1.49 - 1.57
750R-MULTISWISS	751R / 751N	1.103 - 1.126

Porte-outils
Halter
Holders

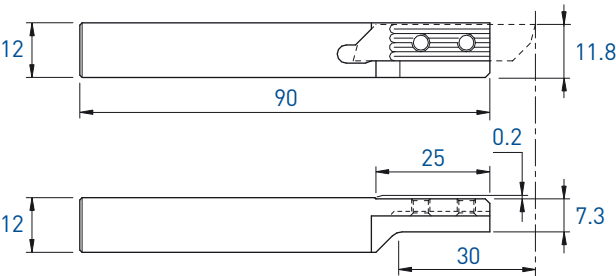
Tornos AS 14
SAS 16

R

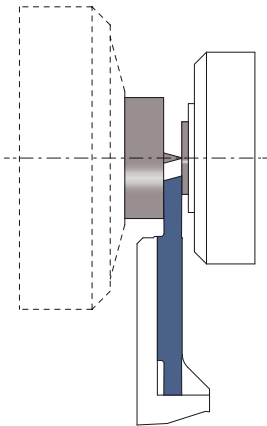
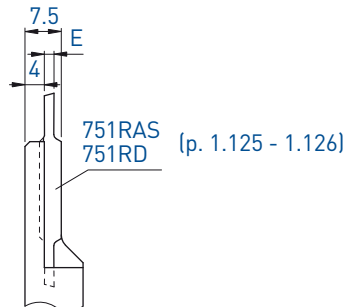
750RAS



Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
750RAS-12	751R	1.114 - 1.127

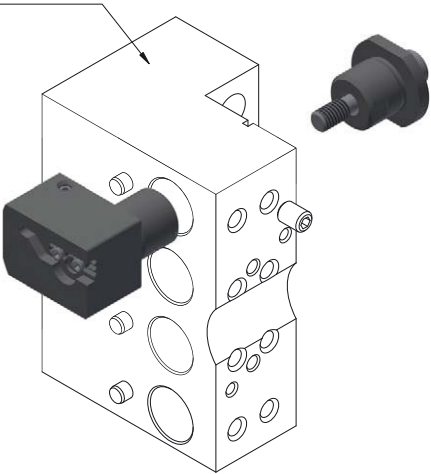


Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
750RAS-12-H11.8	751R	1.114 - 1.127



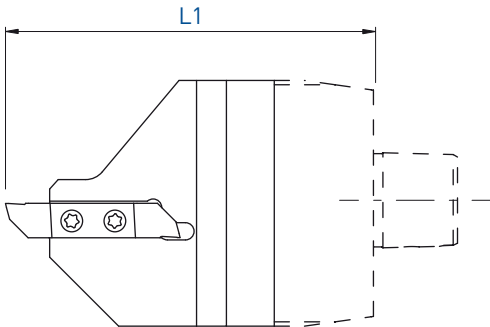
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Compatible avec porte-outils Tornos 312022
Kompatibel mit Tornos-Werkzeughalter 312022
Compatible with Tornos tool holder 312022

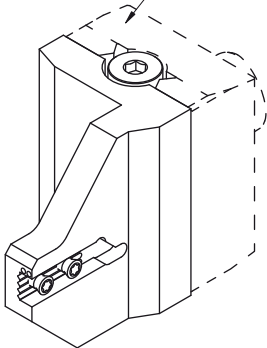
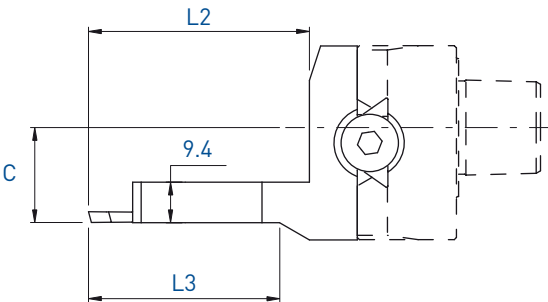


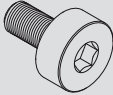
Art. N°	Plaquettes type WSP Typ Inserts type	Pages Seiten Pages
740-SN-312022	740	1.43 - 1.89

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.



Compatibility Schütte

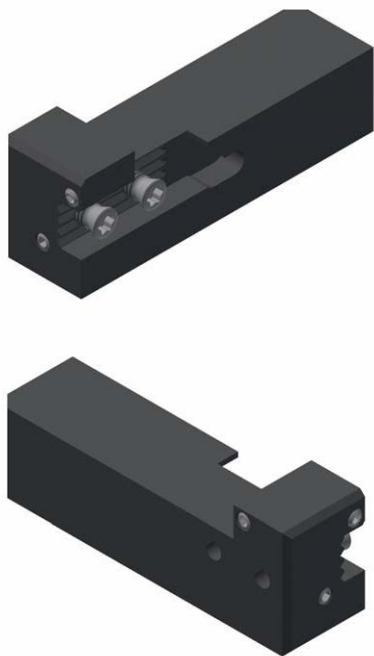
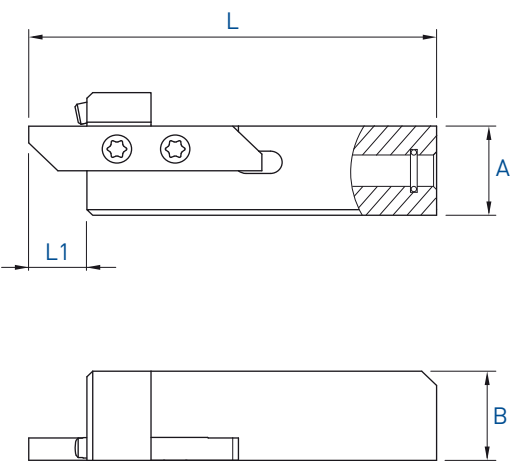


Plaquettes type WSP Typ Inserts type	Pages Seiten Pages	L1	C	L2	L3	Art. N°	Compatibility Schütte	
								Art. N°
761-767	> 1.101	86	22	51	44	DT20-760-JET	C3-75870949	V-M6X0.5-14-L18
		83	27.5	48	–	DT30-760-JET	C4-75836783	

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

AFC-740-JET / AFC-760-JET

Arno
Porte-outils
Halter
Holders



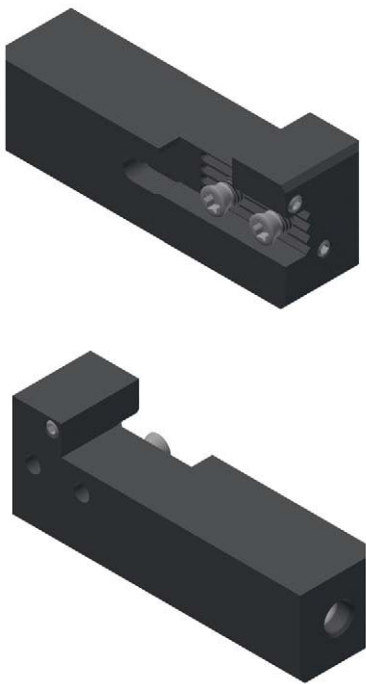
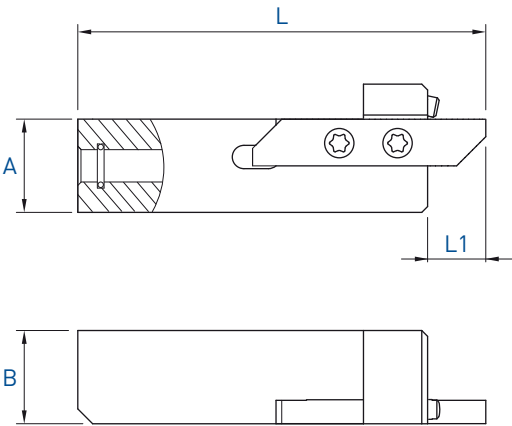
À monter exclusivement avec les butées ARNO AHA...-UN...-AFC
Ausschließlich mit ARNO AHA...-UN...-AFC Anschlagssystemen montieren
To be assembled exclusively with ARNO AHA...-UN...-AFC stop systems

Plaquettes type WSP Typ Insert type	Pages Seiten Pages	AxB	L	L1	Art. N°	Buses Düsen Nozzles 
						Art. N°
740	> 1.43	12x12	70	7.5	AFC-740-12-JET	JJ-M3X6-D1.5
740	> 1.43	16x16	70	7.5	AFC-740-16-JET	JJ-M3X6-D1.5
760	> 1.101	12x12	70	10	AFC-760-12-JET	JJ-M3X6-D1.5
760	> 1.101	16x16	70	10	AFC-760-16-JET	JJ-M3X6-D1.5
						More option see JET-Line

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils
Halter
Arno
Holders

AFC-730R-JET / AFC-750R-JET



À monter exclusivement avec les butées ARNO AHA...-UN...-AFC
Ausschließlich mit ARNO AHA...-UN...-AFC Anschlagssystemen montieren
To be assembled exclusively with ARNO AHA...-UN...-AFC stop systems

Plaquettes type WSP Typ Insert type	Pages Seiten Pages	AxB	L	L1	Art. N°	Buses Düsen Nozzles 
						Art. N°
730	> 1.43	12x12	70	7.5	AFC-730R-12-JET	JJ-M3X6-D1.5
730	> 1.43	16x16	70	7.5	AFC-730R-16-JET	JJ-M3X6-D1.5
750	> 1.101	12x12	70	10	AFC-750R-12-JET	JJ-M3X6-D1.5
750	> 1.101	16x16	70	10	AFC-750R-16-JET	JJ-M3X6-D1.5
						More option see JET-Line

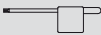
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

TOP-Line

Vis et clés de rechange

Ersatzschrauben und Schlüssel

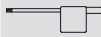
Spare screws and keys

	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage type B Spannsystem Typ B Clamping system type B 	Options 			
710	710-6 / - NOVIBRA	V-M2.5X5.8-T8	C-T8	-	-			
	710-7 / - NOVIBRA	V-M2.5X6.5-T8						
	710-8 / - NOVIBRA	V-M2.5X7.8-T8						
	710-10 - 710-12							
720	720-7	V-M2.5X6.5-T8	C-T8	-	-			
	720-8 - 720-12	V-M2.5X7.8-T8						
730	730-7 / - JET / -NOVIBRA	V-M3X7-T8	C-T8	-	-			
	730-8 / -NOVIBRA			V-M2.5X7.8-T8	C-T8			
	730-9.52 - 730-20			-	-			
	730-DECO10							
	730R-DECO10							
	730RC	V-M3X5.5-T8						
740	740-7 / -JET / -NOVIBRA	V-M3X7-T8	C-T8	-	-			
	740-8 / -NOVIBRA -			V-M2.5X7.8-T8	C-T8			
	740-12 / -JET / -NOVIBRA							
	740-16 - 740-20							
	740/730-D	V-M3X5.5-T8						
	740-C							
	740-D-JET	V-M3X7-T8						
	740-DECO10							
	740L-DECO10	V-M3X9-T8						
	740-Z							
	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage type B Spannsystem Typ B Clamping system type B    BN11 BN21				
750	750-10 - 750-12 / -JET	V-M4X9-T15	C-T15	-	-			
	750-10-AB			V-M3X10-BN21	C-6P-2.0			
	750-12-AB			V-M3X8-BN11				
	750-12.7 - 750-14			V-M3X10-BN11	C-6P-2.5			
	750-16			V-M3X12-BN11				
	750-20			V-M3X16-BN11				
	750RAS - 750-RC	V-M4X7.3-T15		-	-			
	750R-DECO10	V-M4X5.6-T15						
760	760-10 - 760-12 / -JET / -NOVIBRA / 760/750	V-M4X9-T15	C-T15	-	-			
	760-10-AB			V-M3X10-BN21	C-6P-2.0			
	760-12-AB			V-M3X8-BN11				
	760-12.7 - 760-14			V-M3X10-BN11	C-6P-2.5			
	760-16			V-M3X12-BN11				
	760-20			V-M3X16-BN11				
	760-D-JET	V-M4X7.3-T15		-	-			
	760LC							
	760L-DECO10							
	760-Z							

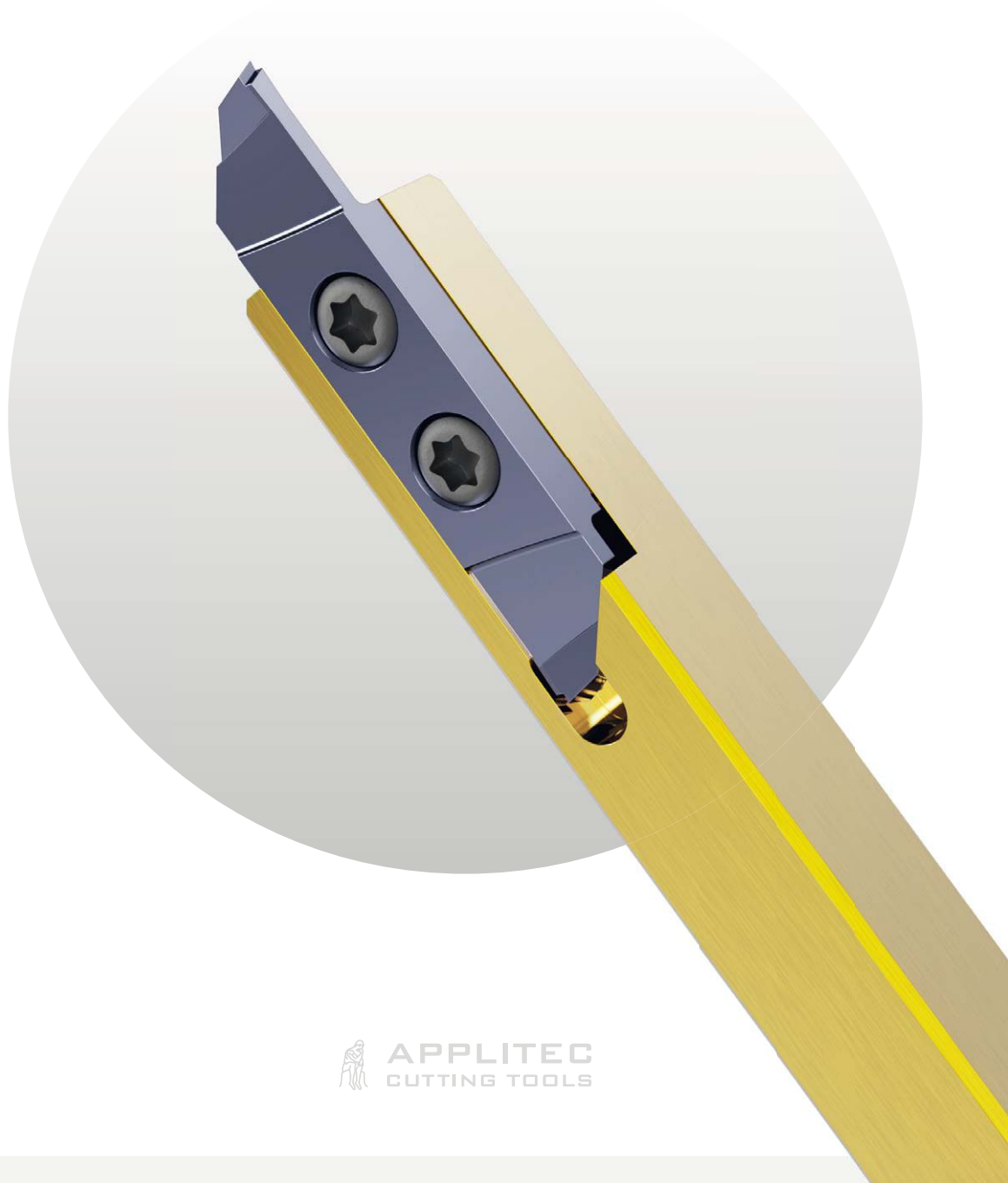
Vis et clés de rechange

Ersatzschrauben und Schlüsseln

Spare screws and keys

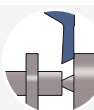
	Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage type B Spannsystem Typ B Clamping system type B  	
770	770 / -JET	V-M4X9-T15	C-T15	-	-
	770RC	V-M4X7.3-T15		-	-
780	780 / -JET	V-M4X9-T15	C-T15	-	-
7050	7050	V-M4X9-T15	C-T15	-	-
	7051			-	-
7060	7060	V-M4X9-T15	C-T15	-	-
	7061			-	-
W	W750 / W760 / -JET	V-M4X11.5-T15	C-T15	-	-
PSC3	PSC3-730	V-M3X7-T8	C-T8	-	-
	PSC3-740			-	-
	PSC3-750	V-M4X9-T15	C-T15	-	-
	PSC3-760			-	-
PSC4	PSC4-730	V-M4X9-T15	C-T15	-	-
	PSC4-740			-	-
	PSC4-750			-	-
	PSC4-760			-	-
HSK	HSK-A40-E40-T40-740	V-M3X7-T8	C-T8	-	-
	HSK-A40-E40-T40-760	V-M4X9-T15	C-T15	-	-
STAR	SL7/10-JET	V-M3X7-T8	C-T8	-	-
DECO 7/10 EvoDECO 10	730-DECO10	V-M3X5.5-T8	C-T8	-	-
	730R-DECO10			-	-
	740-DECO10			-	-
	740L-DECO10			-	-
	750R-DECO10			-	-
	760L-DECO10			-	-
DECO 13 EvoDECO 16	770R-DECO13	V-M3X5.5-T8	C-T8	-	-
DECO 20 EvoDECO 20/32	770R-DECO20	V-M3X5.5-T8	C-T8	-	-
MultiSwiss	730R-MULTISWISS	V-M3X5.5-T8	C-T8	-	-
	750R-MULTISWISS	V-M4X7.3-T15	C-T15	-	-
SwissNano	740-SN-312022	V-M3X5.5-T8	C-T8	-	-
Schütte	DT20-760-JET	V-M4X9-T15	C-T15	-	-
	DT30-760-JET			-	-
Arno	AFC-730R	V-M3X5.5-T8	C-T8	-	-
	AFC-740			-	-
	AFC-750R			-	-
	AFC-760			-	-

TOP-Watch



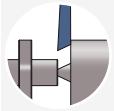
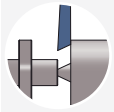
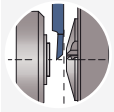
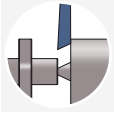
APPLITEC
CUTTING TOOLS

Codification Kodifizierung Coding guide	> 2.04
Infos et avantages Infos und Vorteile Infos and advantages	> 2.05
Nuances Sorten Grades	> 2.06

	pour machines à cames für kurvengesteuerte Maschinen for cam driven machines		pour machines CNC für CNC-Maschinen for CNC driven machines
	L		R
	710 710-SF 710-NOVIBRA > 2.13	730 730-NOVIBRA	740 740SF 740-NOVIBRA > 2.23
	711SF > 2.16		741SF > 2.27
	712SF > 2.18		742SF > 2.32
	713SF > 2.20		743SF > 2.37
			744SF > 2.43
		736SF	746SF > 2.44
			748SF > 2.46
			749SF > 2.47

	pour machines à cames für kurvengesteuerte Maschinen for cam driven machines		pour machines CNC für CNC-Maschinen for CNC driven machines	
	L		L	R
	711-ESF	>	731-ESF	741-ESF > 2.48

Coupe à droite déportée | Versetztes Rechtsschneiden | Right cut off line

	730RC	> 2.49
	731NSF	> 2.50
	731RSF	> 2.51
	750RC	> 2.54
	751RDSF	> 2.55
	770-SN-SF	> 2.56
	771RVSF	> 2.58

Porte-outils pour SwissNano
Halter für SwissNano
Holder for SwissNano

MODU-Line **ML12**

> **2.59**

Codification

Kodifizierung

Coding guide

7	4	4	SF	-	X412	-	0.8	-	HTAXF
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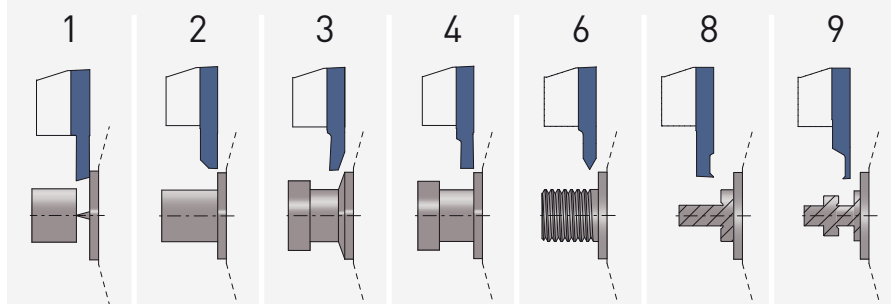
Super finish

Dimension
Abmessung
Dimension

Nuance
Sorte
Grade

Géométrie de coupe / Brise-copeaux / Particularités
Schneidgeometrie / Spanbrecher / Sondereigenschaften
Cutting geometry / Chip breaker / Special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry



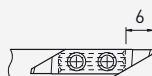
Gamme de produit
Produktsérie
Product series

définit la compatibilité des plaquettes avec le porte-outil
definiert die Kompatibilität der Wendschneidplatten mit dem Werkzeughalter
define the compatibility of the inserts with the toolholder

L = 1, 3, 5, 7 (chiffre impair / ungerade Zahl / uneven number)

R = 4 (chiffre pair / gerade Zahl / even number)

L
710



pour machines à cames
für kurvengesteuerte Maschinen
for cam driven machines

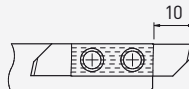
L
730



main series
small type

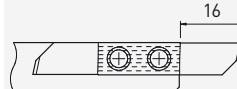
R
740

L
750



main series
large type

L
770



tronçonnage uniquement
nur für abstechen
only for parting off

Applitec série 700
Applitec 700 Serie
Applitec 700 series

Système de serrage à denture décalée avec 2 vis de fixation
Spannsystem mit 2 Schrauben und verschobener Verzahnung
Shifted teeth clamping system with 2 screws

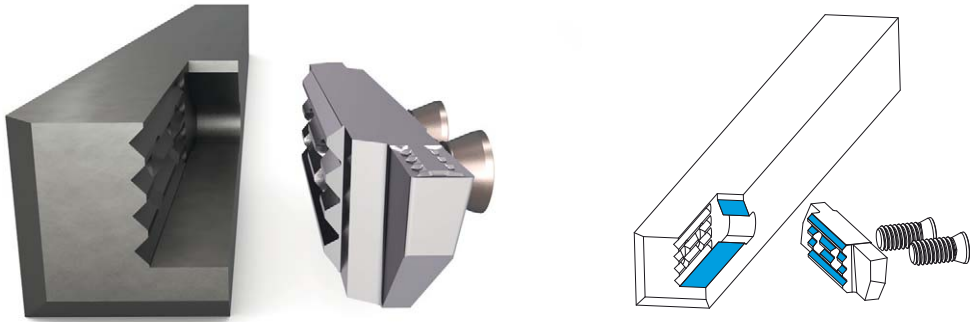
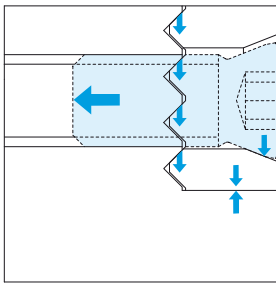
L'outil de référence pour le décolletage

Hochwertiges Wendeplattensystem für Langdrehautomaten

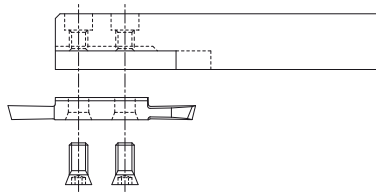
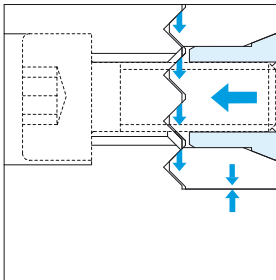
Top class turning tool for automatic lathes

700 Series**100% rigid!**

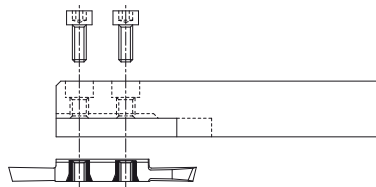
Système de serrage Applitec à denture décalée
 Applitec-Spannsystem mit verschobener Verzahnung
 Applitec clamping system with shifted teeth



Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)



Serrage type B*
Spannsystem Typ B*
Clamping system type B*



ajouter -B après le numéro d'article
 -B nach der Artikelreferenz hinzufügen
 add -B after the article number

Changement de la plaquette possible dans la machine, sans démontage du porte-outil
 WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
 The insert can be changed in the machine without removing the tool holder

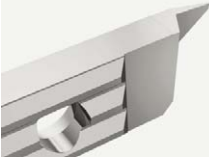
Nuances

Sorten

Grades

μK20

N



 K20

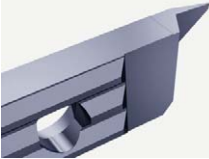
Non revêtu
Unbeschichtet
Uncoated

P	★ ★ ★ ★ ★
M	★ ★ ★ ★ ★
N	★ ★ ★ ★ ★
S	★ ★ ★ ★ ★

- nuance micro-grain tenace, résistante aux conditions défavorables, recommandée pour des opérations de coupe dans des matières ne nécessitant aucun revêtement
- zähe Feinkornsorte, in ungünstige Bearbeitungskonditionen widerstandsfähig, für Schnittbearbeitung von Stahl und rostfreiem Stahl empfohlen
- tough micro-grain grade, suitable for unfavorable machining conditions, suitable for cutting in material that not necessitate any tool coating

μK20

TAF



 K20

μK20 + revêtement PVD
μK20 + PVD Beschichtung
μK20 + PVD coating

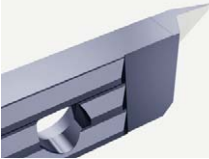
TF — **F** — M — E

P	★ ★ ★ ★ ★
M	★ ★ ★ ★ ★
N	★ ★ ★ ★ ★
S	★ ★ ★ ★ ★

- nuance très résistante aux conditions défavorables, recommandée pour des opérations de coupes dans les aciers et aciers inoxydables
- zähe widerstandsfähige Sorte in ungünstigen Bearbeitungskonditionen, für Schnittbearbeitung von Stahl und rostfreiem Stahl empfohlen
- tough grade, resistant to unfavorable machining conditions, suitable for cutting of steel and stainless steel

μK20

TAF-RE



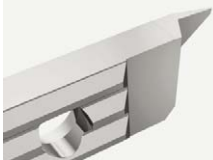
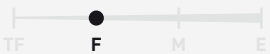
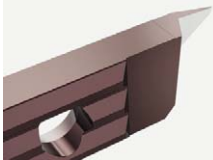
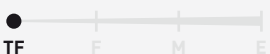
 K20

μK20 + revêtement PVD
μK20 + PVD Beschichtung
μK20 + PVD coating

TF — F — M — E

P	★ ★ ★ ★ ★
M	★ ★ ★ ★ ★
N	★ ★ ★ ★ ★
S	★ ★ ★ ★ ★

- nuance identique à TAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- gleiche Sorte wie TAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- same grade as TAF, after coating grounded clearance, recommended for finishing

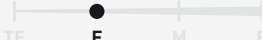
<p>μK10 - μK20</p>	<div> <p>KN</p>  </div> <div> <p> K10 - K20</p> <p>Non revêtu Unbeschichtet Uncoated</p> </div> <div> <table border="1"> <tr><td>P</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>M</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>N</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>S</td><td>★ ★ ★ ★ ★</td></tr> </table> </div> <div> <ul style="list-style-type: none"> • nuance de base non revêtue micro-grain, alliant une très bonne résistance à l'usure et une bonne ténacité • recommandé pour l'usinage des matières ne nécessitant aucun revêtement, par exemple le titane pur </div> <div> <ul style="list-style-type: none"> • verschleißfeste Feinkornsorte, unbeschichtet, mit hoher Zähigkeit und guter Widerstandsfähigkeit • empfohlen für die Bearbeitung von Werkstoffen, die keine Beschichtung erfordern, zum Beispiel reines Titan </div> <div> <ul style="list-style-type: none"> • wear-resistant micro-grain grade, uncoated, with high toughness and good resistance • recommended for machining materials that do not require coating, such as pure titanium </div>	P	★ ★ ★ ★ ★	M	★ ★ ★ ★ ★	N	★ ★ ★ ★ ★	S	★ ★ ★ ★ ★
P	★ ★ ★ ★ ★								
M	★ ★ ★ ★ ★								
N	★ ★ ★ ★ ★								
S	★ ★ ★ ★ ★								
<p>μK10 - μK20</p>	<div> <p>KSTF</p>  </div> <div> <p> K10 - K20</p> <p>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</p>  </div> <div> <table border="1"> <tr><td>P</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>M</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>N</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>S</td><td>★ ★ ★ ★ ★</td></tr> </table> </div> <div> <ul style="list-style-type: none"> • nuance très résistante à l'usure et à la température • 1^{er} choix pour les aciers > 50 HRC, les aciers à base de nickel, chrome-cobalt, inox et titane allié. </div> <div> <ul style="list-style-type: none"> • verschleißfeste Sorte, beständig gegen hohe Temperaturen • erste Wahl für Stähle > 50 HRC, Nickelbasislegierungen, Chrom-Kobalt, rostfreien Stahl und legiertes Titan </div> <div> <ul style="list-style-type: none"> • wear-resistant grade, highly resistant to temperature • first choice for steels > 50 HRC, nickel-based alloys, chrome-cobalt, stainless steel, and alloyed titanium </div>	P	★ ★ ★ ★ ★	M	★ ★ ★ ★ ★	N	★ ★ ★ ★ ★	S	★ ★ ★ ★ ★
P	★ ★ ★ ★ ★								
M	★ ★ ★ ★ ★								
N	★ ★ ★ ★ ★								
S	★ ★ ★ ★ ★								
<p>μK10 - μK20</p>	<div> <p>KSTF-RE</p>  </div> <div> <p> K10 - K20</p> <p>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</p>  </div> <div> <table border="1"> <tr><td>P</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>M</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>N</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>S</td><td>★ ★ ★ ★ ★</td></tr> </table> </div> <div> <ul style="list-style-type: none"> • nuance identique à KSTF avec dépouilles rectifiées après revêtement pour des opérations de finition </div> <div> <ul style="list-style-type: none"> • gleiche Sorte wie KSTF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen </div> <div> <ul style="list-style-type: none"> • same grade as KSTF, after coating grounded clearance, recommended for finishing, </div>	P	★ ★ ★ ★ ★	M	★ ★ ★ ★ ★	N	★ ★ ★ ★ ★	S	★ ★ ★ ★ ★
P	★ ★ ★ ★ ★								
M	★ ★ ★ ★ ★								
N	★ ★ ★ ★ ★								
S	★ ★ ★ ★ ★								

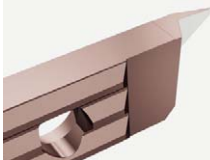
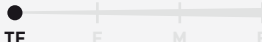
Nuances

Sorten

Grades

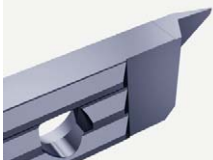
μK10	<div><h3>HN</h3></div>	<div> K10</div> <div>Non revêtu Unbeschichtet Uncoated</div>	<div><table><tr><td>P</td><td>★ ★ ★ ★ ★</td></tr><tr><td>M</td><td>★ ★ ★ ★ ★</td></tr><tr><td>N</td><td>★ ★ ★ ★ ★</td></tr><tr><td>S</td><td>★ ★ ★ ★ ★</td></tr></table></div>	P	★ ★ ★ ★ ★	M	★ ★ ★ ★ ★	N	★ ★ ★ ★ ★	S	★ ★ ★ ★ ★
	P	★ ★ ★ ★ ★									
M	★ ★ ★ ★ ★										
N	★ ★ ★ ★ ★										
S	★ ★ ★ ★ ★										
	<div><ul style="list-style-type: none">• nuance micro-grain, bonne résistance à l'usure• recommandé pour des opérations d'ébauche et de finition pour des matières ou usinages ne nécessitant aucun revêtement</div>	<div><ul style="list-style-type: none">• verschleissfeste Feinkornsorte• für Schruppen und Schlichtbearbeitung empfohlen oder für Werkstoffe oder Bearbeitungen, die keine Beschichtung erfordern</div>	<div><ul style="list-style-type: none">• wear resistant micro-grain carbide• recommended for roughing and finishing and for materials or operations that do not necessitate any tool coating</div>								

μK10	<div><h3>HTC</h3></div>	<div> K10</div> <div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div> <div></div>	<div><table><tr><td>P</td><td>★ ★ ★ ★ ★</td></tr><tr><td>M</td><td>★ ★ ★ ★ ★</td></tr><tr><td>N</td><td>★ ★ ★ ★ ★</td></tr><tr><td>S</td><td>★ ★ ★ ★ ★</td></tr></table></div>	P	★ ★ ★ ★ ★	M	★ ★ ★ ★ ★	N	★ ★ ★ ★ ★	S	★ ★ ★ ★ ★
	P	★ ★ ★ ★ ★									
M	★ ★ ★ ★ ★										
N	★ ★ ★ ★ ★										
S	★ ★ ★ ★ ★										
	<div><ul style="list-style-type: none">• nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition• conseillé pour l'usinage de la matière 20AP</div>	<div><ul style="list-style-type: none">• verschleissfeste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen• für Bearbeitung von 20AP geeignet</div>	<div><ul style="list-style-type: none">• wear resistant grade, low friction ratio, recommended for roughing and finishing• suitable for machining of 20AP material</div>								

μK10	<div><h3>HTC-RE</h3></div>	<div> K10</div> <div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div> <div></div>	<div><table><tr><td>P</td><td>★ ★ ★ ★ ★</td></tr><tr><td>M</td><td>★ ★ ★ ★ ★</td></tr><tr><td>N</td><td>★ ★ ★ ★ ★</td></tr><tr><td>S</td><td>★ ★ ★ ★ ★</td></tr></table></div>	P	★ ★ ★ ★ ★	M	★ ★ ★ ★ ★	N	★ ★ ★ ★ ★	S	★ ★ ★ ★ ★
	P	★ ★ ★ ★ ★									
M	★ ★ ★ ★ ★										
N	★ ★ ★ ★ ★										
S	★ ★ ★ ★ ★										
	<div><ul style="list-style-type: none">• nuance identique à HTC avec dépouilles rectifiées après revêtement pour des opérations de finition• conseillé pour l'usinage de la matière 20AP</div>	<div><ul style="list-style-type: none">• gleiche Sorte wie HTC nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen• für Bearbeitung von 20AP geeignet</div>	<div><ul style="list-style-type: none">• same grade as HTC, after coating grounded clearance, recommended for finishing• suitable for machining of 20AP material</div>								

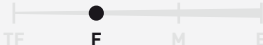
HTAF

μK10



K10

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

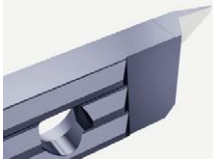


P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- nuance résistante à l'usure, recommandée pour des opérations d'ébauche et de finition
- **conseillé pour l'usinage des matières Finemac et inox 4c27a**
- verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen
- **für Bearbeitung von Finemac und 4c27a-Rostfreiem Stahl geeignet**
- wear resistant grade, recommended for roughing and finishing
- **suitable for machining of Finemac and 4c27a stainless steel**

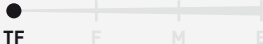
HTAF-RE

μK10



K10

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

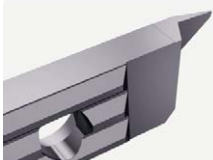


P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- nuance identique à HTAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- **recommandé pour les matières Finemac et inox 4c27a**
- gleiche Sorte wie HTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- **für Bearbeitung von Finemac und 4c27a-Rostfreiem Stahl geeignet**
- same grade as HTAF, after coating grounded clearance, recommended for finishing
- **suitable for machining of Finemac and 4c27a stainless steel**

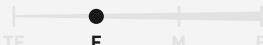
HTAXF

μK10



K10

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating



P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- nuance complémentaire, résistante à l'usure et à la température pour l'usinage ébauche et finition des matières inox 304, 316L, 317L, 904, Phynox Aciers alliés contenant : chrome nickel, vanadium, molybdène...
- komplementäre Sorte, verschleissfest und temperaturbeständig. Für Schruppen und Schlichtbearbeitung von Materialien Inox 304, 316L, 317L, 904, Phynox Legierter Stahl enthaltend Chrom-Nickel, Vanadium, Molybdän...
- complementary grade, wear and temperature resistant for roughing and finishing of following materials : Inox 304, 316L, 317L, 904, Phynox Alloy steel containing Chrome-nickel, Vanadium, Molybdenum...

Nuances

Sorten

Grades

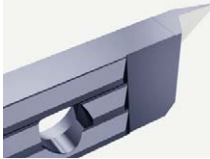
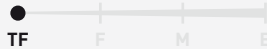
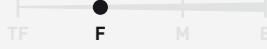
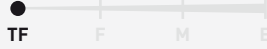
μK10	<div>HTAXF-RE</div> 	<div>K10</div> <div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div> <div>TF F M E</div>	<div>P ★★★★★</div> <div>M ★★★★★</div> <div>N ★★★★★</div> <div>S ★★★★★</div>	<ul style="list-style-type: none">• nuance identique à HTAXF avec dépouilles rectifiées après revêtement pour des opérations de finition	<ul style="list-style-type: none">• gleiche Sorte, wie HTAXF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen	<ul style="list-style-type: none">• same grade as HTAXF, after coating grounded clearance, recommended for finishing
	<div>HCR-TF</div> 	<div>K10</div> <div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div> <div>TF F M E</div>	<div>P ★★★★★</div> <div>M ★★★★★</div> <div>N ★★★★★</div> <div>S ★★★★★</div>	<ul style="list-style-type: none">• nuance spécifique aux matériaux non ferreux tels que cuivre, laiton, laiton sans plomb, bronze, maillechort. Réduit le collage. Alternative aux revêtements DLC pour certains domaines d'applications	<ul style="list-style-type: none">• spezifische Sorte, für Nichteisenmetalle wie Kupfer, Messing, bleifreies Messing, Bronze, Neusilber. Verringerung des Klebens. Alternative zu DLC-Beschichtungen in gewissen Einsatzbereichen	<ul style="list-style-type: none">• specific grade for non-ferrous materials such as copper, brass, lead-free brass, bronze and nickel silver. Reduces sticking. Alternative to DLC coatings for certain applications
	<div>HTiN</div> 	<div>K10</div> <div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div> <div>TF F M E</div>	<div>P ★★★★★</div> <div>M ★★★★★</div> <div>N ★★★★★</div> <div>S ★★★★★</div>	<ul style="list-style-type: none">• nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition	<ul style="list-style-type: none">• verschleisste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen	<ul style="list-style-type: none">• wear resistant grade low friction ratio, recommended for roughing and finishing

μK01	<div> </div> <div> XN </div> <div> K01 </div> <div> Non revêtu Unbeschichtet Uncoated </div> <div> <table border="1"> <tr><td>P</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>M</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>N</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>S</td><td>★ ★ ★ ★ ★</td></tr> </table> </div> <div> <ul style="list-style-type: none"> • nuance micro-grain très résistante à l'usure, recommandée pour des opérations d'ébauche et de finition pour des matières ou usinages ne nécessitant aucun revêtement • sehr verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen oder für Werkstoffe oder Bearbeitungen, die keine Beschichtung erfordern • wear resistant micro-grain carbide, recommended for roughing and finishing and for materials or operations that do not necessitate any tool coating </div>	P	★ ★ ★ ★ ★	M	★ ★ ★ ★ ★	N	★ ★ ★ ★ ★	S	★ ★ ★ ★ ★
P	★ ★ ★ ★ ★								
M	★ ★ ★ ★ ★								
N	★ ★ ★ ★ ★								
S	★ ★ ★ ★ ★								
μK01	<div> </div> <div> XTC </div> <div> K01 </div> <div> μK01 + revêtement PVD μK01 + PVD Beschichtung μK01 + PVD coating </div> <div> </div> <div> <table border="1"> <tr><td>P</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>M</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>N</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>S</td><td>★ ★ ★ ★ ★</td></tr> </table> </div> <div> <ul style="list-style-type: none"> • nuance très résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations de finition • sehr verschleissfeste Sorte, geringer Reibwert, für Schlichtbearbeitung empfohlen • very wear resistant grade, recommended for finishing, suitable for machining of very abrasive materials </div>	P	★ ★ ★ ★ ★	M	★ ★ ★ ★ ★	N	★ ★ ★ ★ ★	S	★ ★ ★ ★ ★
P	★ ★ ★ ★ ★								
M	★ ★ ★ ★ ★								
N	★ ★ ★ ★ ★								
S	★ ★ ★ ★ ★								
μK01	<div> </div> <div> XTAF </div> <div> K01 </div> <div> μK01 + revêtement PVD μK01 + PVD Beschichtung μK01 + PVD coating </div> <div> </div> <div> <table border="1"> <tr><td>P</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>M</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>N</td><td>★ ★ ★ ★ ★</td></tr> <tr><td>S</td><td>★ ★ ★ ★ ★</td></tr> </table> </div> <div> <ul style="list-style-type: none"> • nuance très résistante à l'usure, recommandée pour des opérations de finition, conseillée pour l'usinage des matières très abrasives • sehr verschleissfeste Sorte, für Schlichtbearbeitung empfohlen, für die Bearbeitung von sehr abrasiven Rohstoffen geeignet • very wear resistant grade, recommended for finishing, suitable for machining of very abrasive materials </div>	P	★ ★ ★ ★ ★	M	★ ★ ★ ★ ★	N	★ ★ ★ ★ ★	S	★ ★ ★ ★ ★
P	★ ★ ★ ★ ★								
M	★ ★ ★ ★ ★								
N	★ ★ ★ ★ ★								
S	★ ★ ★ ★ ★								

Nuances

Sorten

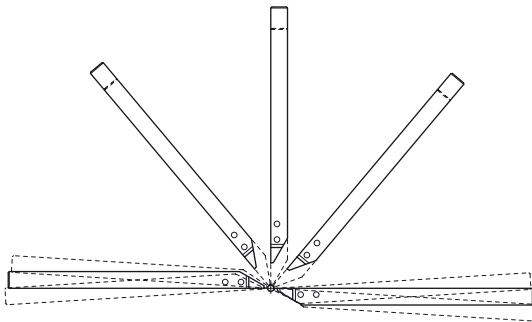
Grades

<div>μK01</div>	<div><div><div>XTAF-RE</div></div><div><ul style="list-style-type: none">• nuance identique à HTAF avec dépouilles rectifiées après revêtement pour des opérations de finition</div></div>	<div><div><div><div> K01</div><div>μK01 + revêtement PVD μK01 + PVD Beschichtung μK01 + PVD coating</div><div></div></div><div><ul style="list-style-type: none">• gleiche Sorte wie XTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen</div></div></div>	<div><div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div><div><ul style="list-style-type: none">• same grade as XTAF, after coating grounded clearance, recommended for finishing</div></div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★										
M	★★★★★										
N	★★★★★										
S	★★★★★										
<div>μK01</div>	<div><div><div>XTAXF</div></div><div><ul style="list-style-type: none">• nuance complémentaire très résistante à l'usure et à la température pour la finition des matières inox 304, 316L, 317L, 904, Phynox Aciers alliés contenant : chrome nickel, vanadium, molybdène...</div></div>	<div><div><div><div> K01</div><div>μK01 + revêtement PVD μK01 + PVD Beschichtung μK01 + PVD coating</div><div></div></div><div><ul style="list-style-type: none">• komplementäre Sorte, sehr verschleißfest und temperaturbeständig. Für Schlichtbearbeitung von Materialien Inox 304, 316L, 317L, 904, Phynox Legierter Stahl enthaltend Chrom-Nickel, Vanadium, Molybdän...</div></div></div>	<div><div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div><div><ul style="list-style-type: none">• complementary grade, very wear and temperature resistant for finishing of following materials: Inox 304, 316L, 317L, 904, Phynox Alloy steel containing Chrome-nickel, Vanadium, Molybdenum...</div></div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★										
M	★★★★★										
N	★★★★★										
S	★★★★★										
<div>μK01</div>	<div><div><div>XTAXF-RE</div></div><div><ul style="list-style-type: none">• nuance identique à HTAXF avec dépouilles rectifiées après revêtement pour des opérations de finition</div></div>	<div><div><div><div> K01</div><div>μK01 + revêtement PVD μK01 + PVD Beschichtung μK01 + PVD coating</div><div></div></div><div><ul style="list-style-type: none">• gleiche Sorte wie XTAXF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen</div></div></div>	<div><div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div><div><ul style="list-style-type: none">• same grade as XTAXF, after coating grounded clearance, recommended for finishing,</div></div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★										
M	★★★★★										
N	★★★★★										
S	★★★★★										

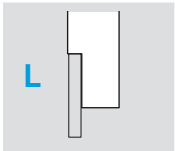
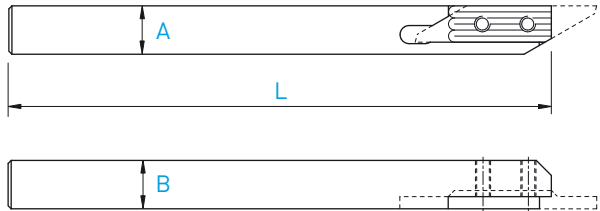
Porte-outils

Halter
Holders

710



Porte-outils pour machines à cames à gauche
Halter für linksdrehende kurvengesteuerte Maschinen
Tool holders for left hand turning cam driven machines

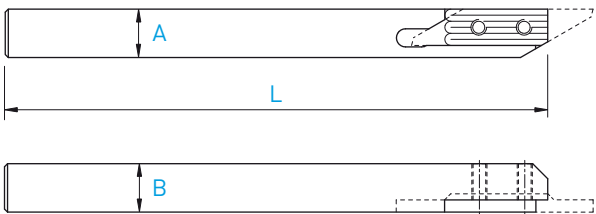


A x B	L	Serrage Spannsystem Clamping	Art. N°
6 x 6	115	A	710-6
7 x 7	115	A	710-7
8 x 8	115	A	710-8
8 x 8	140	A	710-8-140
10 x 10	115	A	710-10
12 x 12	130	A	710-12

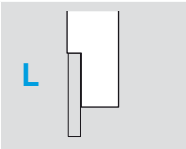


Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 
710-6	V-M2.5X5.8-T8	C-T8
710-7	V-M2.5X6.5-T8	
710-8		
710-10	V-M2.5X7.8-T8	
710-12		

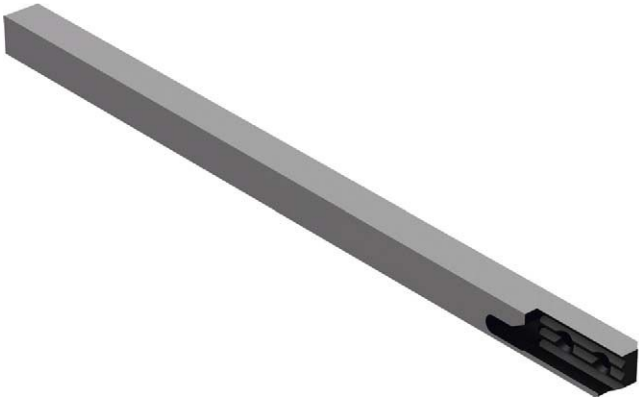
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish



A x B	L	Serrage Spannsystem Clamping	Art. N°
7 x 7	140	A	710-7-140-SF
8 x 8	140	A	710-8-140-SF

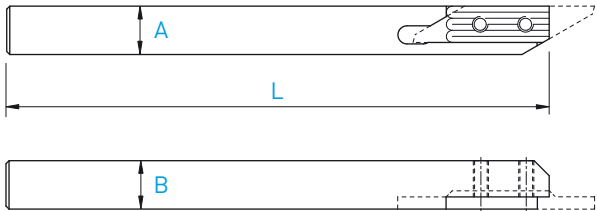
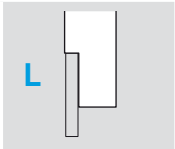


Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
		
710-7-SF	V-M2.5X6.5-T8	C-T8
710-8-SF	V-M2.5X7.8-T8	

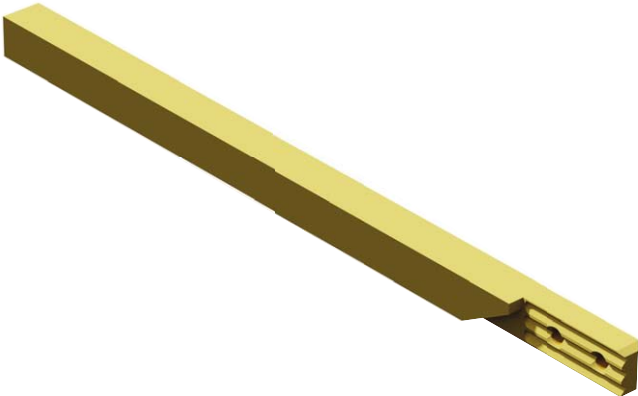
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils en métal lourd anti-vibratoire
Schwingungdämpfender Schwermetallhalter
Low vibration heavy metal holders

710-NOVIBRA



A x B	L	Serrage Spannsystem Clamping	Art. N°
6 x 6	115	A	710-6-NOVIBRA
7 x 7	115	A	710-7-NOVIBRA
8 x 8	115	A	710-8-NOVIBRA

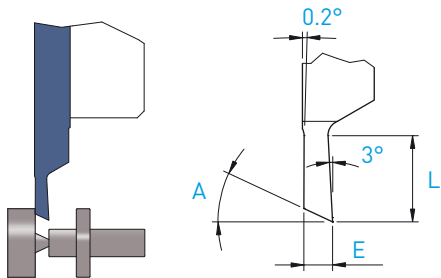
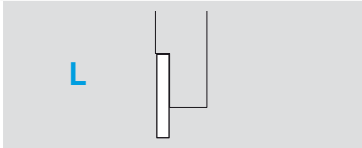


Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 
710-6-NOVIBRA	V-M2.5X5.8-T8	C-T8
710-7-NOVIBRA	V-M2.5X6.5-T8	
710-8-NOVIBRA	V-M2.5X7.8-T8	

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

711SF

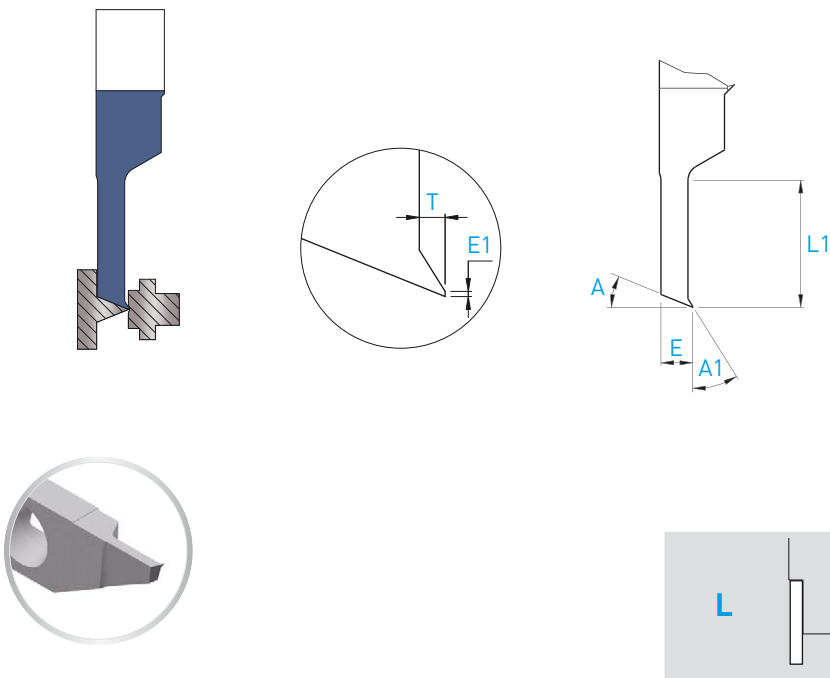
Tronçonnage
Abstechen
Parting off



E	L	A	Art. N°	<div> <div>P</div> <div>P</div> <div>P</div> <div>P</div> <div></div> </div>				
				HTC	HTC-RE	HTAF	HTIN	HN (µk10)
0.8	3.0	25°	711SF-0.8-25°	●	●	●	●	●
1.0	3.0	25°	711SF-1.0-25°	●		●	●	

Coupe rentrante
Abstechen Zentrumfrei
Pip-free back parting off

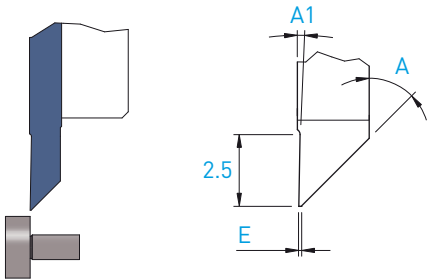
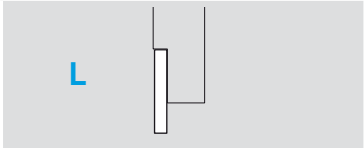
711SF-A



						Art. N°		
E1	E	A	A1	T	L1		z	TAF-RE
0.03	0.8	22°	32°	0.15	4	711SF-0.8-22°-A3215	•	•
0.03	1.0	22°	32°	0.15	4	711SF-1.0-22°-A3215	•	•

712SF

Tournage avant ébauche / finition
Vorwärts drehen schruppen / schlichten
Front turning for roughing / finishing

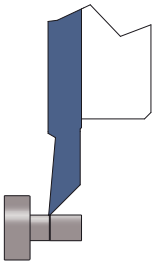
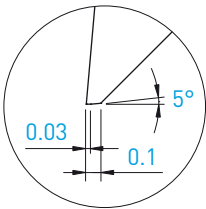
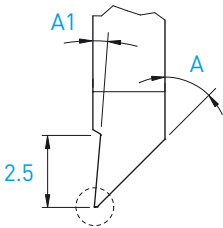


E	A	A1	Art. N°	<div><div>P</div><div></div><div></div></div> HTC	<div><div>P</div><div></div><div></div></div> HTC-RE	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTAF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTIN	<div><div></div><div></div><div>N</div><div>S</div></div> HN <small>(µk10)</small>
0.03	45°	3°	712SF-3/3-45°	•		•		•
0.08	45°	1°	712SF-8/8-45°	•	•	•	•	•

Tournage avant finition (pivotage)

Vorwärts drehen schlichten
Front turning for finishing

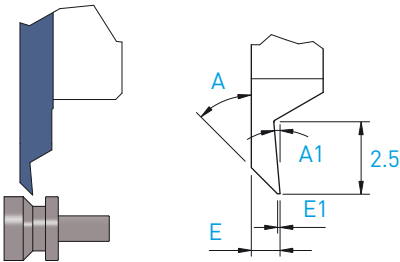
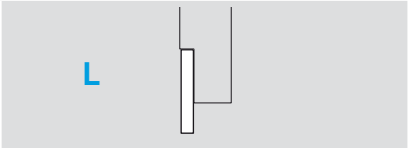
712SF-10/3



A	A1	Art. N°						
			HTC	HTC-RE	HTAF	HTIN	HN (µk10)	
45°	3°	712SF-10/3	●	●	●	●	●	

713SF

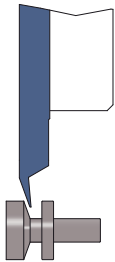
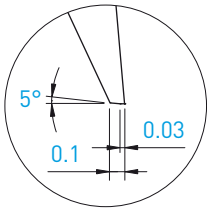
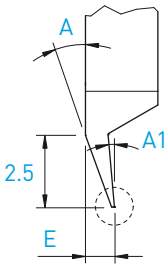
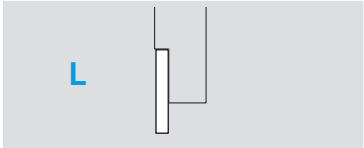
Tournage arrière ébauche / finition
Rückwärts drehen schruppen / schlichten
Back turning for roughing / finishing



E1	E	A	A1	Art. N°	<div> <div>P</div> <div></div> <div></div> <div></div> </div> <div> <div>P</div> <div></div> <div></div> <div></div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div></div> <div></div> <div>N</div> <div>S</div> </div>
					<div> <div>HTC</div> <div>HTC-RE</div> <div>HTAF</div> <div>HTIN</div> <div>HN [µk10]</div> </div>
0.03	1.0	45°	5°	713SF-3/3-45°-1.0	<div> <div>●</div> <div>●</div> <div>●</div> <div>●</div> <div>●</div> </div>
0.10	1.0	45°	5°	713SF-10/10-45°-1.0	<div> <div>●</div> <div>●</div> <div>●</div> <div>●</div> <div>●</div> </div>

Tournage arrière finition
Rückwärts drehen schlichten
Back turning for finishing

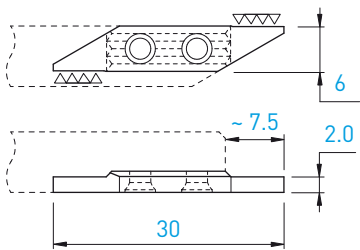
713SF-10/3



E	A	A1	Art. N°	<div><div><div>P</div><div></div><div></div></div><div><div>P</div><div></div><div></div></div><div><div>P</div><div>M</div><div>S</div></div><div><div>P</div><div>M</div><div>S</div></div><div><div></div><div>N</div><div>S</div></div></div>				
				HTC	HTC-RE	HTAF	HTIN	HN [µk10]
1.0	20°	5°	713SF-10/3	●	●	●	●	

711-ESF

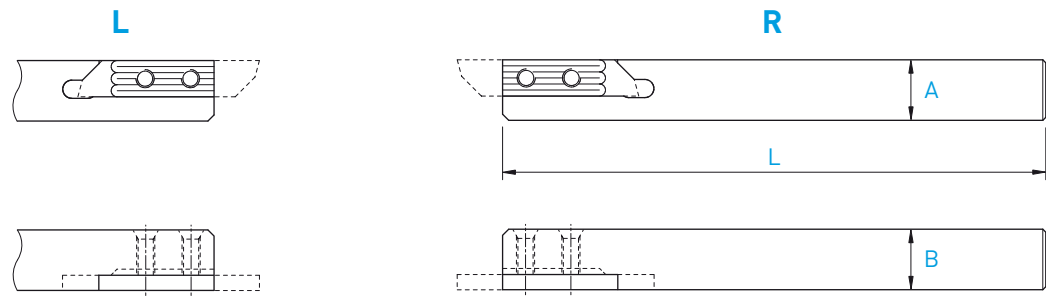
Plaquettes ébauches
WSP-Rohlinge
Blank inserts

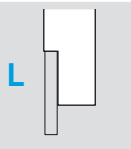
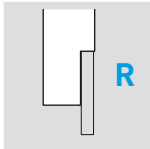


L								
Art. N°	☐ P	☐ P	☐ P	☐	☐ P	☐	☐ P	
	☐	☒ M	☒ M	☐	☒ M	☐	☐	
	☐	☒ N	☒ N	☒ N	☒ N	☒ N	☐	
	☐	☒ S	☒ S	☒ S	☒ S	☒ S	☐	
	HTC	HTAF	HTIN	HN [µk10]	XTAF	XN [µk01]	XTC	
711-ESF	●	●		●	●	●	●	

Porte-outils
Halter
Holders

730 / 740



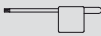
				
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
7 x 7	115	A	730-7	740-7
8 x 8	115	A + B	730-8	740-8
8 x 8	140	A + B	730-8-140	-
10 x 10	115	A + B	730-10	740-10
12 x 12	130	A + B	730-12	740-12
12 x 12	90	A + B	730-12-90	740-12-90

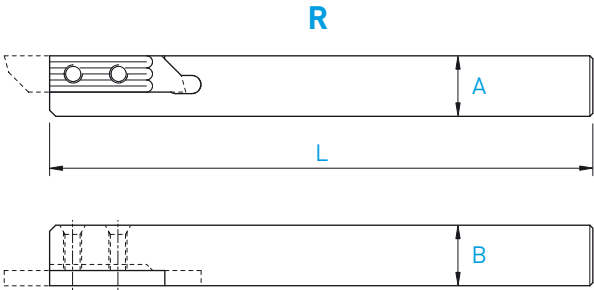


Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.

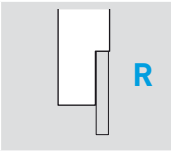
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage standard (B) Standard Spannsystem (B) Standard clamping system (B) 	Options 
730/740-7 730/740-8 730/740-10 730/740-12	V-M3X7-T8	C-T8	- V-M2.5X7.8-T8	- C-T8



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish



A x B	L	Serrage Spannsystem Clamping	Art. N°
7 x 7	90	A	740-7-90-SF
8 x 8	115	A + B	740-8-SF
8 x 8	90	A + B	740-8-90-SF
10 x 10	115	A + B	740-10-SF
10 x 10	90	A + B	740-10-90-SF
12 x 12	130	A + B	740-12-SF
12 x 12	90	A + B	740-12-90-SF

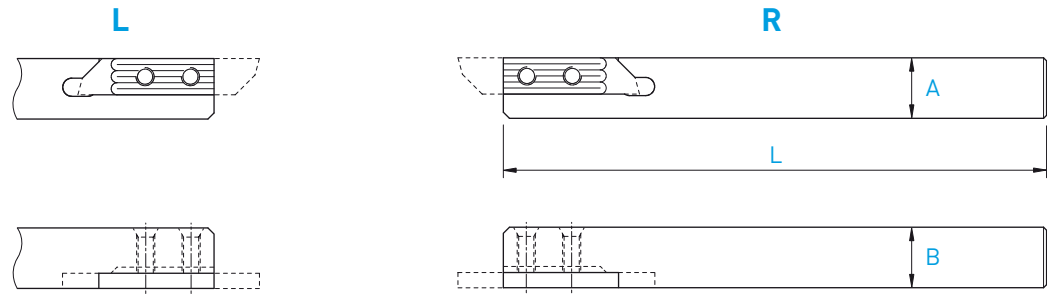


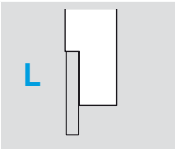
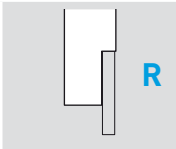
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options	Serrage standard (B) Standard Spannsystem (B) Standard clamping system (B)	Options
740-SF-7 740-SF-8 740-SF-10 740-SF-12	V-M3X7-T8	C-T8	- V-M2.5X7.8-T8	- C-T8

Porte-outils en métal lourd anti-vibratoire
Schwingungdämpfender Schwermetallhalter
Low vibration heavy metal holders

730 / 740-NOVIBRA



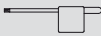
				
A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
7 x 7	115	A	730-7-NOVIBRA	740-7-NOVIBRA
8 x 8	115	A + B	730-8-NOVIBRA	740-8-NOVIBRA
8 x 8	80	A + B	-	740-8-80-NOVIBRA
10 x 10	115	A + B	-	740-10-NOVIBRA
12 x 12	130	A + B	-	740-12-NOVIBRA



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.

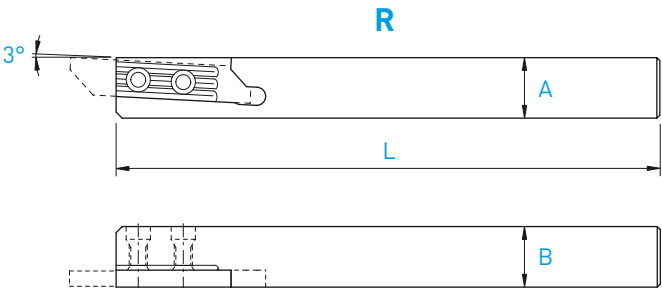
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws. The keys must be ordered separately.

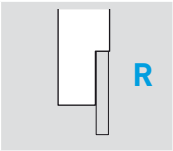
Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage standard (B) Standard Spannsystem (B) Standard clamping system (B) 	Options 
730/740-NOVIBRA-7 730/740-NOVIBRA-8 740-NOVIBRA-10 740-NOVIBRA-12	V-M3X7-T8	C-T8	- V-M2.5X7.8-T8	- C-T8

740X3-SF

Porte-outils
Halter
Holders



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish



A x B	L	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	A + B	740X3-8-SF
10 x 10	115	A + B	740X3-10-SF
12 x 12	130	A + B	740X3-12-SF



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

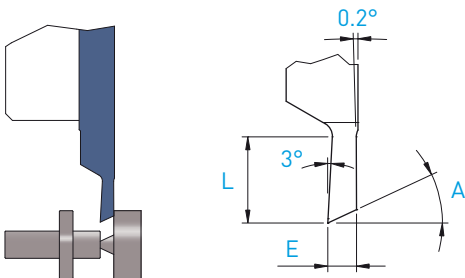
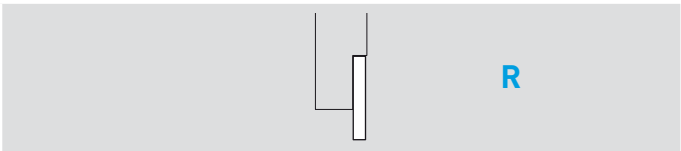
Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options	Serrage standard (B) Standard Spannsystem (B) Standard clamping system (B)	Options
740X-SF-8				
740X-SF-10	V-M3X7-T8	C-T8	V-M2.5X7.8-T8	C-T8
740X-SF-12				

Tronçonnage

Abstechen

Parting off

741SF



E	L	A	Art. N°													R			
				P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
				M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
				KSTF	KN (µk10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTIN	HN (µk10)	XTAF	XTAXF	XTAXF-RE	XN (µk01)		
0.5	2.0	25°	741SF-0.5-25°	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
0.8	3.0	25°	741SF-0.8-25°	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1.0	3.0	25°	741SF-1.0-25°	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1.2	6.0	22°	741SF-1.2-22°	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

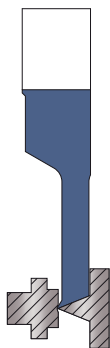
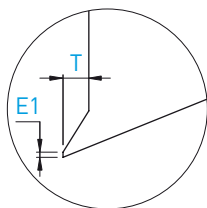
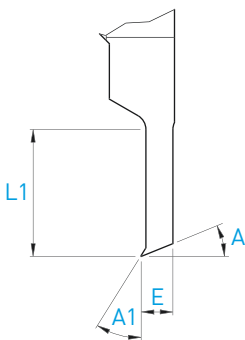
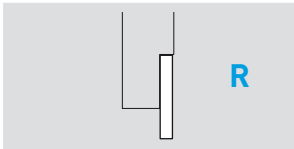
7XX-XX-B



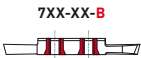
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

741SF-A

Coupe rentrante
Abstechen Zentrumsfrei
Pip-free back parting off



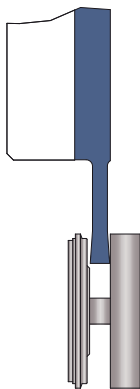
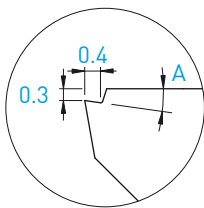
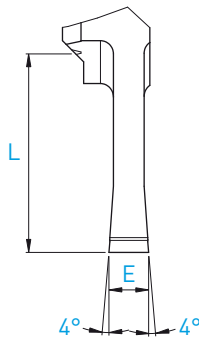
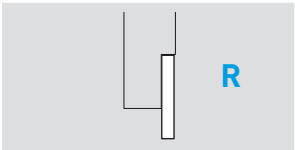
E1	E	A	A1	T	L1	Art. N°	P	M	N	S	TAF-RE	Z
0.03	0.8	22°	32°	0.15	4	741SF-0.8-22°-A3215	●	●	●	●	●	●
0.03	1.0	22°	32°	0.15	4	741SF-1.0-22°-A3215	●	●	●	●	●	●
0.03	1.2	22°	32°	0.20	6	741SF-1.2-22°-A3220	●	●	●	●	●	●



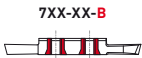
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Tronçonnage
Abstechen
Parting off

741NSF-X



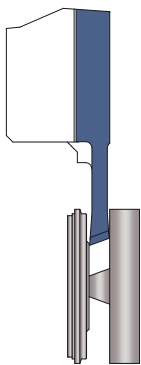
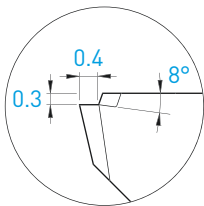
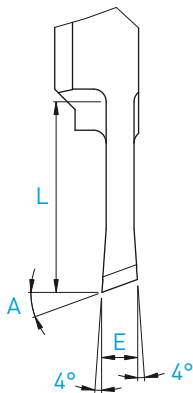
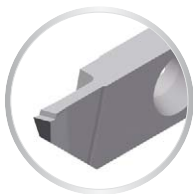
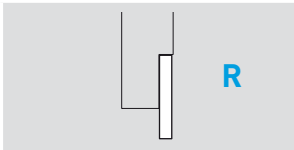
E	A	L	Art. N°	HCR-TF	HN (µk10)
1.5	8°	7.5	741NSF-X840-1.5	•	•
2.0	8°	8.0	741NSF-X840-2.0	•	•



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

741SF-X

Tronçonnage
Abstechen
Parting off



E	A	L	Art. N°			
				HCR-TF	HN [µk10]	
1.1	20°	5.0	741SF-X840-1.1-20°	●	●	●
1.4	20°	7.5	741SF-X840-1.4-20°	●	●	●
1.5	5°	7.5	741SF-X840-1.5-5°	●	●	●
1.9	20°	8.0	741SF-X840-1.9-20°	●	●	●

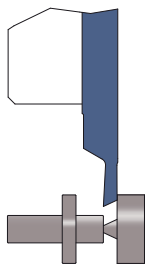
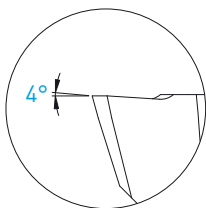
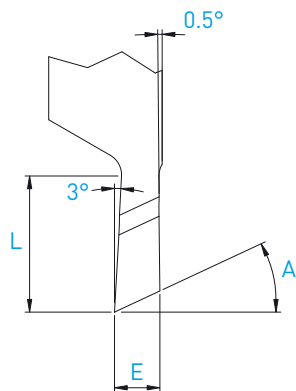
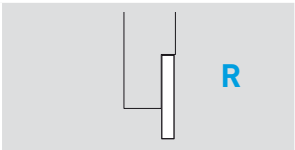
7XX-XX-B



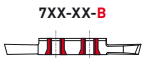
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Tronçonnage
Abstechen
Parting off

741SF-X4

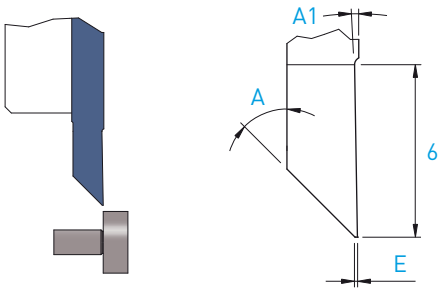
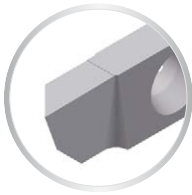
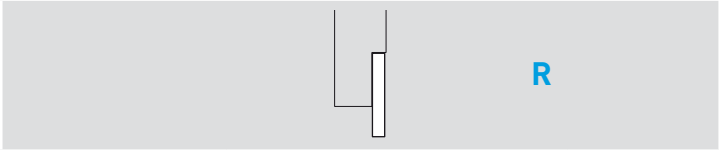


E	A	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div>	
				KSTF	KN [µkt(0-20)]
0.8	25°	3.0	741SF-X4-0.8-25	•	•
1.0	25°	3.0	741SF-X4-1.0-25	•	•



7XX-XX-B

Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05



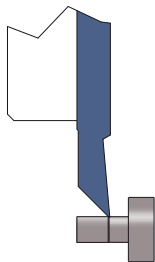
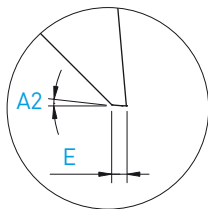
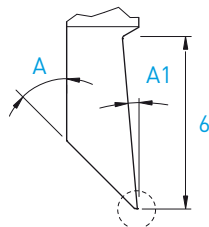
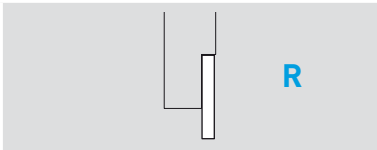
E	A	A1	Art. N°	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
				M	M	M				M	M	M	M	M			M	M	M	
				N	N	N				N	N			N	N			S	S	S
				S	S	S				S	S	S	S	S	S			S	S	S
				KSTF	KSTF-RE	KN (µk10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (µk10)	XTAF	XTAXF	XTAF-RE	XN (µk01)		
0.03	45°	3°	742SF-3/3-45°	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
0.05	45°	3°	742SF-5/5-45°					●	●	●					●					
0.08	45°	1°	742SF-8/8-45°	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

7XX-XX-B

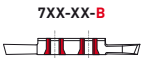


Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

742SF-_/0



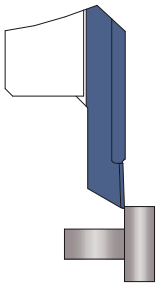
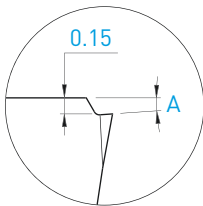
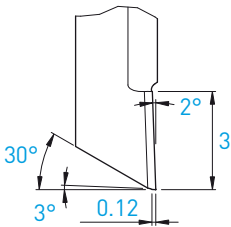
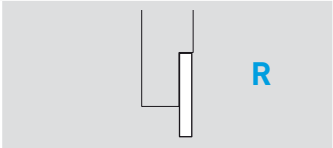
E	A	A1	A2	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div>				
					KSTF	KSTF-RE	KN [μk10-20]	HTAF-RE	XTAF-RE
0.10	45°	5°	5°	742SF-10/0-5°-45°	●	●	●	●	●
0.15	30°	3°	2°	742SF-15/0-2°-30°	●	●	●	●	●



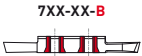
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Tournage avant
Vorwärtsdrehen
Front turning

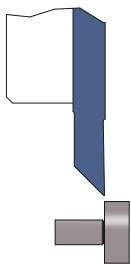
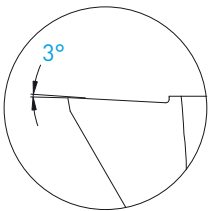
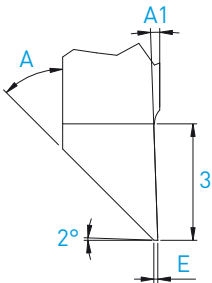
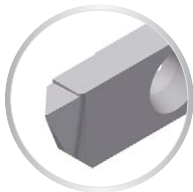
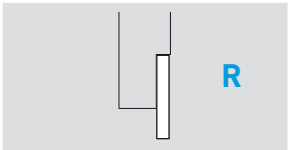
742SF-X



A	Art. N°	<div><div>P</div><div>M</div><div>S</div></div>			<div><div>N</div><div>S</div></div>	
		HTAXF	HCR-TF	HN (µk10)		
4°	742SF-X412	•	•	•		
8°	742SF-X812	•	•	•		
12°	742SF-X1212	•	•	•		



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05



E	A	A1	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div>	
				KSTF	KN (µk(0-20))
0.05	43°	2°	742SF-XZ3-5/0-2-43	●	●
0.10	43°	2°	742SF-XZ3-10/0-2-43	●	●

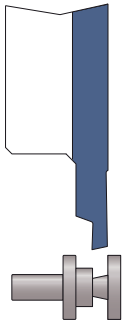
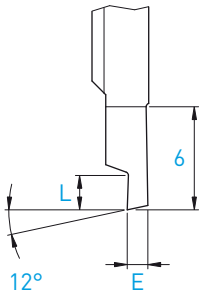
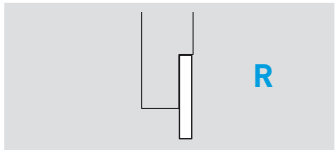
7XX-XX-B



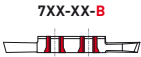
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Tournage arrière ébauche
 Rückwärts drehen schrappen
 Back turning for roughing

743SF



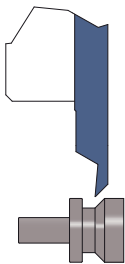
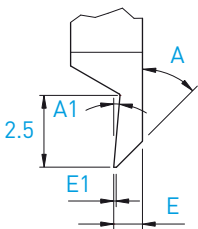
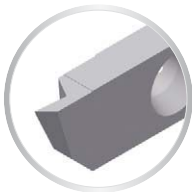
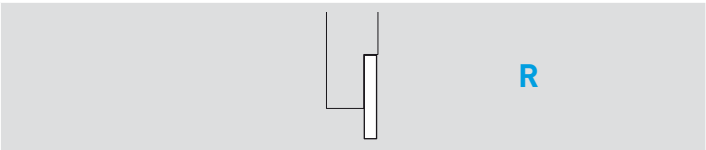
E	L	Art. N°	<div> <div> <div>P</div> <div></div> <div></div> </div> <div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div></div> <div>N</div> <div>S</div> </div> </div>		
			HTC	HTAF	HN (µk10)
1.2	2.5	743SF-120/0-12°	•	•	•
1.4	3.0	743SF-140/0-12°	•	•	•
1.6	3.0	743SF-160/0-12°	•	•	•
1.8	4.0	743SF-180/0-12°	•	•	•



Sur demande pour serrage type B, voir page 2.05
 Auf Anfrage für B-Spannsystem, siehe Seite 2.05
 On request for B clamping system, see page 2.05

743SF-3/3

Tournage arrière ébauche / finition
Rückwärts drehen schrappen / schlichten
Back turning for roughing / finishing



					<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>
E1	E	A	A1	Art. N°	KSTF	KSTF-RE	KN (μk10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTiN	HN (μk10)	XTAF	XTAXF	XTAXF-RE	XN (μk01)
0.03	1.0	45°	5°	743SF-3/3-45°-1.0	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
0.03	1.2	45°	5°	743SF-3/3-45°-1.2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
0.10	1.0	45°	5°	743SF-10/10-45°-1.0	●	●	●	●	●	●	●	●	●		●	●	●	●	●
0.05	0.8	30°	3°	743SF-5/5-30°-0.8	●	●	●				●								
0.05	1.0	30°	3°	743SF-5/5-30°-1.0	●	●	●				●								

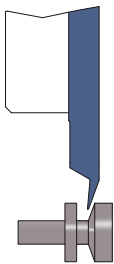
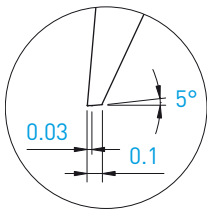
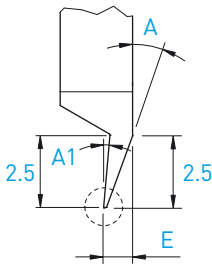
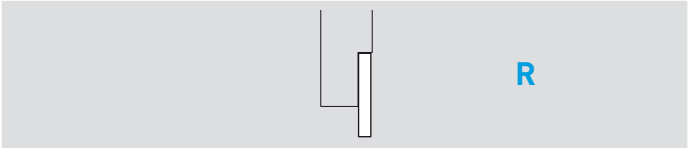
7XX-XX-B



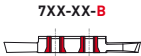
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Tournage arrière finition
Rückwärts drehen schlichten
Back turning for finishing

743SF-10/3

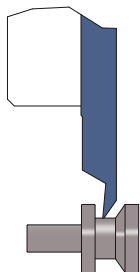
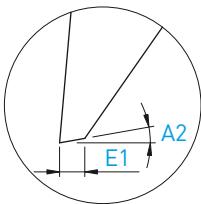
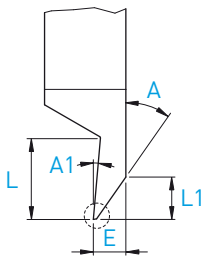
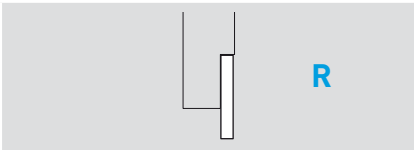


E	A	A1	Art. N°	KSTF	KSTF-RE	KN (µk10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTAXF	HTAXF-RE	HTIN	HN (µk10)	XTAF	XTAXF	XTAXF-RE	XN (µk01)
1.0	20°	5°	743SF-10/3	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

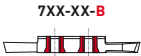


7XX-XX-B
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

743SF-_/0



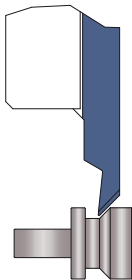
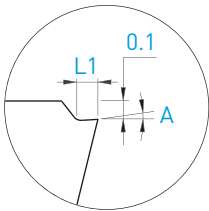
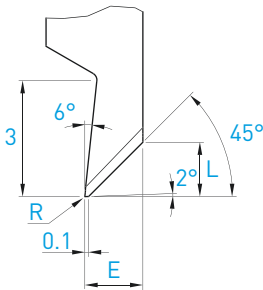
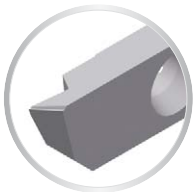
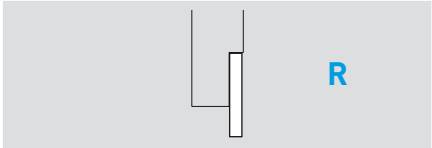
E1	E	L1	L	A	A1	A2	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> KSTF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> KSTF-RE	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> KN (µk10-20)	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> HTAF-RE	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> XTAF-RE
0.08	1.0	1.6	2.5	30°	5°	2°	743SF-8/0-2°-30°-1.0	●	●	●	●	●
0.15	1.2	1.8	4.0	30°	3°	2°	743SF-15/0-2°-30°-1.2	●	●	●	●	●
0.10	1.0	1.3	2.5	35°	5°	10°	743SF-10/0-10°-35°-1.0	●	●	●	●	●



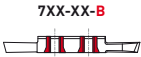
7XX-XX-B
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Tournage arrière
Rückwärts drehen
Back turning

743SF-X



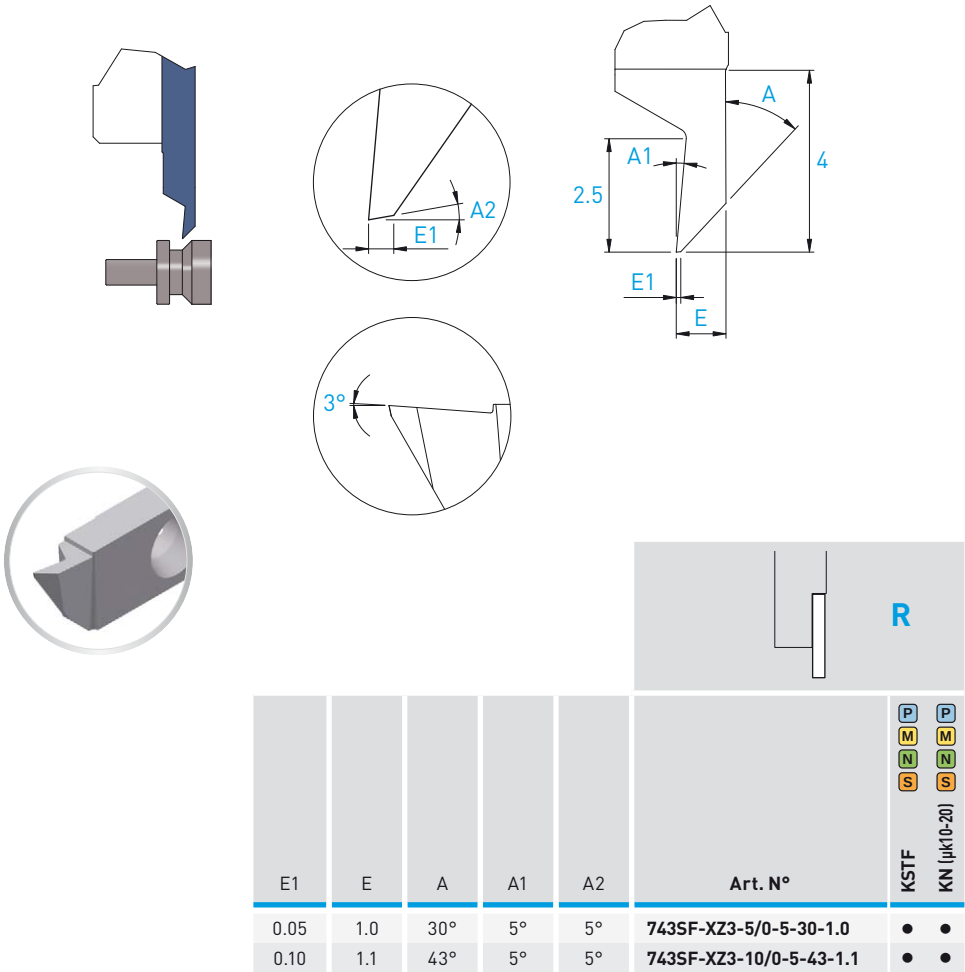
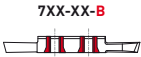
E	L	L1	A	R	Art. N°	<div><div><div>P</div><div>M</div><div>N</div><div>S</div></div><div><div>P</div><div>M</div><div>N</div><div>S</div></div><div><div>P</div><div>M</div><div>N</div><div>S</div></div><div><div></div><div></div><div>N</div><div></div></div><div><div></div><div></div><div>N</div><div>S</div></div></div>				
						KSTF	KN (µk10-20)	HTAXF	HCR-TF	HN (µk10)
1.0	0.9	0.12	4°	0	743SF-X412-45°-1.0			•	•	•
			8°	0	743SF-X812-45°-1.0			•	•	•
			12°	0	743SF-X1212-45°-1.0			•	•	•
1.5	1.4	0.12	4°	0	743SF-X412-45°-1.5			•	•	•
			8°	0	743SF-X812-45°-1.5			•	•	•
			12°	0	743SF-X1212-45°-1.5			•	•	•
1.5	1.3	0.24	6°	0.05	743SF-X624-45°-1.5-R05	•	•			



7XX-XX-B
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

743SF-XZ

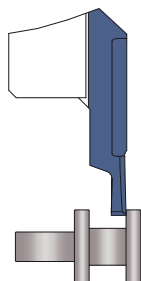
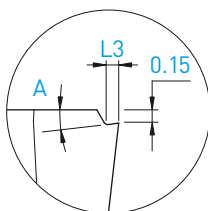
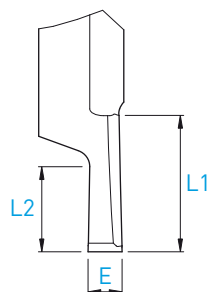
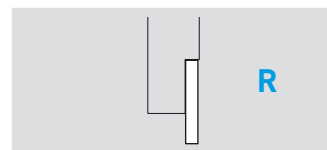
Tournage arrière
Rückwärts drehen
Back turning



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Fonçage-tournage

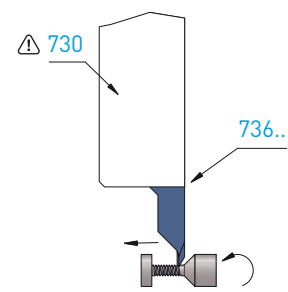
Einstechen und drehen
Grooving and turning

744SF-X

A	E	L1	L2	L3	Art. N°	<div><div><div><div>P</div></div><div>M</div><div></div><div>S</div></div><div><div></div><div>N</div><div></div><div></div></div><div><div></div><div>N</div><div></div><div>S</div></div></div>			HTAXF	HCR-TF	HN [µk10]
4°	0.5	3	1.0	0.12	744SF-X412-0.5	●	●	●			
	0.6	3	1.5	0.12	744SF-X412-0.6	●	●	●			
	0.8	4	2.0	0.12	744SF-X412-0.8	●	●	●			
	1.0	4	2.5	0.12	744SF-X412-1.0	●	●	●			
	1.0	4	2.5	0.24	744SF-X424-1.0	●	●	●			
	1.0	4	2.5	0.36	744SF-X436-1.0	●	●	●			
	1.2	5	3.0	0.12	744SF-X412-1.2	●	●	●			
8°	0.6	3	1.5	0.12	744SF-X812-0.6	●	●	●			
	0.8	4	2.0	0.12	744SF-X812-0.8	●	●	●			
	1.0	4	2.5	0.12	744SF-X812-1.0	●	●	●			
	1.2	5	3.0	0.12	744SF-X812-1.2	●	●	●			

7XX-XX-B

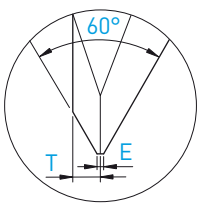
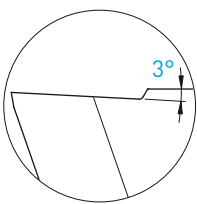
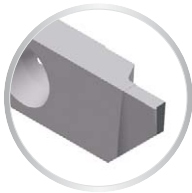
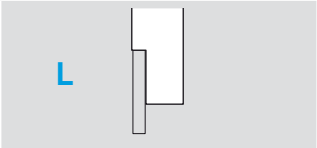
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05



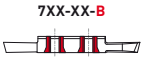
Filetage à droite
sens rotation machine M4

Rechtgewinde Drehrichtung
der Maschine M4

Right-hand thread rotating
machinery M4



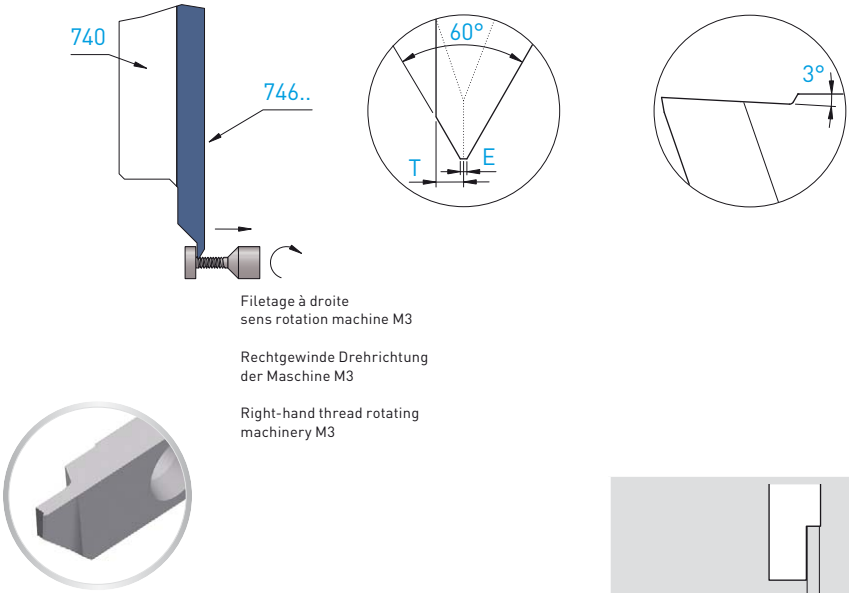
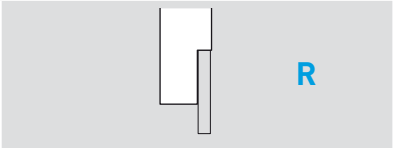
Filetage Gewinde drehen Threading	Pas Steigung Pitch P	T	E 0/-0.01	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>HTAF</div> <div>HN [µk10]</div>
S0.50	0.125	0.07	0.015	736SFX3-A60-S0.50-AR	● ●
S0.60	0.150	0.09	0.020	736SFX3-A60-S0.60-AR	● ●
S0.70	0.175	0.10	0.020	736SFX3-A60-S0.70-AR	● ●
S0.80	0.200	0.12	0.025	736SFX3-A60-S0.80-AR	● ●
S0.90	0.225	0.13	0.030	736SFX3-A60-S0.90-AR	● ●
S1.00	0.250	0.15	0.035	736SFX3-A60-S1.00-AR	● ●



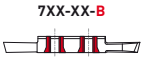
7XX-XX-B
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Filetage à profil partiel – norme NIHS
 Gewinde drehen mit Teilprofil – Norm NIHS
 Threading with partial profile – norm NIHS

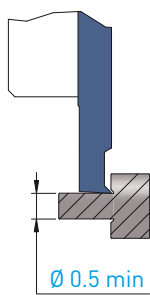
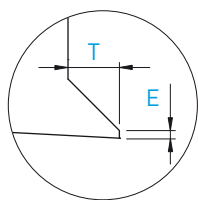
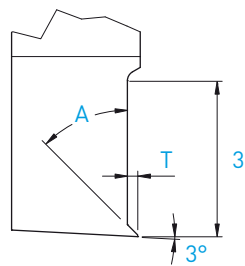
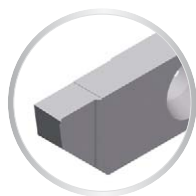
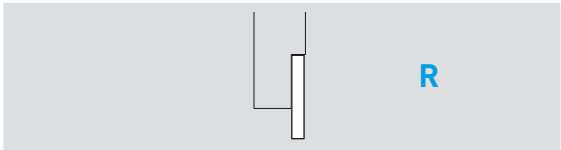
746SF



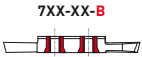
Filetage Gewinde drehen Threading	Pas Steigung Pitch P	T	E 0/-0.01	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div></div> <div></div> <div>N</div> <div>S</div> </div>
					<div> <div>KSTF</div> <div>KN (µk10-20)</div> <div>HTAF</div> <div>HN (µk10)</div> </div>
S0.50	0.125	0.07	0.015	746SFX3-A60-S0.50-AR	● ● ● ●
S0.60	0.150	0.09	0.020	746SFX3-A60-S0.60-AR	● ● ● ●
S0.70	0.175	0.10	0.020	746SFX3-A60-S0.70-AR	● ● ● ●
S0.80	0.200	0.12	0.025	746SFX3-A60-S0.80-AR	● ● ● ●
S0.90	0.225	0.13	0.030	746SFX3-A60-S0.90-AR	● ● ● ●
S1.00	0.250	0.15	0.035	746SFX3-A60-S1.00-AR	● ● ● ●



Sur demande pour serrage type B, voir page 2.05
 Auf Anfrage für B-Spannsystem, siehe Seite 2.05
 On request for B clamping system, see page 2.05



E 0/-0.01	A	T	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div> </div><div> </div><div> </div></div>	<div><div>P</div><div> </div><div> </div><div> </div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div> </div><div> </div><div>N</div><div>S</div></div>			
				KSTF	KSTF-RE	KN [µk(0-20)]	HTC	HTC-RE	HTAF	HTAF-RE	HTiN	HN [µk(10)]			
				0.03	45°	0.2	748SF-E03-A45°-L20	●	●	●	●	●	●	●	●
				0.05	45°	0.3	748SF-E05-A45°-L30	●	●	●	●	●	●	●	●
0.08	45°	0.5	748SF-E08-A45°-L50	●	●	●	●	●	●	●	●				

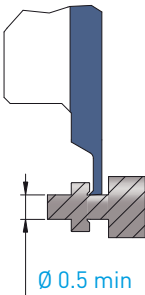
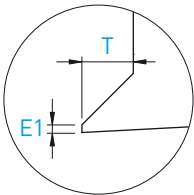
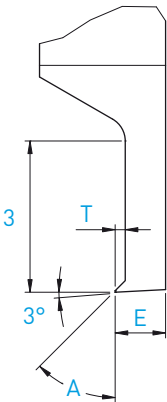
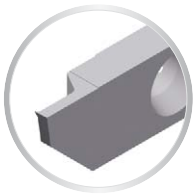
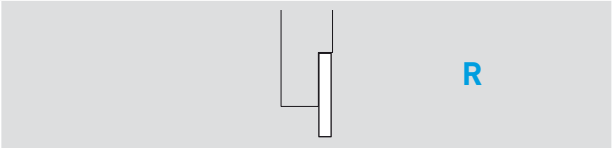


7XX-XX-B

Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

Plaquettes piqure arrière
Rückeinstich WSP
Back grooving inserts

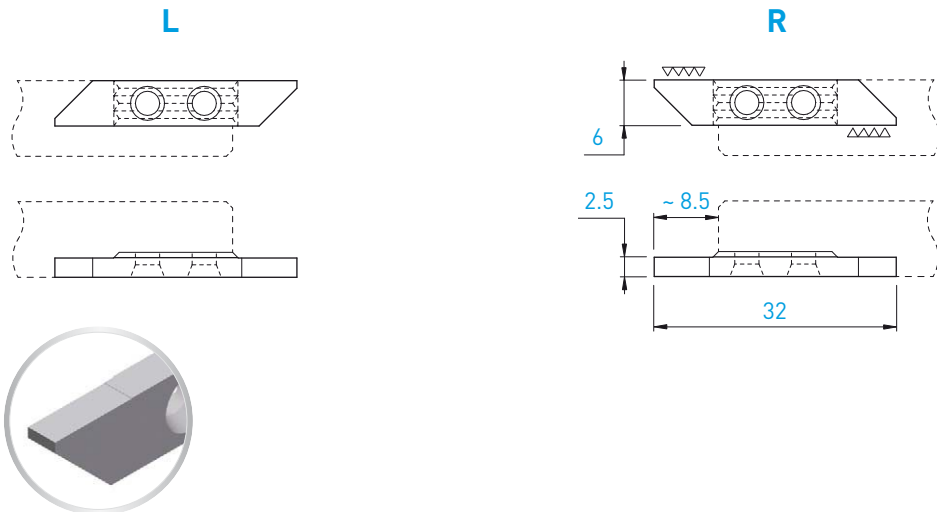
749SF



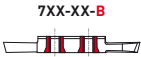
E1 0/-0.01	A	T	E	Art. N°									
													
													
													
KSTF	KSTF-RE	KN (µk10-20)	HTC	HTC-RE	HTAF	HTAF-RE	HTiN	HN (µk10)					
0.03	45°	0.2	1.0	749SF-E03-A45°-L20-B100	●	●	●	●	●	●	●	●	
0.05	45°	0.3	1.0	749SF-E05-A45°-L30-B100	●	●	●	●	●	●	●	●	
0.08	45°	0.5	1.2	749SF-E08-A45°-L50-B120	●	●	●	●	●	●	●	●	

731-ESF / 741-ESF

Plaquettes ébauches
WSP-Rohlinge
Blank inserts



L										R													
Art. N°										Art. N°													
731-ESF	KSTF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	HTC	<div><div>P</div><div></div><div></div><div></div></div>	HTAF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	HTAXF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	HCR-TF	<div><div></div><div></div><div></div><div></div></div>	HTiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	HN (µk10)	<div><div>P</div><div></div><div>N</div><div>S</div></div>	XTC	<div><div>P</div><div></div><div></div><div></div></div>	XTAF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	XN (µk01)	<div><div></div><div></div><div>N</div><div>S</div></div>		
	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
741-ESF	KSTF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	HTC	<div><div>P</div><div></div><div></div><div></div></div>	HTAF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	HTAXF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	HCR-TF	<div><div></div><div></div><div>N</div><div></div></div>	HTiN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	HN (µk10)	<div><div>P</div><div></div><div>N</div><div>S</div></div>	XTC	<div><div>P</div><div></div><div></div><div></div></div>	XTAF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	XN (µk01)	<div><div></div><div></div><div>N</div><div>S</div></div>		
	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•



7XX-XX-B

Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

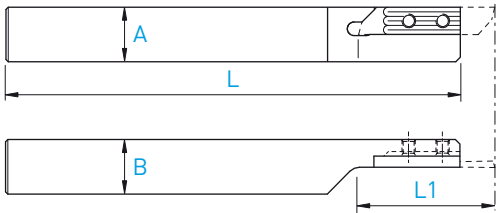
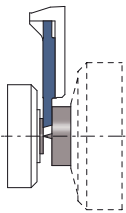
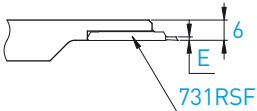
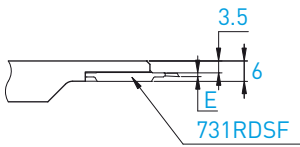
Porte-outils

Halter
Holders

Coupe à droite déportée

Versetztes Rechtsschneiden
Right cut off line

730RC



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line



A x B	L	L1	Art. N°
8 x 8	115	24	730RC-8
10 x 10	115	24	730RC-10
12 x 12	130	30	730RC-12
12.7 x 12.7	130	30	730RC-12.7
16 x 16	130	40	730RC-16

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

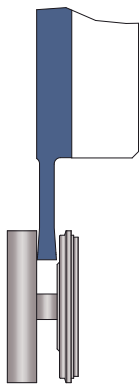
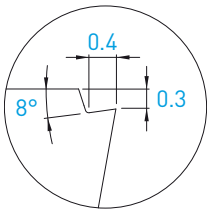
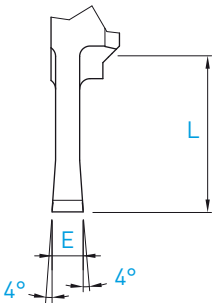
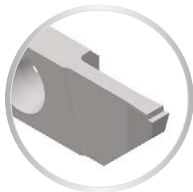
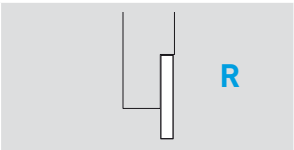
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

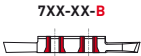
Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
730RC	V-M3X5.5-T8	C-T8

731NSF-X

Tronçonnage
Abstechen
Parting off



E	L	Art. N°	HCR-TF	HN [µk10]
1.5	7.5	731NSF-X840-1.5	●	●



Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

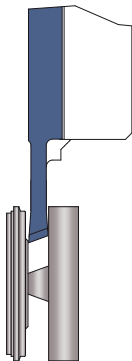
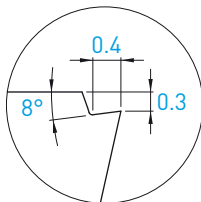
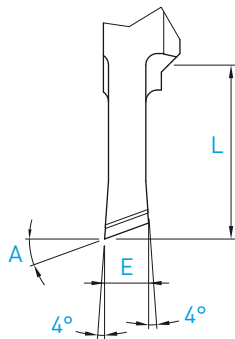
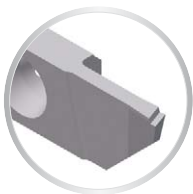
Tronçonnage

Abstechen
Parting off

Coupe à droite déportée

Versetztes Rechtsschneiden
Right cut off line

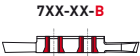
731RSF-X



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	A	Art. N°	HCR-TF	HN (µk10)
1.5	7.5	5°	731RSF-X840-1.5-5	●	●
1.4	7.5	20°	731RSF-X840-1.4-20	●	●
1.9	7.5	20°	731RSF-X840-1.9-20	●	●

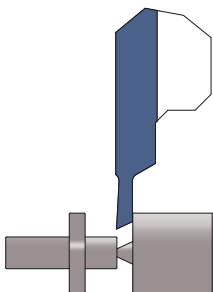
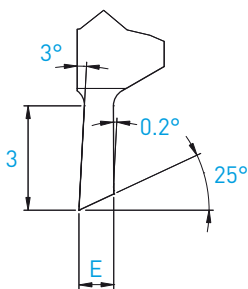
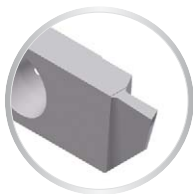


Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

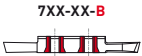
731RSF

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Tronçonnage
Abstechen
Parting off



	L (R)			
Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line				
Art. N°				
				
				
				
	HTAF	HTin		HN (µk10)
731RSF-1.0-25°	●	●	●	



7XX-XX-B
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

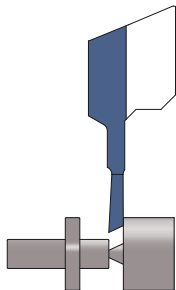
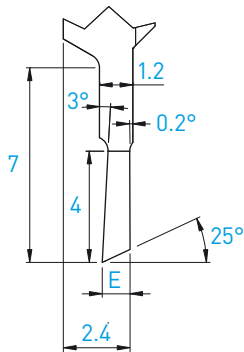
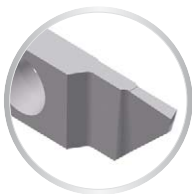
Tronçonnage

Abstechen
Parting off

Coupe à droite déportée

Versetztes Rechtsschneiden
Right cut off line

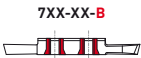
731RDSF



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	Art. N°	<table><tr><td>P</td><td>P</td><td></td></tr><tr><td>M</td><td>M</td><td></td></tr><tr><td>N</td><td>N</td><td>N</td></tr><tr><td>S</td><td>S</td><td>S</td></tr></table>			P	P		M	M		N	N	N	S	S	S
		P	P													
M	M															
N	N	N														
S	S	S														
		HTAF	HTIN	HN [µk10]												
0.8	731RDSF-0.8-25°	●		●												
1.0	731RDSF-1.0-25°	●	●	●												



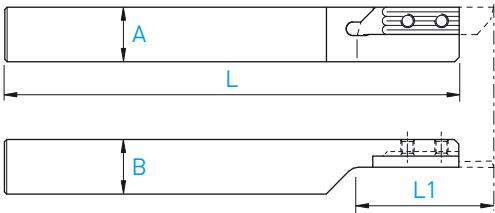
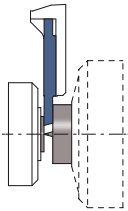
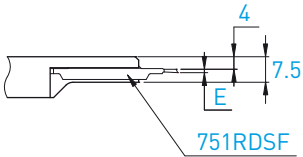
7XX-XX-B

Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

750RC

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Porte-outils
Halter
Holders



<div>L (R)</div> <div>Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line</div>			
A x B	L	L1	Art. N°
12 x 12	130	30	750RC-12
16 x 16	130	40	750RC-16

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
750RC	V-M4X7.3-T15	C-T15

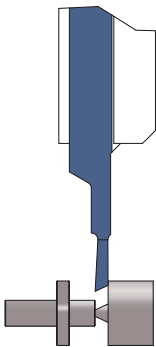
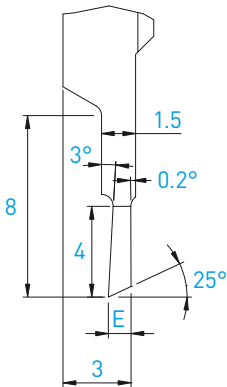
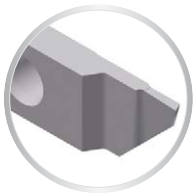
Tronçonnage

Abstechen
Parting off

Coupe à droite déportée

Versetztes Rechtsschneiden
Right cut off line

751RDSF

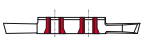


L (R)

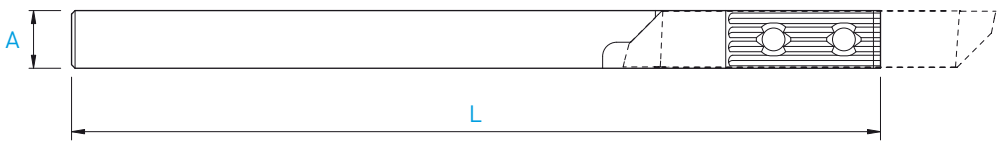
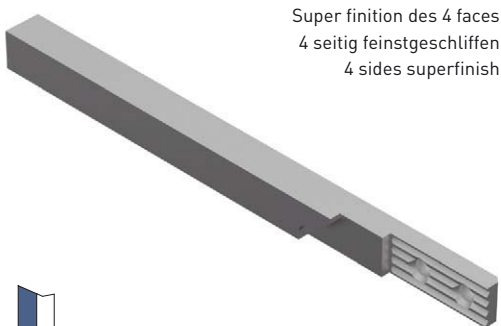
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div></div> <div></div> <div>N</div> <div>S</div> </div>		
		HTAF	HTIN	HN [µk10]
0.8	751RDSF-0.8-25°	●	●	
1.0	751RDSF-1.0-25°	●	●	

7XX-XX-B

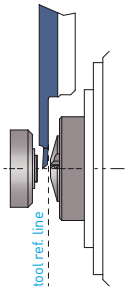
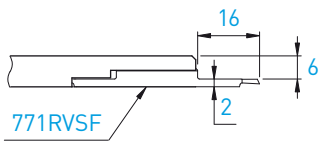
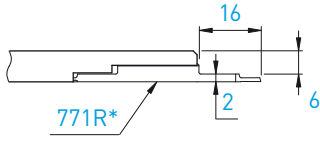


Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05



Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish

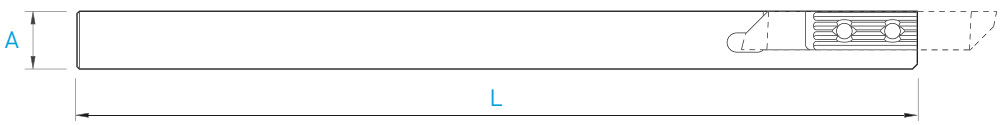
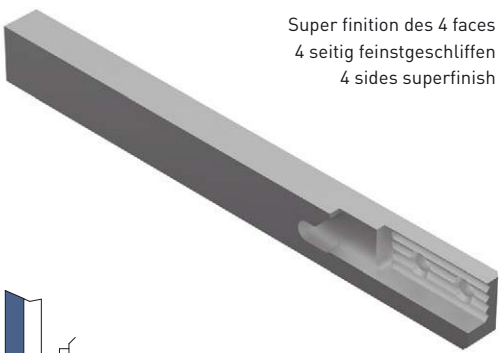
L (R)		
Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line		
A x B	L	Art. N°
8.2 x 8	115	770-8.2X8-SN4-SF



* voir TOP-Line
* siehe TOP-Line
* see TOP-Line

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
770-SN-SF	V-M4X7.3-T15	C-T15



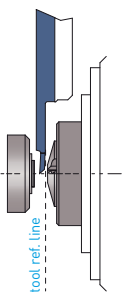
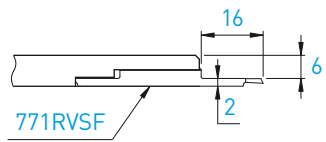
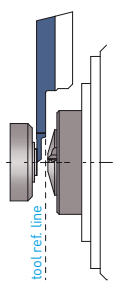
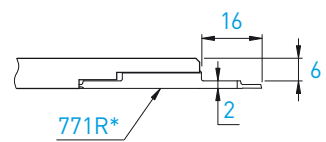
Super finition des 4 faces
4 seitig feinstgeschliffen
4 sides superfinish

L (R)

Coupe à droite déportée
Versetzttes Rechtsschneiden
Right cut off line



A x B	L	Art. N°
12 x 8	115	770-12X8-SN7-SF



* voir TOP-Line
* siehe TOP-Line
* see TOP-Line

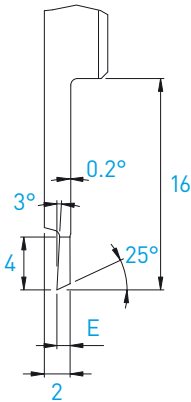
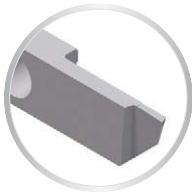
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A)	Options
770-SN-SF	V-M4X7.3-T15	C-T15

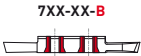
771RVSF

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Tronçonnage
Abstechen
Parting off



L (R)		Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line	
E	Art. N°	TAF	N [μK20]
1.0	771RVSF-1.0-25°	●	●
1.2	771RVSF-1.2-25°	●	●
1.5	771RVSF-1.5-25°	●	●



7XX-XX-B
Sur demande pour serrage type B, voir page 2.05
Auf Anfrage für B-Spannsystem, siehe Seite 2.05
On request for B clamping system, see page 2.05

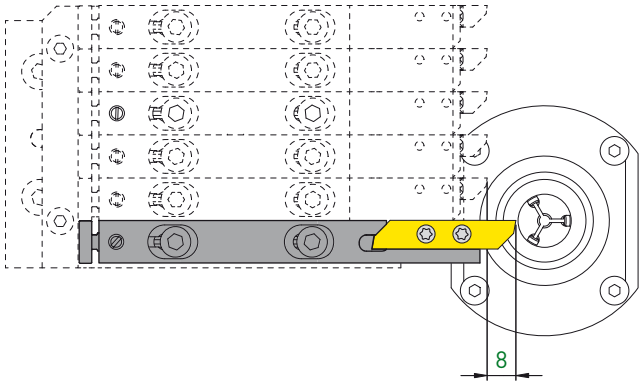
Porte-outils spéciaux de tronçonnage

Sonder Abstechwerkzeughalter

Special parting off tool holders

MODU-Line

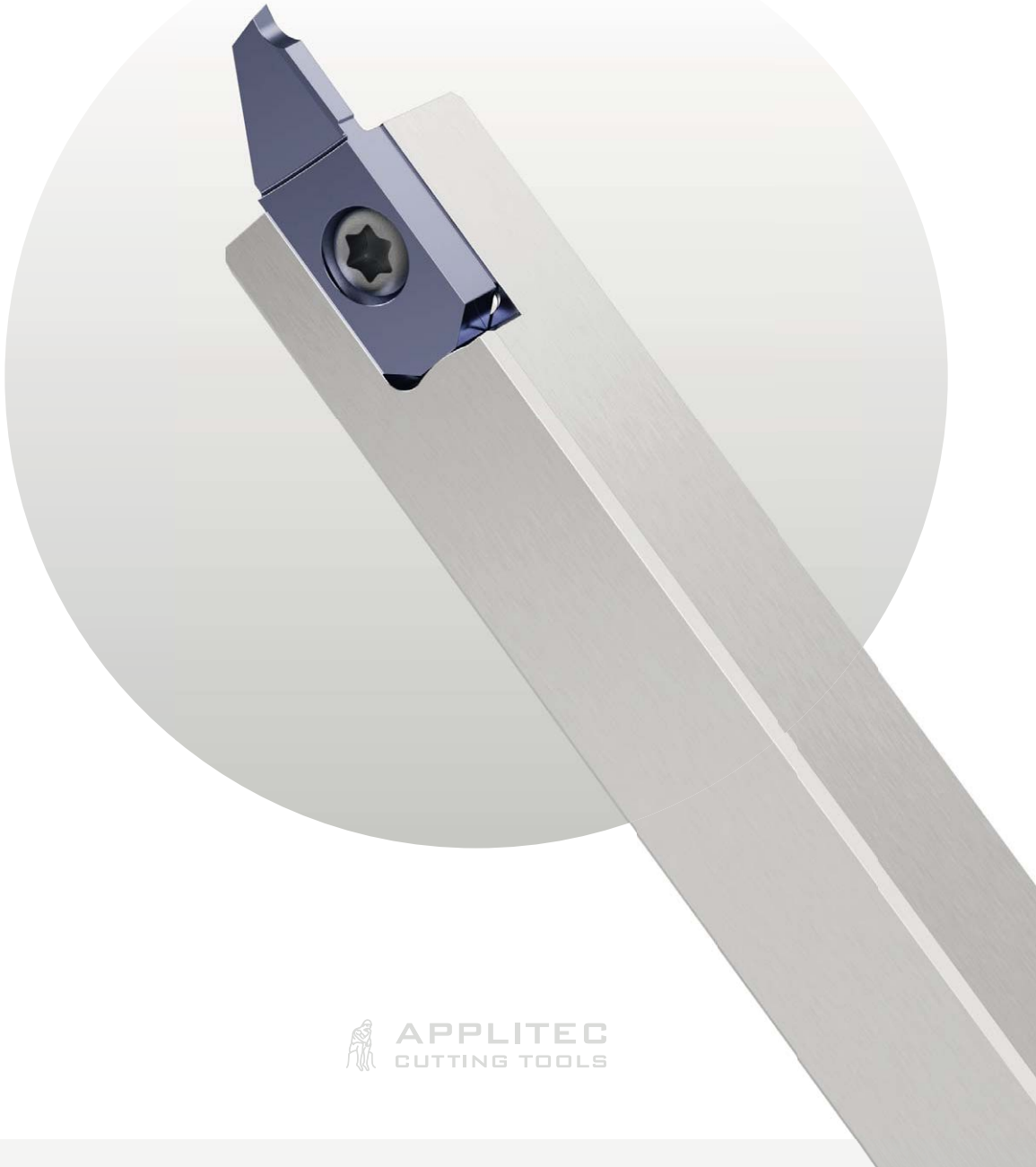
ML12



Voir chapitre MODU-Line
Siehe Kapitel MODU-Line
See chapter MODU-Line

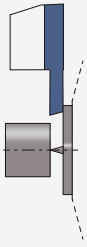
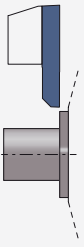
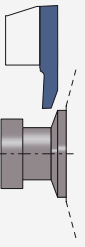
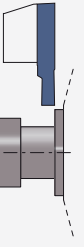
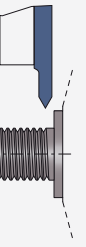
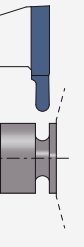
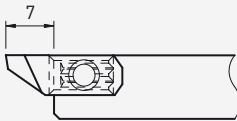
Type de machine Maschinen-Typ Type of machine	Porte-outils Halter Holders	Art. N°	Plaquettes type WSP Typ Inserts type
SwissNano	ML12	ML12A-730RC-SWISS-NANO	731RSF / 731RDSF
		ML12A-750RC-SWISS-NANO	751RDSF

ONE-Line



APPLITEC
CUTTING TOOLS

Codification Kodifizierung Coding guide			> 3.03
Infos et avantages Infos und Vorteile Infos and advantages			> 3.04
Nuances Sorten Grades			> 3.06
Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data			> 3.07
Porte-outils Halter Holder	130 / 140		> 3.08
Tronçonnage Abstechen Parting off	131 / 141		> 3.11
Tournage avant Vorwärts drehen Front turning	142		> 3.19
Tournage arrière Rückwärts drehen Back turning	143		> 3.21
Fonçage-tournage Einstechen und drehen Grooving and turning	144		> 3.23
Filetage Gewinde drehen Threading	146		> 3.25
Plaquettes à rayon Radius Wendeplatten Radius inserts	147		> 3.27
Plaquettes ébauches WSP-Rohlinge Blank inserts	131-EP / 141-EP		> 3.28
Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories			> 3.29

1	3	4	X	-	2.0	-	R20	-	KST	
					Dimension Abmessung Dimension		Rayon Radius Radius		Nuance Sorte Grade	
				Géométrie de coupe Schneidgeometrie Cutting geometry	brise-copeaux Spanbrecher chip breaker	particularités Sondereigenschaften special features				
				Géométrie d'usinage Bearbeitungsgeometrie Machining geometry						
				1	2	3	4	6	7	
										
				Gamme de produit Produktserie Product series						définit la compatibilité des plaquettes avec le porte-outils definiert die Kompatibilität der Wendschneidplatten mit dem Werkzeughalter define the compatibility of the inserts with the toolholder
				L = 3						(chiffre impair / ungerade Zahl / uneven number)
				R = 4						(chiffre pair / gerade Zahl / even number)
				L 130 R 140						
				Applitec série 100 Applitec 100 Serie Applitec 100 series						Système de serrage à denture décalée avec 1 vis de fixation Spannsystem mit 1 Schraube und verschobener Verzahnung Shifted teeth clamping system with 1 screw

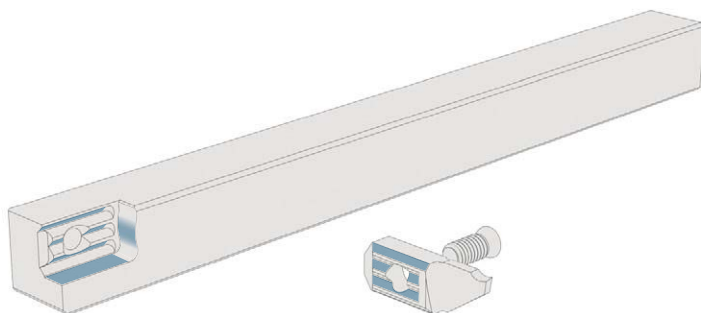
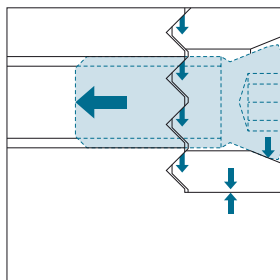
Infos et avantages

Infos und Vorteile

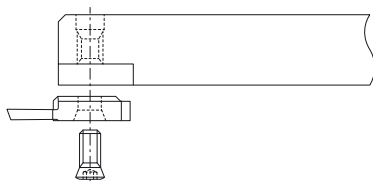
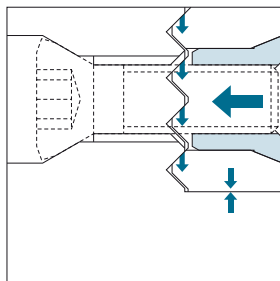
Infos and advantages

Rigid !

Système de serrage Applitec à denture décalée
Applitec-Spannsystem mit verschobener Verzahnung
Applitec clamping system with shifted teeth

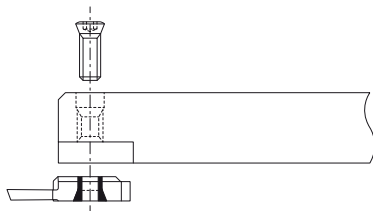


Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)



Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
-B nach der Artikelreferenz hinzufügen
add -B after the article number

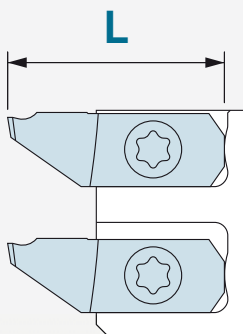


Changement de la plaquette possible dans la machine, sans démontage du porte-outil
WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
The insert can be changed in the machine without removing the tool holder

* = sur demande / auf Anfrage / on request

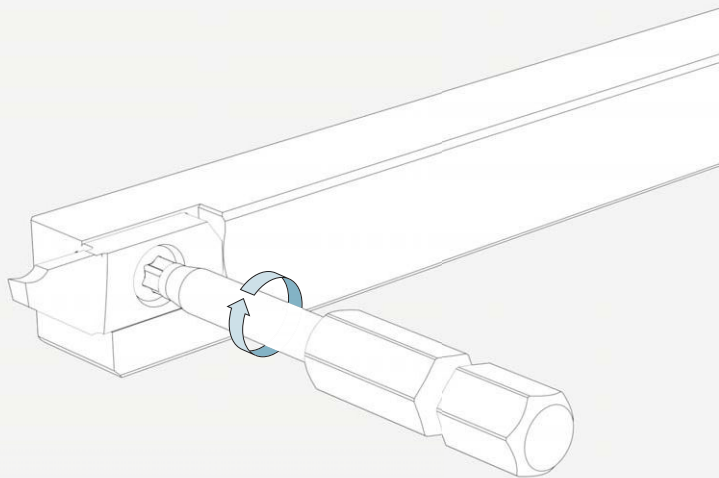
Space requirement

Conçu pour maximiser l'efficacité dans les espaces les plus restreints
Entwickelt, um die Effizienz auf engstem Raum zu maximieren
Designed to maximize efficiency in the tightest spaces



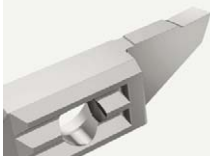
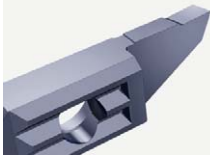
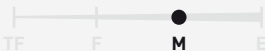
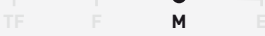
Optimal clamping

Le couple de serrage recommandé est de 2 Nm
Das empfohlene Anzugsdrehmoment beträgt 2 Nm
The recommended tightening torque is 2 Nm



Nuances

Sorten
Grades

μ K10 - μ K20	<div><div>KN</div></div>	<div><div> K10 - K20</div><div>Non revêtu Unbeschichtet Uncoated</div></div> <div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div> <ul style="list-style-type: none">• nuance de base non revêtue micro-grain alliant une très bonne résistance à l'usure et ténacité• recommandé pour l'usinage des matières ne nécessitant aucun revêtement par exemple le titane pur <ul style="list-style-type: none">• unbeschichtete Basis-Nuance mit feiner Körnung, die eine sehr gute Verschleißfestigkeit und Zähigkeit vereint• empfohlen für die Bearbeitung von Materialien, die keine Beschichtung erfordern, wie z. B. reines Titan <ul style="list-style-type: none">• uncoated base grade with fine grain, combining excellent wear resistance and toughness• recommended for machining materials that require no coating, such as pure titanium	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★									
M	★★★★★									
N	★★★★★									
S	★★★★★									
μ K10 - μ K20	<div><div>KTA</div></div>	<div><div> K10 - K20</div><div>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</div><div></div></div> <div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★☆☆</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div> <ul style="list-style-type: none">• nuance universelle• 1^{er} choix pour l'usinage des aciers, aciers inoxydables et alliage de titane <ul style="list-style-type: none">• universelle Sorte• erste Wahl für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen <ul style="list-style-type: none">• universal grade• first choice for machining steel, stainless steel, and titanium alloys	P	★★★★★	M	★★★★★	N	★★★☆☆	S	★★★★★
P	★★★★★									
M	★★★★★									
N	★★★☆☆									
S	★★★★★									
μ K10 - μ K20	<div><div>KST</div></div>	<div><div> K10 - K20</div><div>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</div><div></div></div> <div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★☆☆</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div> <ul style="list-style-type: none">• nuance très résistante à l'usure et à la température• 1^{er} choix pour les aciers > 50 HRC, les alliages à base de nickel, chrome-cobalt, inox et titane allié <ul style="list-style-type: none">• sehr verschleiß- und temperaturbeständige Sorte• erste Wahl für Stähle > 50 HRC, Nickelbasislegierungen, Chrom-Kobalt, Edelstahl und legiertes Titan <ul style="list-style-type: none">• highly wear- and temperature-resistant grade• first choice for steels > 50 HRC, nickel-based alloys, chrome-cobalt, stainless steels, and alloyed titanium	P	★★★★★	M	★★★★★	N	★★★☆☆	S	★★★★★
P	★★★★★									
M	★★★★★									
N	★★★☆☆									
S	★★★★★									

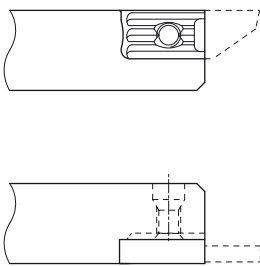
Paramètres de coupe indicatifs

Empfohlene Schnittwerte

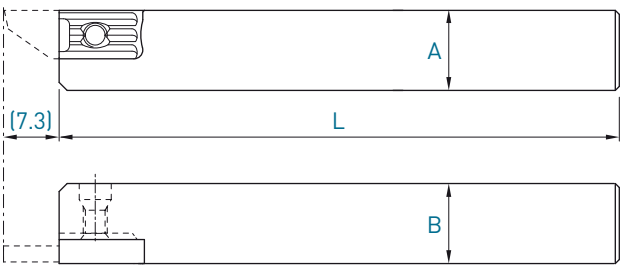
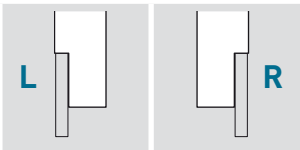
Standard machining data

Matière Werkstoff Material		Tournage Drehen Turning			Tronçonnage Abstechen Parting off		
		VC	Prof. de passe Schnitttiefe Depth of cut	Avance Vorschub Feed	VC	Largeur de coupe Abstechbreite Cutting width	Avance Vorschub Feed
		(m/min)	(mm)	(mm/U)	(m/min)	(mm)	(mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	80 - 150	0.50 - 1.50 1.50 - 2.50	0.01 - 0.08 0.03 - 0.15
Acier Stahl Steel	< 600 N/mm ² P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	70 - 120	0.50 - 1.50 1.50 - 2.50	0.01 - 0.06 0.03 - 0.12
Acier Stahl Steel	< 800 N/mm ² P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.05 0.03 - 0.10
Acier Stahl Steel	> 800 N/mm ² P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	40 - 80	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Aluminium Si <12%	N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	180 - 400	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Aluminium Si >12%	N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	150 - 300	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35	100 - 300	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Titane Titan Titanium	S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15	30 - 50	0.50 - 1.50 1.50 - 2.50	0.01 - 0.03 0.03 - 0.06

L

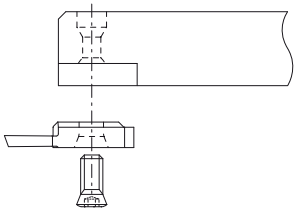


R

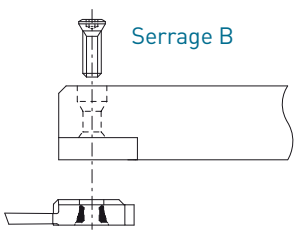


A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
8 x 8	115	A+B	130-8	140-8
10 x 10	115	A+B	130-10	140-10
12 x 12	115	A+B	130-12	140-12

Serrage A



Serrage B



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils

Halter
Holders

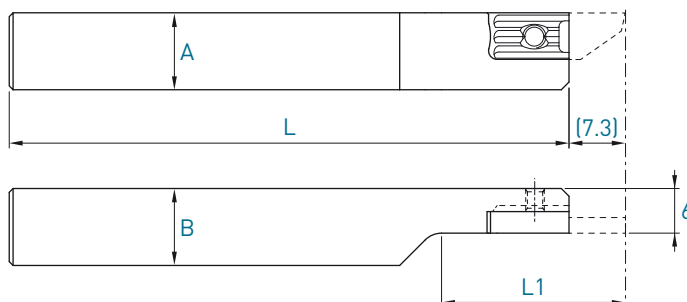
Coupe à droite déportée

Versetztes Rechtsschneiden
Right cut off line

130RC

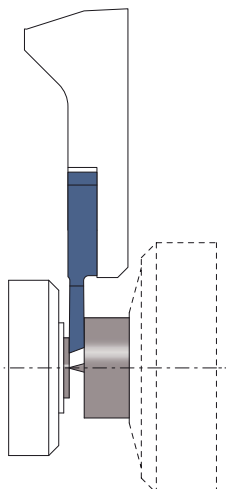
Utiliser des plaquettes type 131R
WSP Typ 131R verwenden
Use inserts type 131R

Voir pages 3.11 - 3.14
Siehe Seiten 3.11 - 3.14
See pages 3.11 - 3.14

**L (R)**

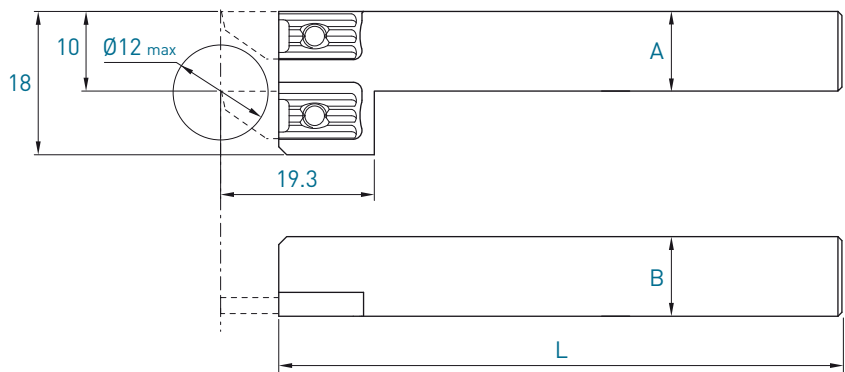
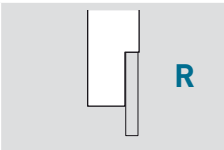
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

AxB	L	L1	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	24	A	130RC-8
10 x 10	115	24	A	130RC-10
12 x 12	115	30	A	130RC-12



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

R



A x B	L	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	A+B	140-8-H10-DUO
10 x 10	115	A+B	140-10-H10-DUO
12 x 12	115	A+B	140-12-H10-DUO

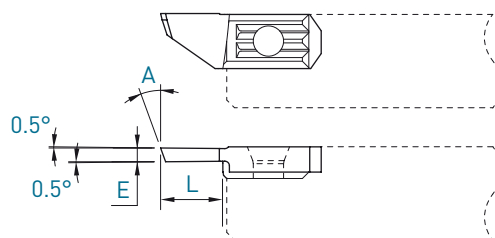
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Tronçonnage

Abstechen
Parting off

Coupe déportée

Versetztes Schneiden
Cut off line

131R**Cut R****L (R)**

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

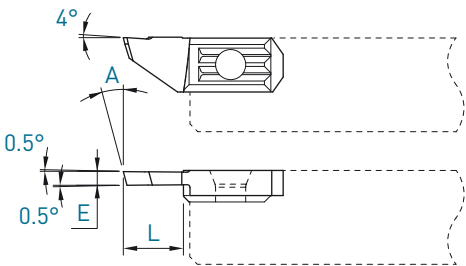
E	A	L	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>		
				KTA	KST	KN [µk10-20]
1.0	20°	5	131R-1.0-20	●	●	●
1.2	20°	5	131R-1.2-20	●	●	●
1.5	20°	7	131R-1.5-20	●	●	●
2.0	20°	7	131R-2.0-20	●	●	●

131RX4

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off

Cut R



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

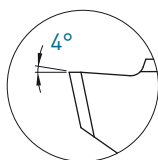
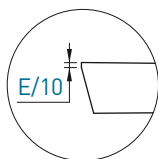
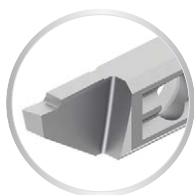
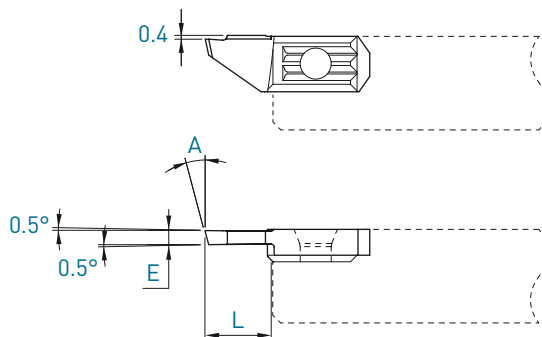
E	A	L	Art. N°	P	P	P
				M	M	M
				N	N	N
				S	S	S
				KTA	KST	KN [uk10-20]
1.0	15°	5	131RX4-1.0	●	●	●
1.5	15°	7	131RX4-1.5	●	●	●

Tronçonnage

Abstechen
Parting off

Coupe déportée

Versetztes Schneiden
Cut off line

131RXF**Cut R****L (R)**

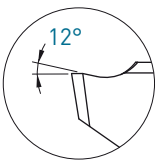
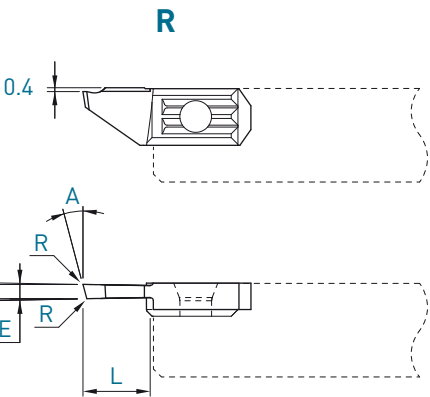
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>		
				KTA	KST	KN [µk'10-20]
1.0	15°	5	131RXF-1.0	•	•	•
1.5	15°	7	131RXF-1.5	•	•	•

131RX12

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off



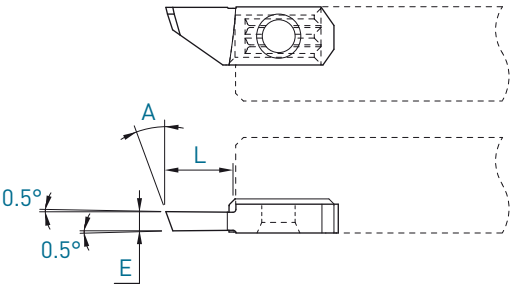
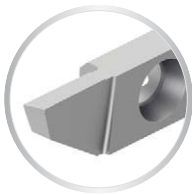
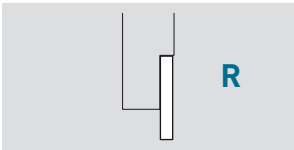
L (R)
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	R	Art. N°			
							
							
							
					KN <small>10-20</small>		
KTA	KST						
1.0	15°	5	0.03	131RX12-1.0	●	●	●
1.5	15°	7	0.03	131RX12-1.5	●	●	●

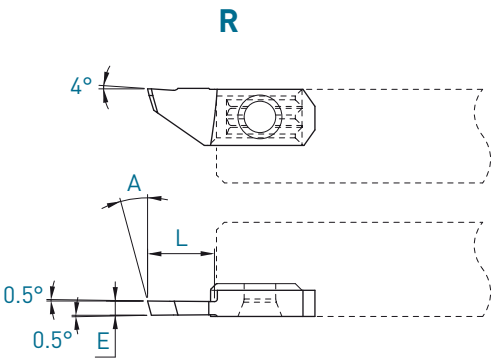
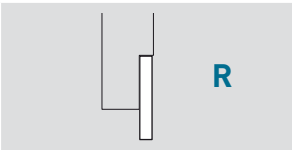
Tronçonnage
Abstechen
Parting off

141

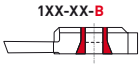
R



E	A	L	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>		
				KTA	KST	KN [µk'10-20]
0.6	20°	3	141-0.6-20	•	•	•
0.8	20°	5	141-0.8-20	•	•	•
1.0	20°	5	141-1.0-20	•	•	•
1.2	20°	5	141-1.2-20	•	•	•
1.5	20°	7	141-1.5-20	•	•	•
2.0	20°	7	141-2.0-20	•	•	•
2.5	20°	7	141-2.5-20	•	•	•



E	A	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div>		
				KTA		
				KST		
				KN (uk10-20)		
0.8	15°	5	141X4-0.8	●	●	●
1.0	15°	5	141X4-1.0	●	●	●
1.5	15°	7	141X4-1.5	●	●	●
2.0	15°	7	141X4-2.0	●	●	●



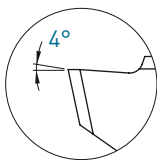
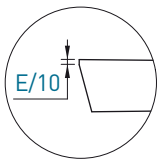
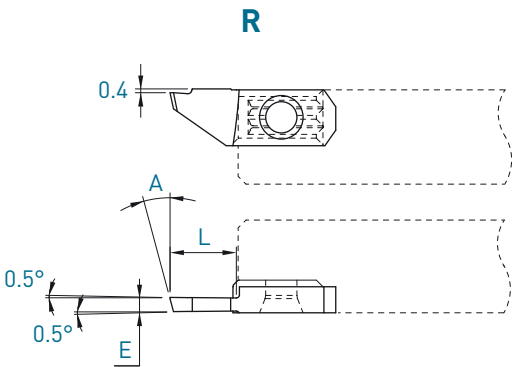
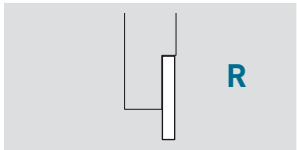
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

Tronçonnage

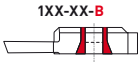
Abstechen

Parting off

141XF

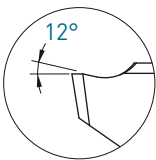
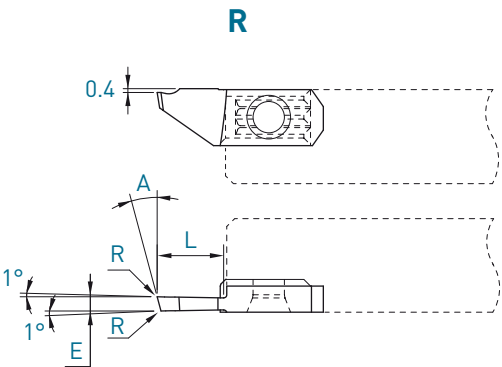
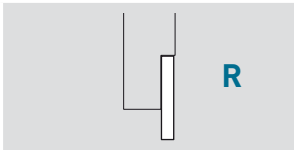


E	A	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>KN (p.10-20)</div>		
				KTA	KST	KN
1.0	15°	5	141XF-1.0	●	●	●
1.2	15°	5	141XF-1.2	●	●	●
1.5	15°	7	141XF-1.5	●	●	●

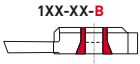


1XX-XX-B

Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04



E	A	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>KN (uk10-20)</div>		
					KTA	KST	KN
0.5	15°	3	0.03	141X12-0.5	●	●	●
1.0	15°	5	0.03	141X12-1.0	●	●	●
1.5	15°	7	0.03	141X12-1.5	●	●	●

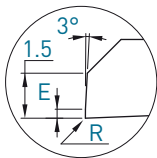


1XX-XX-B

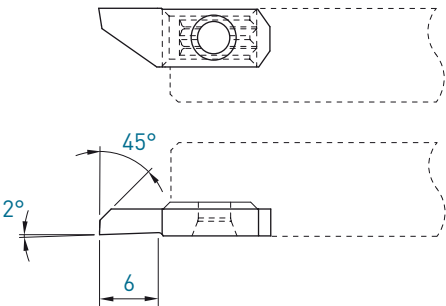
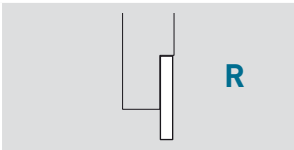
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

Tournage avant
Vorwärts drehen
Front turning

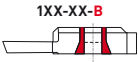
142-2



R

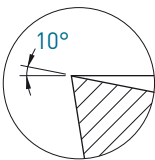
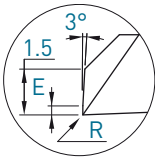


E	R	Art. N°			
					
					
					
			KN [µk'10-20]		
			KTA	KST	KN
0.3	0	142-2	●	●	●
0	0-0.01	142-2-R01	●	●	●
0	0.08	142-2-R08	●	●	●

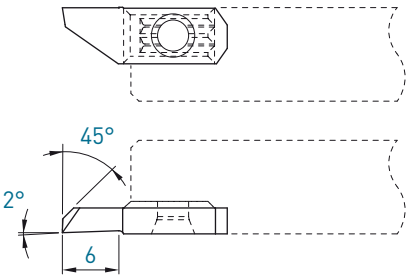
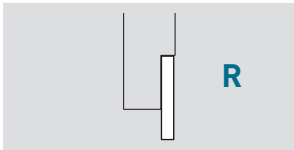


1XX-XX-B

Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04



R



		Art. N°			
					
					
					
			KN [uk10-20]		
E	R	Art. N°	KTA	KST	KN
0.3	0	142X10-2	●	●	●
0	0-0.01	142X10-2-R01	●	●	●
0	0.08	142X10-2-R08	●	●	●

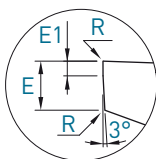
1XX-XX-B



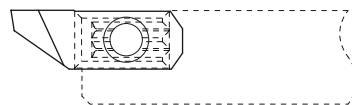
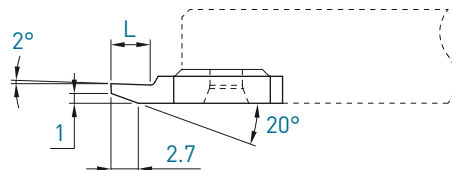
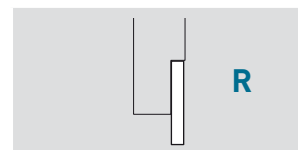
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

Tournage arrière
Rückwärts drehen
Back turning

143



R

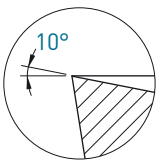
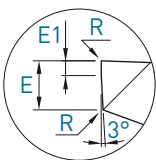
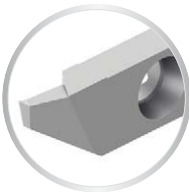


E	E1	L	R	Art. N°	P	P	P
					M	M	M
					N	N	N
					S	S	S
					KN [µk10-20]		
					KTA	KST	KN
0.5	0.15	3	0	143-0.5	•	•	•
0.5	0	3	0-0.01	143-0.5-R01	•	•	•
0.5	0	3	0.08	143-0.5-R08	•	•	•
1.0	0.3	4	0	143-1.0	•	•	•
1.0	0	4	0	143-1.0-R01	•	•	•
1.0	0	4	0.08	143-1.0-R08	•	•	•

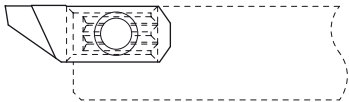
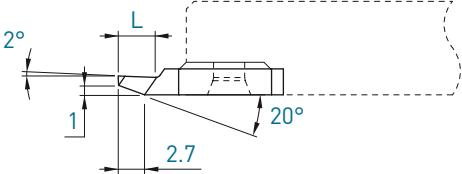
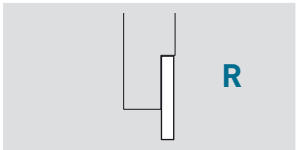
1XX-XX-B



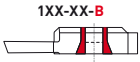
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04



R



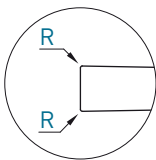
E	E1	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>KN (uk10-20)</div>		
					KTA	KST	KN
0.5	0.15	3	0	143X10-0.5	●	●	●
0.5	0	3	0-0.01	143X10-0.5-R01	●	●	●
0.5	0	3	0.08	143X10-0.5-R08	●	●	●
1.0	0.3	4	0	143X10-1.0	●	●	●
1.0	0	4	0-0.01	143X10-1.0-R01	●	●	●
1.0	0	4	0.08	143X10-1.0-R08	●	●	●



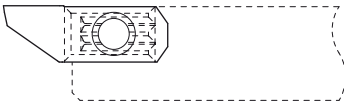
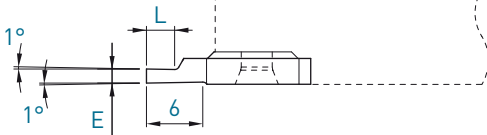
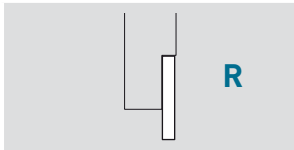
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

Fonçage-tournage
Einstechen und drehen
Grooving and turning

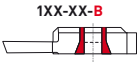
144



R

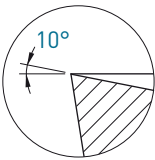
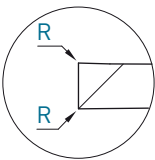


E	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>KN [µk10-20]</div>		
				KTA	KST	KN
0.5	1.5	0	144-0.5	•	•	•
0.6	1.8	0	144-0.6	•	•	•
0.8	2	0	144-0.8	•	•	•
1.0	2.5	0	144-1.0	•	•	•
1.0	3	0.08	144-1.0-R08	•	•	•
1.5	3	0	144-1.5	•	•	•
1.5	3	0.08	144-1.5-R08	•	•	•

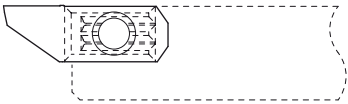
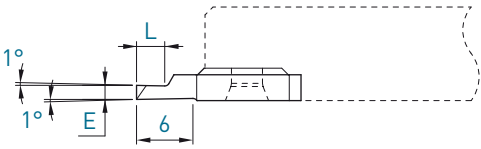
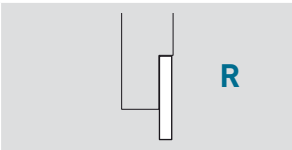


1XX-XX-B

Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04



R

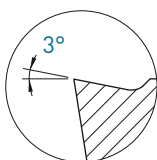
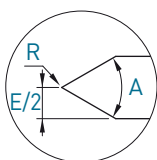
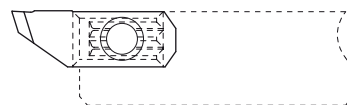
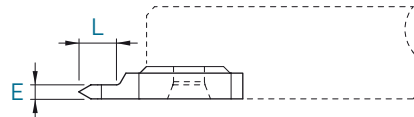
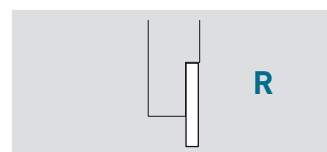


E	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>KN (uk10-20)</div>		
				KTA	KST	KN
0.8	2	0	144X10-0.8	●	●	●
1.0	2.5	0	144X10-1.0	●	●	●
1.0	2.5	0.08	144X10-1.0-R08	●	●	●
1.5	3	0	144X10-1.5	●	●	●
1.5	3	0.08	144X10-1.5-R08	●	●	●

1XX-XX-B



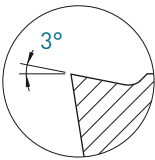
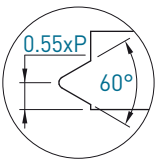
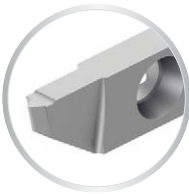
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

FiletageGewinde drehen
Threading**146X3****R**Profil partiel
Teilprofil
Partial profile

A	E	L	R	Pas mm Steigung mm Pitch mm P	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>		
						KTA	KST	KN [µk10-20]
60°	1.5	4	0	-	146X3-60-1.5	•	•	•
60°	1.5	4	0.03	0.25-0.35	146X3-60-1.5-R03	•	•	•
60°	2.0	6	0.06	0.40-0.70	146X3-60-2.0-R06	•	•	•
60°	2.0	6	0.12	0.8-1.25	146X3-60-2.0-R12	•	•	•

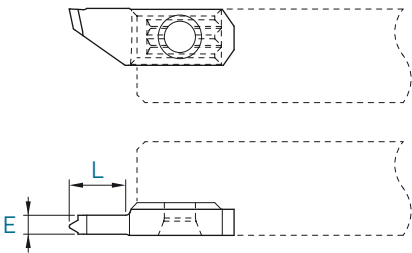
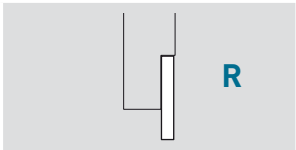
A	E	L	R	Pas TPI Steigung TPI Pitch TPI P	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>		
						KTA	KST	KN [µk10-20]
55°	1.5	4	0	-	146X3-55-1.5	•	•	•
55°	1.5	4	0.06	32-48	146X3-55-1.5-R06	•	•	•
55°	2.0	6	0.12	18-26	146X3-55-2.0-R12	•	•	•

1XX-XX-BSur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

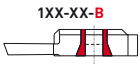


Profil complet métrique
Metrisches Vollprofil
Metric full profile

R



Pas Steigung Pitch P	E	L	Art. N°	P	P	P
				M	M	M
				N	N	N
				S	S	S
				KTA	KST	KN (uk10-20)
0.25	1.0	3	146X3-M-0.25	•	•	•
0.30	1.0	3	146X3-M-0.30	•	•	•
0.35	1.0	3	146X3-M-0.35	•	•	•
0.40	1.0	3	146X3-M-0.40	•	•	•
0.45	1.0	3	146X3-M-0.45	•	•	•
0.50	1.0	3	146X3-M-0.50	•	•	•
0.60	1.0	3	146X3-M-0.60	•	•	•
0.70	1.0	3	146X3-M-0.70	•	•	•
0.75	1.0	3	146X3-M-0.75	•	•	•
0.80	1.5	4.5	146X3-M-0.80	•	•	•
1.00	1.5	4.5	146X3-M-1.00	•	•	•
1.25	1.5	4.5	146X3-M-1.25	•	•	•
1.50	2.0	6	146X3-M-1.50	•	•	•
1.75	2.0	6	146X3-M-1.75	•	•	•

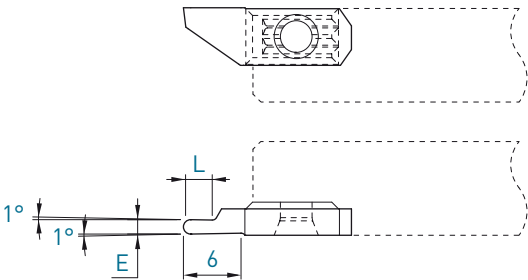
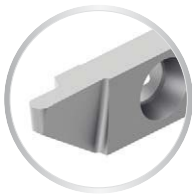


1XX-XX-B
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

Plaquettes à rayon
Radius Wendeplatten
Radius inserts

147

R



R

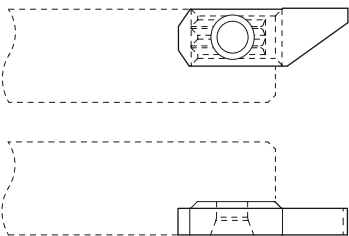
R	L	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>		
			KTA	KST	KN [µk10-20]
0.25	1.5	147-R0.25	•	•	•
0.40	2	147-R0.4	•	•	•
0.50	2.5	147-R0.5	•	•	•
0.60	2.5	147-R0.6	•	•	•
0.75	3	147-R0.75	•	•	•
0.80	3	147-R0.8	•	•	•
1.0	4	147-R1.0	•	•	•

1XX-XX-B

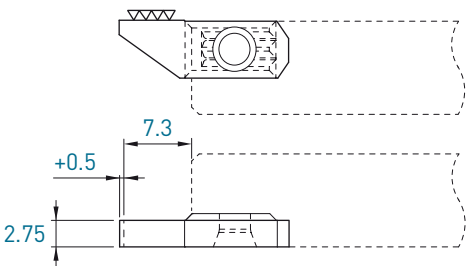
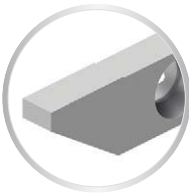


Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

L

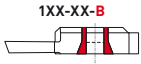


R



Face de coupe polie
Polierte Schnittfläche
Polished cutting face

									
Art. N°		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	Art. N°		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>
		KN [µk10-20]					KN [µk10-20]		
131-EP		●	●	●	141-EP		●	●	●

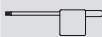
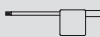


1XX-XX-B
Sur demande pour serrage type B, voir page 3.04
Auf Anfrage für B-Spannsystem, siehe Seite 3.04
On request for B clamping system, see page 3.04

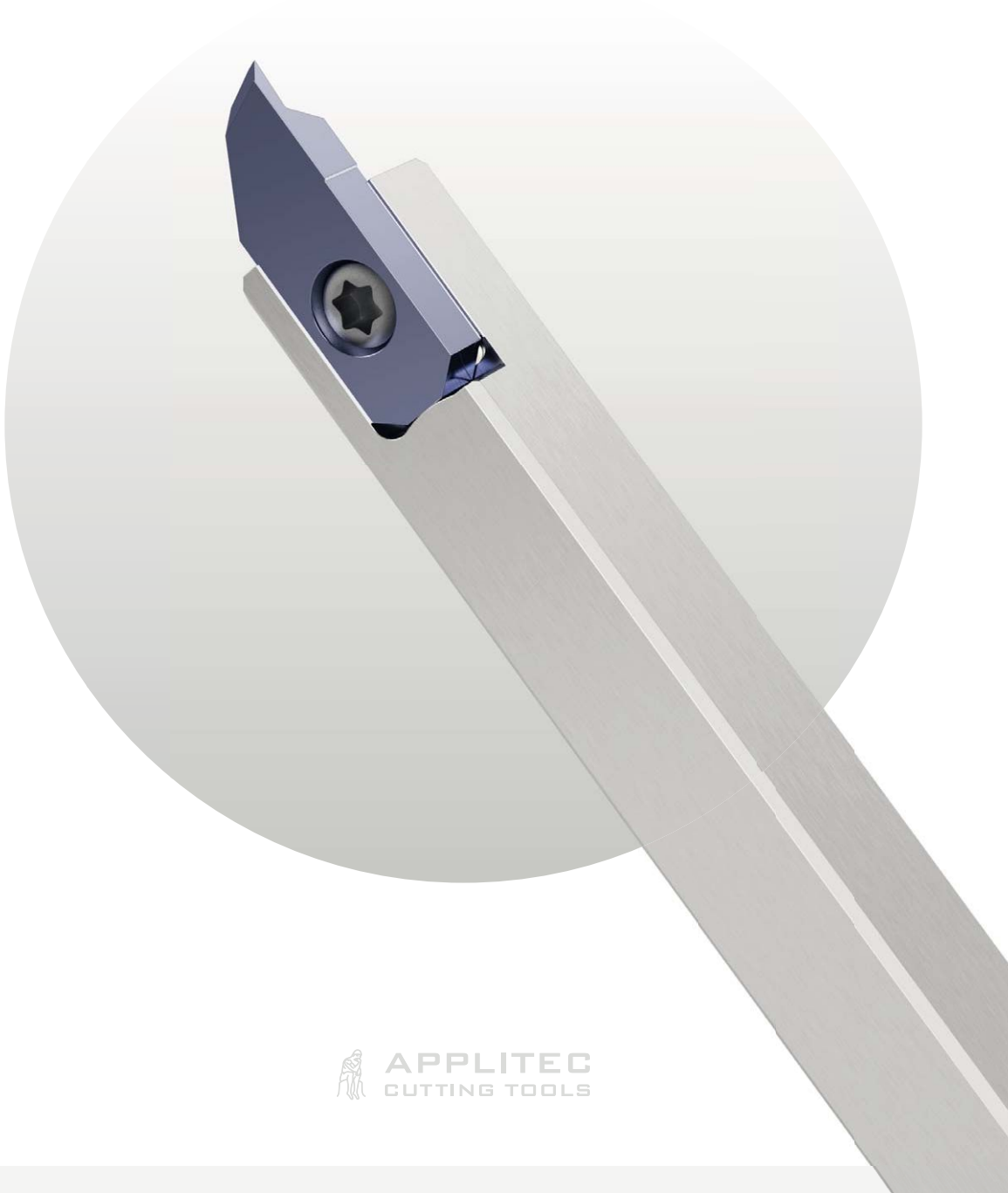
Pièces de rechange et accessoires

Ersatzteile und Zubehör

Spare parts and accessories

		Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage type B Spannsystem Typ B Clamping system type B 	Options 	
130	130-8	V-M3x7-T8	C-T8	V-M2.5X7.8-T8	C-T8		
	130-10						
	130-12						
	130RC-8	V-M3x5.5-T8		-			
	130RC-10						
	130RC-12						
140	140-8	V-M3x7-T8	C-T8	V-M2.5X7.8-T8	C-T8		
	140-10						
	140-12						
	140-8-H10-DUO						
	140-10-H10-DUO						
	140-12-H10-DUO						

ONE-Watch



APPLITEC
CUTTING TOOLS

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Infos et avantages Infos und Vorteile Infos and advantages			> 4.04
Nuances Sorten Grades			> 4.05
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Plaquettes piqure avant Fronteinstich WSP Front grooving inserts	148SF		> 4.20
Plaquettes piqure arrière Rüceinstich WSP Back grooving inserts	149SF		> 4.21
Plaquettes ébauches WSP-Rohlinge Blank inserts	131-ESF / 141-ESF		> 4.22
Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories			> 4.23

1	4	3	SF	-	3/3	-	45	-	KSTF
----------	----------	----------	-----------	----------	------------	----------	-----------	----------	-------------

Super finish

**Dimension
Abmessung
Dimension**

**Nuance
Sorte
Grade**

**Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry**

1	2	3	6	8	9

**Gamme de produit
Produktserie
Product series**

définit la compatibilité des plaquettes avec le porte-outils
 bestimmt die WSP und Halter Kompatibilität
 define the compatibility of the inserts with the toolholder

L = 3 (chiffre impair / ungerade Zahl / uneven number)

R = 4 (chiffre pair / gerade Zahl / even number)

L

130

R

140

**Applitec série 100
Applitec 100 Serie
Applitec 100 series**

Système de serrage à denture décalée avec 1 vis de fixation
 Spannsystem mit 1 Schraube und verschobener Verzahnung
 Shifted teeth clamping system with 1 screw

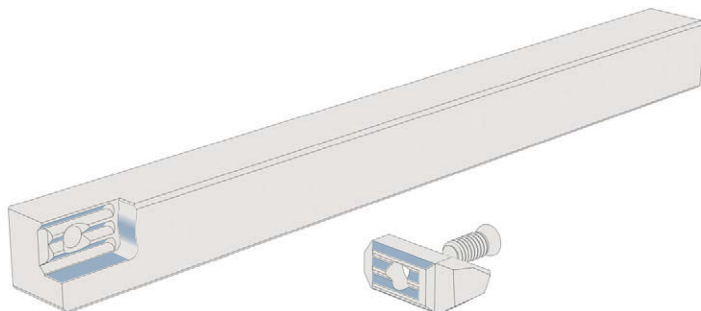
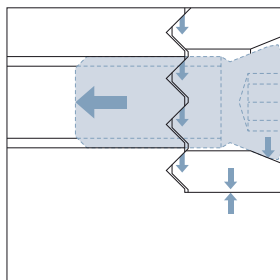
Infos et avantages

Infos und Vorteile

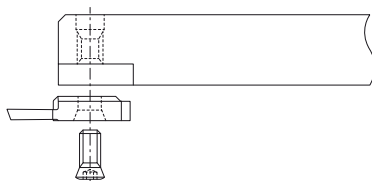
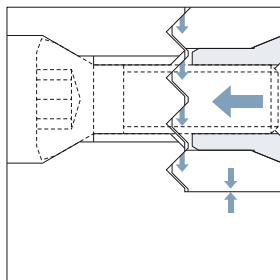
Infos and advantages

Rigid !

Système de serrage Applitec à denture décalée
Applitec-Spannsystem mit verschobener Verzahnung
Applitec clamping system with shifted teeth

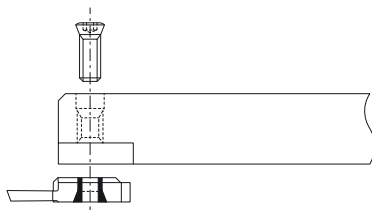


Serrage standard (A)
Standard Spannsystem (A)
Standard clamping system (A)



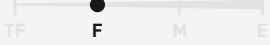
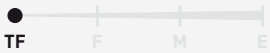
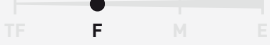
Serrage type B*
Spannsystem Typ B*
Clamping system type B*

ajouter -B après le numéro d'article
-B nach der Artikelreferenz hinzufügen
add -B after the article number



Changement de la plaquette possible dans la machine, sans démontage du porte-outil
WSP-Austauschmöglichkeit in der Maschine ohne Halterausbau
The insert can be changed in the machine without removing the tool holder

* = sur demande / auf Anfrage / on request

μK10 - μK20	<div> <p>KTC</p>  </div> <div> <p>● K10 - K20</p> <p>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</p>  </div> <div> <table border="1"> <tr><td>P</td><td>★★★★★</td></tr> <tr><td>M</td><td>★★★★★</td></tr> <tr><td>N</td><td>★★★★★</td></tr> <tr><td>S</td><td>★★★★★</td></tr> </table> </div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★								
M	★★★★★								
N	★★★★★								
S	★★★★★								
	<div> <ul style="list-style-type: none"> • nuance résistante à l'usure, faible coefficient de frottement, recommandée pour des opérations d'ébauche et de finition • conseillé pour l'usinage de la matière 20AP + aciers de décolletage </div> <div> <ul style="list-style-type: none"> • verschleissfeste Sorte, geringer Reibwert, für Schruppen und Schlichtbearbeitung empfohlen • empfohlen für die Bearbeitung von Material 20AP + Automa-tenstahl </div> <div> <ul style="list-style-type: none"> • wear resistant grade, low friction ratio, recommended for roughing and finishing • recommended for suitable for machining of 20AP material + Free-cutting steel </div>								
μK10 - μK20	<div> <p>KTC-RE</p>  </div> <div> <p>● K10 - K20</p> <p>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</p>  </div> <div> <table border="1"> <tr><td>P</td><td>★★★★★</td></tr> <tr><td>M</td><td>★★★★★</td></tr> <tr><td>N</td><td>★★★★★</td></tr> <tr><td>S</td><td>★★★★★</td></tr> </table> </div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★								
M	★★★★★								
N	★★★★★								
S	★★★★★								
	<div> <ul style="list-style-type: none"> • nuance identique à KTC avec dépouilles rectifiées après revêtement pour des opérations de finition • conseillé pour l'usinage de la matière 20AP + aciers de décolletage </div> <div> <ul style="list-style-type: none"> • gleiche Sorte wie KTC nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen • empfohlen für die Bearbeitung von Material 20AP + Automa-tenstahl </div> <div> <ul style="list-style-type: none"> • same grade as KTC, after coating grounded clearance, recommended for finishing • recommended for suitable for machining of 20AP material + Free-cutting steel </div>								
μK10 - μK20	<div> <p>KTAF</p>  </div> <div> <p>● K10 - K20</p> <p>μK10 - μK20 + revêtement PVD μK10 - μK20 + PVD Beschichtung μK10 - μK20 + PVD coating</p>  </div> <div> <table border="1"> <tr><td>P</td><td>★★★★★</td></tr> <tr><td>M</td><td>★★★★★</td></tr> <tr><td>N</td><td>★★★★★</td></tr> <tr><td>S</td><td>★★★★★</td></tr> </table> </div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★								
M	★★★★★								
N	★★★★★								
S	★★★★★								
	<div> <ul style="list-style-type: none"> • nuance résistante à l'usure, recommandée pour des opérations d'ébauche et de finition • conseillé pour l'usinage des matières Finemac et inox 4c27a </div> <div> <ul style="list-style-type: none"> • verschleissfeste Sorte, für Schruppen und Schlichtbearbeitung empfohlen • empfohlen für die Bearbeitung von Finemac und Inox 4c27a rostfreiem Stahl </div> <div> <ul style="list-style-type: none"> • wear resistant grade, recommended for roughing and finishing • recommended for suitable for machining of Finemac and 4c27a stainless steel </div>								

Nuances

Sorten

Grades

KTAF-RE

● K10 - K20

μK10 - μK20 + revêtement PVD
μK10 - μK20 + PVD Beschichtung
μK10 - μK20 + PVD coating

TF F M E

P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- nuance identique à KTAF avec dépouilles rectifiées après revêtement pour des opérations de finition
- **recommandé pour les matières Finemac et inox 4c27a**

- gleiche Sorte wie KTAF nach der Beschichtung geschliffener Freiwinkel, für Schlichtbearbeitung empfohlen
- **empfohlen für die Bearbeitung von Finemac und Inox 4c27a rostfreiem Stahl**

- same grade as KTAF, with clearance angles rectify after coating, recommended for finishing
- **recommended for suitable for machining of Finemac and 4c27a stainless steel**

KSTF

● K10 - K20

μK10 - μK20 + revêtement PVD
μK10 - μK20 + PVD Beschichtung
μK10 - μK20 + PVD coating

TF F M E

P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- nuance très résistante à l'usure et à la température
- 1^{er} choix pour les aciers > 50 HRC, les aciers à base de nickel, chrome-cobalt, inox et titane allié

- verschleißfeste Sorte, beständig gegen hohe Temperaturen
- erste Wahl für Stähle > 50 HRC, Nickelbasislegierungen, Chrom-Kobalt, rostfreien Stahl und legiertes Titan

- wear-resistant grade, highly resistant to temperature
- first choice for steels > 50 HRC, nickel-based alloys, chrome-cobalt, stainless steel, and alloyed titanium

KN

● K10 - K20

Non revêtu
Unbeschichtet
Uncoated

P	★☆☆☆☆
M	★☆☆☆☆
N	★★★★★
S	★★★★★

- nuance de base non revêtue micro-grain, alliant une très bonne résistance à l'usure et une bonne ténacité
- **recommandé pour l'usinage des matières ne nécessitant aucun revêtement, par exemple le titane pur**

- verschleißfeste Feinkornsorte, unbeschichtet, mit hoher Zähigkeit und guter Widerstandsfähigkeit
- **empfohlen für die Bearbeitung von Werkstoffen, die keine Beschichtung erfordern, zum Beispiel reines Titan**

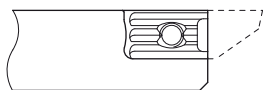
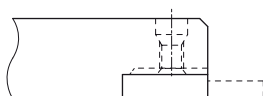
- wear-resistant micro-grain grade, uncoated, with high toughness and good resistance
- **recommended for machining materials that do not require coating, such as pure titanium**

Porte-outils

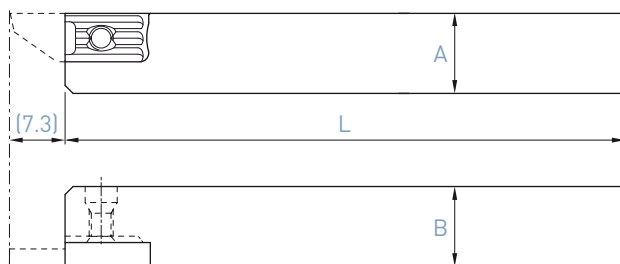
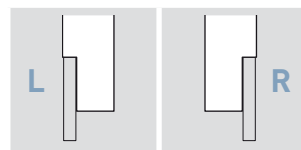
Halter
Holders

130 / 140

L

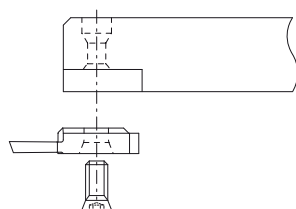


R

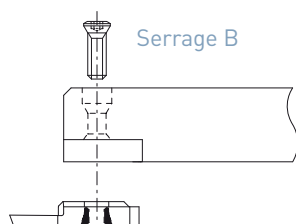


A x B	L	Serrage Spannsystem Clamping	Art. N°	Art. N°
8 x 8	115	A+B	130-8	140-8
10 x 10	115	A+B	130-10	140-10
12 x 12	115	A+B	130-12	140-12

Serrage A



Serrage B



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

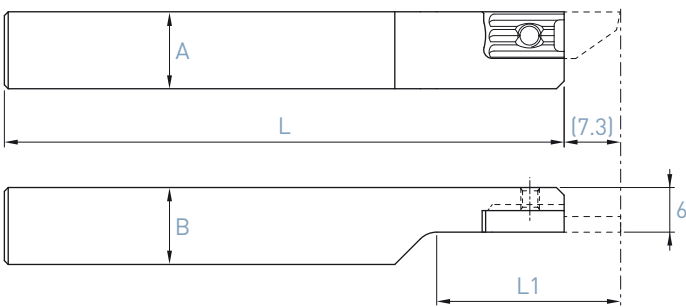
130RC

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Porte-outils
Halter
Holders

Utiliser des plaquettes type 131R
WSP Typ 131R verwenden
Use inserts type 131R

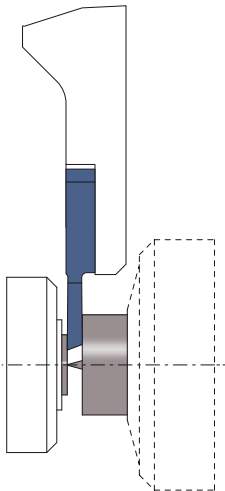
Voir pages 4.10 - 4.11
Siehe Seiten 4.10 - 4.11
See pages 4.10 - 4.11



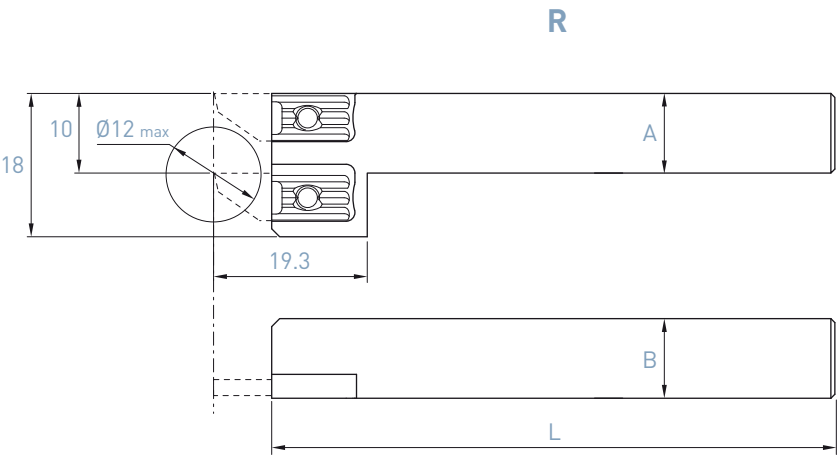
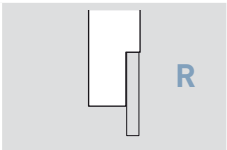
L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

AxB	L	L1	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	24	A	130RC-8
10 x 10	115	24	A	130RC-10
12 x 12	115	30	A	130RC-12



Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.



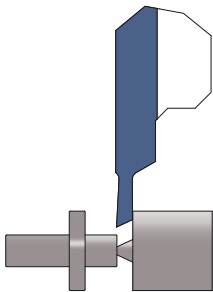
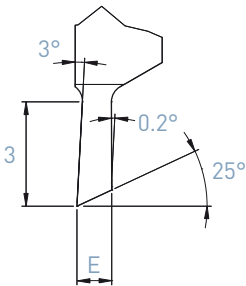
A x B	L	Serrage Spannsystem Clamping	Art. N°
8 x 8	115	A+B	140-8-H10-DUO
10 x 10	115	A+B	140-10-H10-DUO
12 x 12	115	A+B	140-12-H10-DUO

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

131RSF

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Tronçonnage
Abstechen
Parting off



		<div> L (R)</div> <div>Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line</div>		
		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>KN (uk10-20)</div>
E	Art. N°	KTAF	KSTF	KN
1.0	131RSF-1.0-25	●	●	●

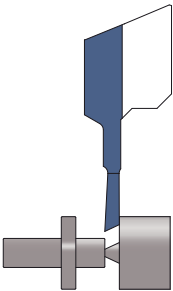
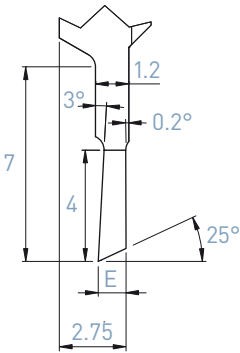
Tronçonnage

Abstechen
Parting off

Coupe à droite déportée

Versetztes Rechtsschneiden
Right cut off line

131RDSF



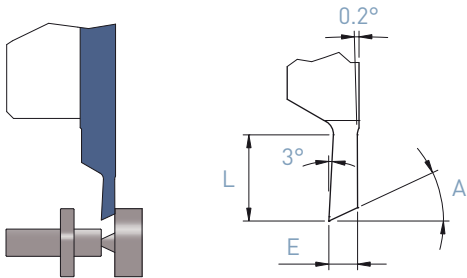
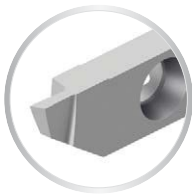
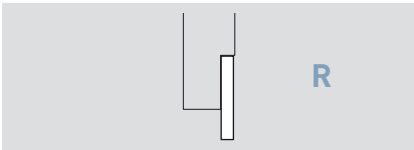
L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

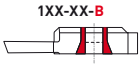
E	Art. N°	P	P
		M	M
		N	N
		S	S
		KTAF	KN [µk10-20]
1.0	131RDSF-1.0-25	●	●

141SF

Tronçonnage
Abstechen
Parting off



A	E	L	Art. N°	P	P	P	P	P	P
				<div></div>	<div></div>	<div>M</div>	<div>M</div>	<div>M</div>	<div>M</div>
				<div></div>	<div></div>	<div>N</div>	<div>N</div>	<div>N</div>	<div>N</div>
				<div></div>	<div></div>	<div>S</div>	<div>S</div>	<div>S</div>	<div>S</div>
				KTC	KTC-RE	KTAF	KTAF-RE	KSTF	KN <small>(uk10-20)</small>
25°	0.5	2	141SF-0.5-25	●	●	●	●	●	●
	0.8	3	141SF-0.8-25	●	●	●	●	●	●
	1.0	3	141SF-1.0-25	●	●	●	●	●	●
22°	1.2	5	141SF-1.2-22	●	●	●	●	●	●

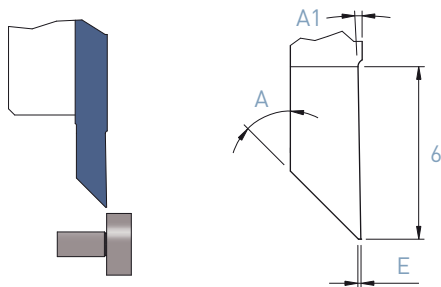
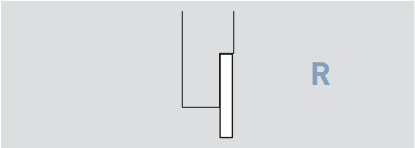


1XX-XX-B

Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

Tournage avant
Vorwärts drehen
Front turning

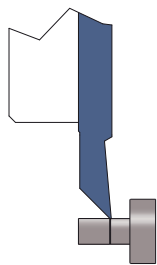
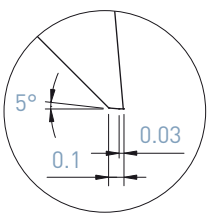
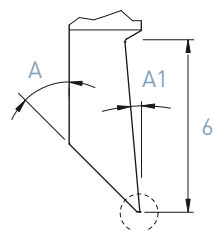
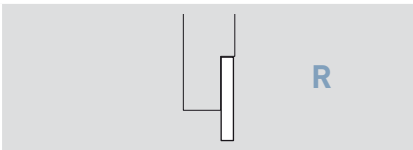
142SF



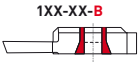
E	A	A1	Art. N°	<div> <div>P</div><div>P</div><div>P</div><div>P</div><div>P</div><div>P</div> <div>☐</div><div>☐</div><div>☐</div><div>☐</div><div>☐</div><div>☐</div> <div>☐</div><div>☐</div><div>☐</div><div>☐</div><div>☐</div><div>☐</div> </div>					
				KTC	KTC-RE	KTAF	KTAF-RE	KSTF	KN [µk10-20]
0.03	45°	3°	142SF-3/3-45	•	•	•	•	•	•
0.05	45°	3°	142SF-5/5-45	•	•	•	•	•	•
0.08	45°	1°	142SF-8/8-45	•	•	•	•	•	•



Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04



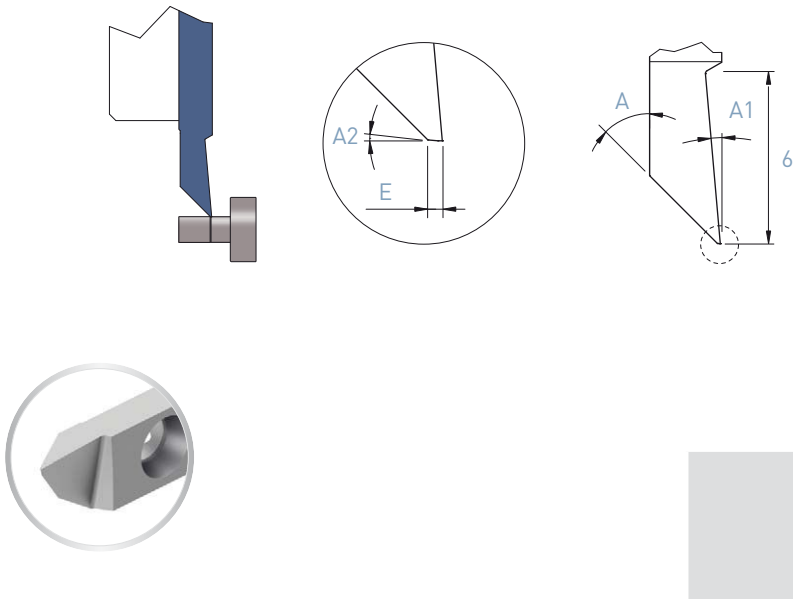
A	A1	Art. N°	P	P	P	P	P	P
			☐	☐	☒	☒	☒	☒
45°	5°	142SF-10/3	KTC	KTC-RE	KTAF	KTAF-RE	KSTF	KN (uk10-20)
			•	•	•	•	•	•

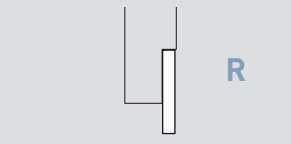


1XX-XX-B
Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

Tournage avant
Vorwärts drehen
Front turning

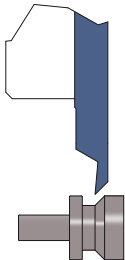
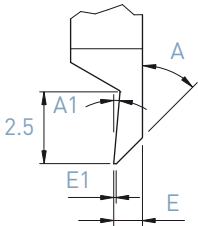
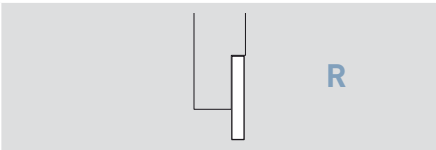
142SF-_0



																	
					<table><tr><td>P</td><td>P</td><td>P</td></tr><tr><td>M</td><td>M</td><td>M</td></tr><tr><td>N</td><td>N</td><td>N</td></tr><tr><td>S</td><td>S</td><td>S</td></tr></table>	P	P	P	M	M	M	N	N	N	S	S	S
P	P	P															
M	M	M															
N	N	N															
S	S	S															
					KTAF-RE KSTF KN [µk10-20]												
E	A	A1	A2	Art. N°													
0.1	45°	5°	5°	142SF-10/0-5-45	● ● ●												
0.15	30°	3°	2°	142SF-15/0-2-30	● ● ●												



Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04



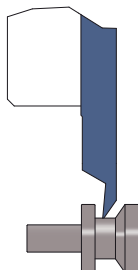
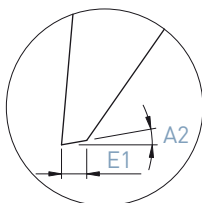
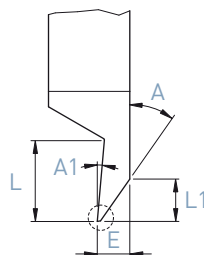
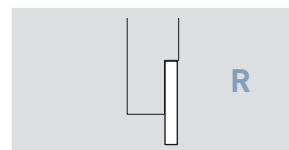
E1	E	A	A1	Art. N°	P	P	P	P	P	P
					☐	☐	☒	☒	☒	☒
					KTC	KTC-RE	KTAF	KTAF-RE	KSTF	KN (uk10-20)
0.03	1.0	45°	5°	143SF-3/3-45-1.0	●	●	●	●	●	●
0.03	1.2	45°	5°	143SF-3/3-45-1.2	●	●	●	●	●	●
0.10	1.0	45°	5°	143SF-10/10-45-1.0	●	●	●	●	●	●
0.05	0.8	30°	3°	143SF-5/5-30-0.8				●		

1XX-XX-B



Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

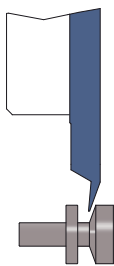
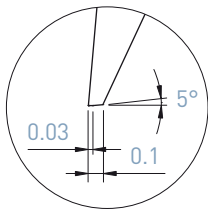
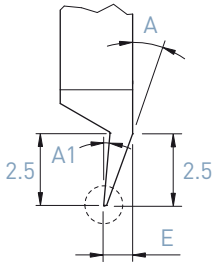
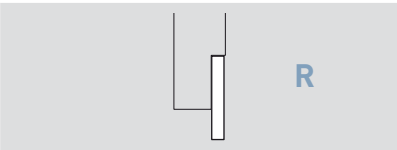
Tournage arrière
Rückwärts drehen
Back turning

143SF-_0

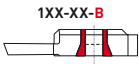
E1	E	L1	L	A	A1	A2	Art. N°	KTAF-RE	KN [µk10-20]
0.08	1.0	1.6	2.5	30°	5°	2°	143SF-8/0-2-30-1.0	● ●	● ●
0.15	1.2	1.8	4.0	30°	3°	2°	143SF-15/0-2-30-1.2	● ●	● ●
0.10	1.0	1.3	2.5	35°	5°	10°	143SF-10/0-10-35-1.0	● ●	● ●

**1XX-XX-B**

Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04



E	A	A1	Art. N°	<div><div>P</div><div></div><div></div><div></div></div> KTC	<div><div>P</div><div></div><div></div><div></div></div> KTC-RE	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> KTAF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> KTAF-RE	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> KN (uk10-20)
1.0	20°	5°	143SF-10/3					

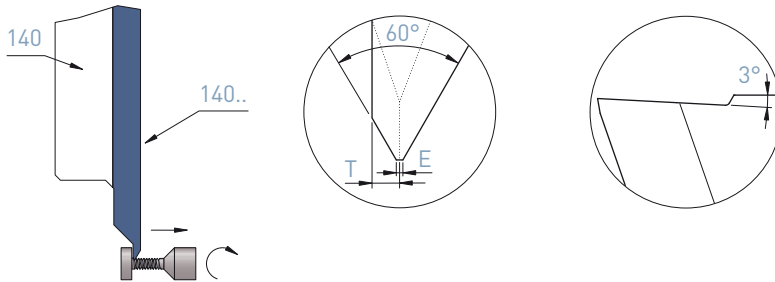


Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

Filetage

Gewinde drehen

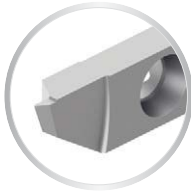
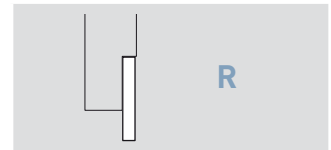
Threading

146SFX3

Filetage à droite
sens rotation machine M3

Rechtgewinde Drehrichtung
der Maschine M3

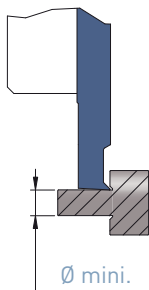
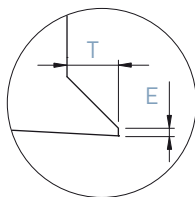
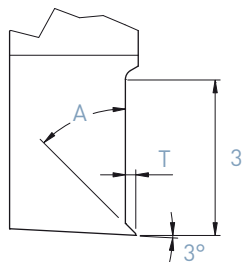
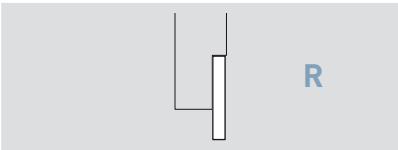
Right-hand thread rotating
machinery M3



Filetage Gewinde drehen Threading	Pas Steigung Pitch P	T	E 0/-0.01	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>KTAF</div> <div>KN [µk'10-20]</div> </div>
S0.50	0.125	0.07	0.025	146SFX3-A60-S0.50-AR	● ●
S0.60	0.150	0.09	0.030	146SFX3-A60-S0.60-AR	● ●
S0.70	0.175	0.10	0.035	146SFX3-A60-S0.70-AR	● ●
S0.80	0.200	0.12	0.040	146SFX3-A60-S0.80-AR	● ●
S0.90	0.225	0.13	0.045	146SFX3-A60-S0.90-AR	● ●
S1.00	0.250	0.15	0.050	146SFX3-A60-S1.00-AR	● ●

1XX-XX-B

Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04



E	A	T	Ø mini.	Art. N°	<div><div><div>P</div><div></div><div></div><div></div><div></div></div><div><div>P</div><div></div><div></div><div></div><div></div></div><div><div>P</div><div>M</div><div>N</div><div>S</div><div></div></div><div><div>P</div><div>M</div><div>N</div><div>S</div><div></div></div><div><div>P</div><div>M</div><div>N</div><div>S</div><div></div></div></div>				
					KTC	KTC-RE	KTAF	KTAF-RE	KN (uk10-20)
0.03	46°	0.2	0.3	148SF-E03-A46-L20	●	●	●	●	●
0.05	46°	0.3	0.4	148SF-E05-A46-L30	●	●	●	●	●
0.08	46°	0.5	0.5	148SF-E08-A46-L50	●	●	●	●	●

1XX-XX-B



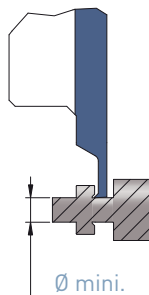
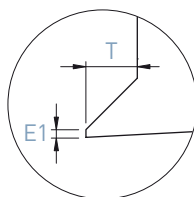
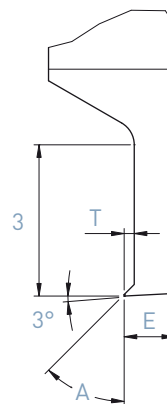
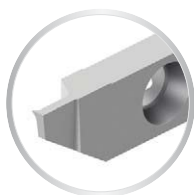
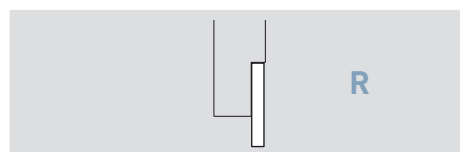
Sur demande pour serrage type B, voir page 4.04
Auf Anfrage für B-Spannsystem, siehe Seite 4.04
On request for B clamping system, see page 4.04

Plaquettes piqûre arrière

Rückeinstich WSP

Back grooving inserts

149SF



E1	A	T	E	Ø mini.	Art. N°	P	P	P	P	P
						☐	☐	☐	☐	☐
						KTC	KTC-RE	KTAF	KTAF-RE	KN (µk10-20)
0.03	46°	0.2	1.0	0.3	149SF-E03-A46-L20-B100	●	●	●	●	●
0.05	46°	0.3	1.0	0.4	149SF-E05-A46-L30-B100	●	●	●	●	●
0.08	46°	0.5	1.2	0.5	149SF-E08-A46-L50-B120	●	●	●	●	●

1XX-XX-B

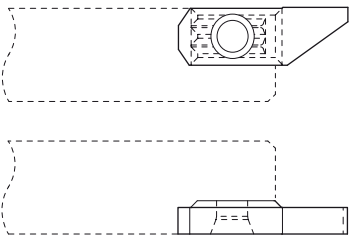


Sur demande pour serrage type B, voir page 4.04
 Auf Anfrage für B-Spannsystem, siehe Seite 4.04
 On request for B clamping system, see page 4.04

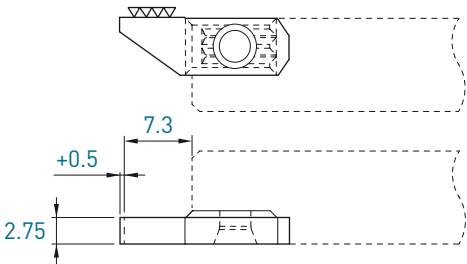
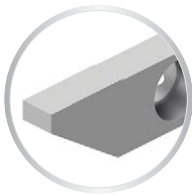
131-ESF / 141-ESF

Plaquettes ébauchées
WSP-Rohlinge
Blank inserts

L



R



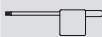
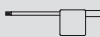
Face de coupe polie
Polierte Schnittfläche
Polished cutting face

L						R					
Art. N°	KTC	KTAF	KSTF	KCR-TF	KN [µk10-20]	Art. N°	KTC	KTAF	KSTF	KCR-TF	KN [µk10-20]
131-ESF	●	●	●	●	●	141-ESF	●	●	●	●	●

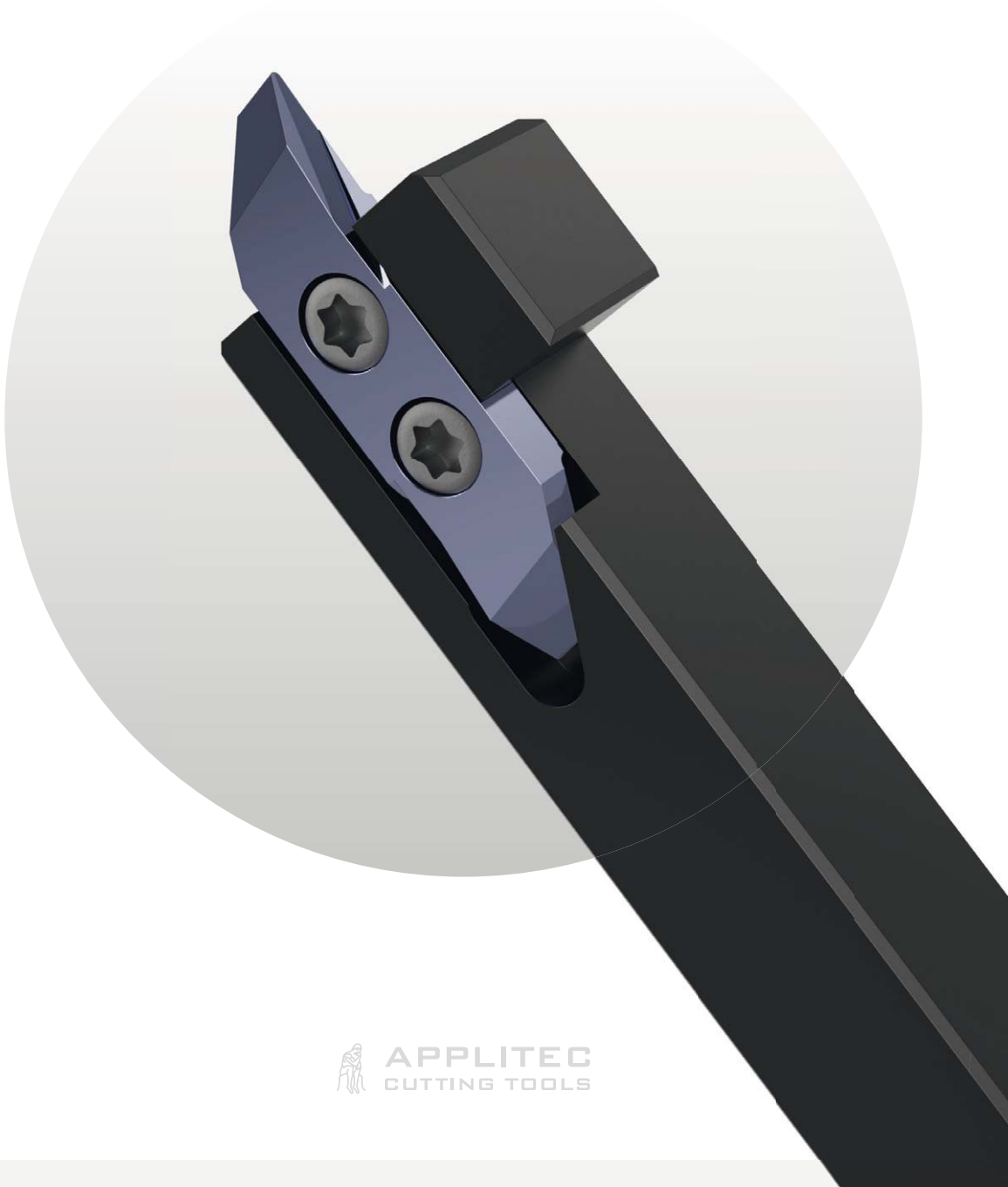
Pièces de rechange et accessoires

Ersatzteile und Zubehör

Spare parts and accessories

Porte-outils Halter Holders		Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Options 	Serrage type B Spannsystem Typ B Clamping system type B 	Options 		
130	130-8	V-M3x7-T8	C-T8	V-M2.5X7.8-T8	C-T8		
	130-10						
	130-12						
	130RC-8	V-M3x5.5-T8		-			
	130RC-10						
	130RC-12						
140	140-8	V-M3x7-T8	C-T8	V-M2.5X7.8-T8	C-T8		
	140-10						
	140-12						
	140-8-H10-DUO						
	140-10-H10-DUO						
	140-12-H10-DUO						

PRO-Line

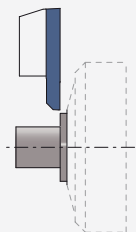


APPLITEC
CUTTING TOOLS

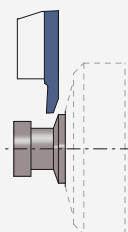
Codification Kodifizierung Coding guide			> 5.06
Infos et avantages Infos und Vorteile Infos and advantages			> 5.08
Nuances Sorten Grades			> 5.09
Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data			> 5.11
SERIES 630 / 640 Tournage et gorge Drehen und Einstecken Turning and grooving	Porte-outils Halter Holders		630 / 640 > 5.12
	Tournage avant Vorwärts drehen Front turning		632 / 642  > 5.14
	Tournage arrière Rückwärts drehen Back turning		633 / 643  > 5.17
	Fonçage-tournage Einstecken und drehen Grooving and turning		634 / 644  > 5.25
	Chanfreinage Anfasen Chamfering		635 / 645  > 5.30
	Filetage Gewinde drehen Threading		636 / 646  > 5.32
	Plaquettes à rayon Radius Wendeplatten Radius inserts		637 / 647  > 5.34
	Plaquettes ébauches WSP-Rohlinge Blank inserts		631-EP / 641-EP  > 5.36

SERIES 650 / 660 Tronçonnage Abstechen Parting off	Porte-outils Halter Holders		650 / 660	> 5.37
	Tronçonnage Abstechen Parting off		651 / 661	 > 5.40
	Tronçonnage - coupe déportée Abstechen - versetztes Schneiden Parting off - cut off line		651R	 > 5.45
	Plaquettes ébauches WSP-Rohlinge Blank inserts		651-EP / 661-EP	 > 5.50
	Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories			> 5.51

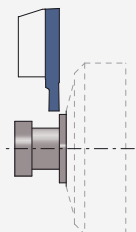
642



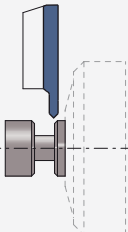
643



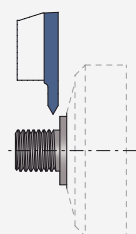
644



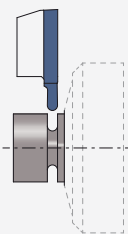
645



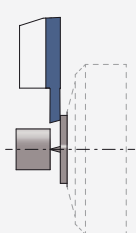
646



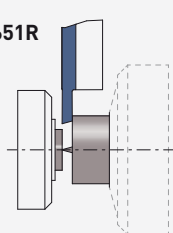
647



661



651R



6	4	4	X	-	2.0	-	R15	-	TiAlN
---	---	---	---	---	-----	---	-----	---	-------

Dimension
Abmessung
Dimension

Rayon
Radius
Radius

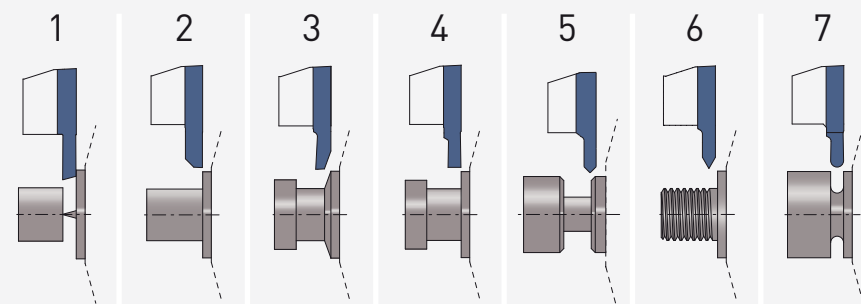
Nuance
Sorte
Grade

Géométrie de coupe
Schneidgeometrie
Cutting geometry

brise-copeaux
Spanbrecher
chip breaker

particularités
Sondereigenschaften
special features

Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry



Gamme de produit
Produktsérie
Product series

définit la compatibilité des plaquettes avec le porte-outil
bestimmt die WSP und Halter Kompatibilität
shows the inserts and holder compatibility

L = 3, 5

(chiffre impair / ungerade Zahl / uneven number)

R = 4, 6

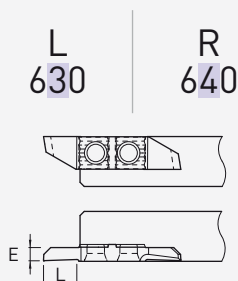
(chiffre pair / gerade Zahl / even number)

SERIES

Tournage
et gorge

Drehen
und
Einstechen
Turning
and
grooving

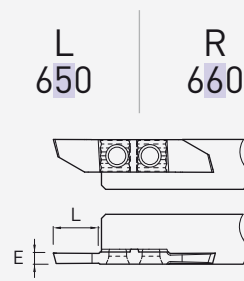
E max = 3 mm
L max = 8 mm



SERIES

Tronçonnage
Abstechen
Parting off

E max = 2.5 mm
L max = 11 mm



Applitec série 600
Applitec 600 Serie
Applitec 600 series

Système de serrage à denture avec 2 vis de fixation
Spannsystem mit Verzahnung und 2 Schrauben
Teeth clamping system with 2 screws

PRO-Line

Infos et avantages

Infos und Vorteile

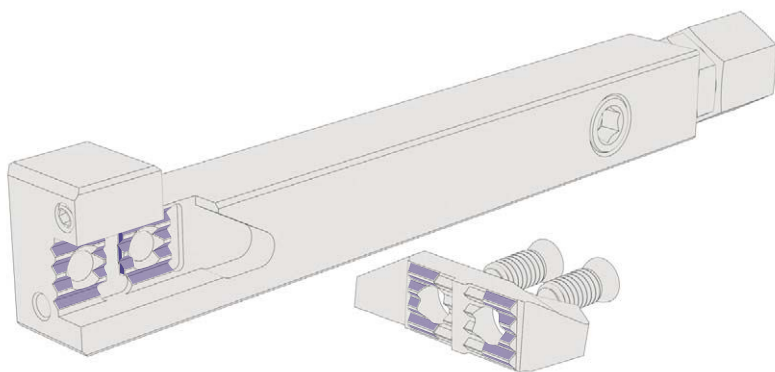
Infos and advantages

Rigid!

Système de serrage à denture Applitec avec repositionnement sur la nervure centrale.

Applitec-Verzahnungsspannsystem mit Neupositionierung auf der Zentralrippe.

Applitec toothed clamping system with repositioning on the central rib.

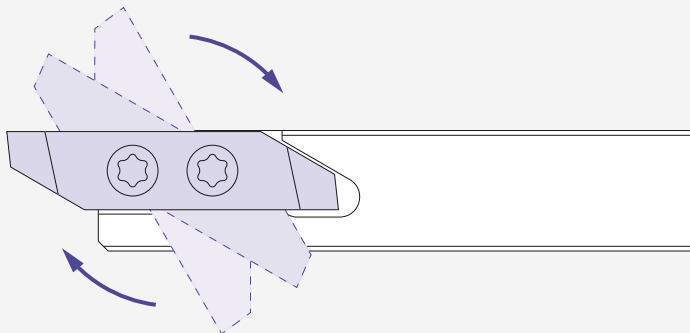


Ultra precision

Grande précision lors du retournement de la plaquette

Hohe Präzision beim Wenden der Platte

High precision when flipping the insert

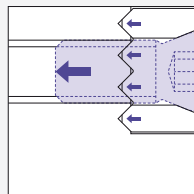


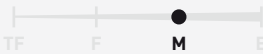
Applitec tooththing

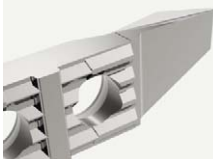
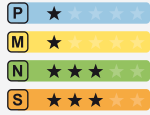
Système de serrage en fond de denture

Klemmvorrichtung an der Prothesenbasis

Clamping system at the denture base



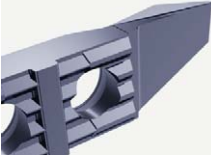
μK20	 <p>TiAlN</p>	 K20	
	<p>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</p> 	<p>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</p>	
	<ul style="list-style-type: none"> excellente nuance universelle 1^{er} choix pour l'usinage des aciers, aciers inoxydables et alliages de titane très bonne résistance à la température 	<ul style="list-style-type: none"> beste Universalsorte für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet sehr gute Warmfestigkeit 	<ul style="list-style-type: none"> best universal grade first choice for steel, stainless steel and titanium alloys machining very good heat resistance

μK20	 <p>N</p>	 K20	
	<p>Non revêtu Unbeschichtet Uncoated</p>	<p>Non revêtu Unbeschichtet Uncoated</p>	
	<ul style="list-style-type: none"> nuance micro-grain tenace supporte les coupes interrompues et autres conditions d'usinage défavorables 	<ul style="list-style-type: none"> zähe Feinkornsorte für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen 	<ul style="list-style-type: none"> tough micro-grain grade suitable for interrupted cut and other unfavourable machining conditions

Nuances

Sorten

Grades

μK10	<div>HTA</div> 	<div>● K10</div> <div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div> <div>TF F M E</div>	<div>P ★★★★★</div> <div>M ★★★★★</div> <div>N ★★★★★</div> <div>S ★★★★★</div>	<ul style="list-style-type: none">• nuance très résistante à l'usure• pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane	<ul style="list-style-type: none">• sehr verschleissfeste Sorte• für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen	<ul style="list-style-type: none">• very wear resistant grade• for light machining of steel, stainless steel and titanium alloys under favourable machining conditions
	<div>HN</div> 	<div>● K10</div> <div>Non revêtu Unbeschichtet Uncoated</div>	<div>P ★★★★★</div> <div>M ★★★★★</div> <div>N ★★★★★</div> <div>S ★★★★★</div>	<ul style="list-style-type: none">• nuance micro-grain très résistante à l'usure• recommandé pour l'usinage du titane faiblement allié• déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables	<ul style="list-style-type: none">• verschleissfeste Feinkornsorte• für die Bearbeitung von niedrig legiertem Titan empfehlenswert• für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet	<ul style="list-style-type: none">• wear resistant micro-grain grade• suitable for the machining of low alloyed titanium• not suitable for interrupted cut and other unfavourable machining conditions

Paramètres de coupe indicatifs

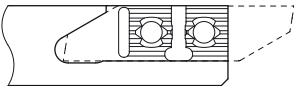
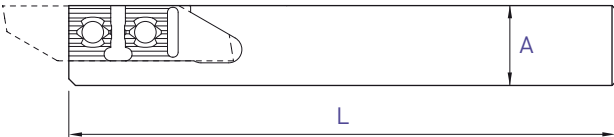
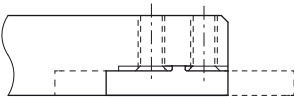
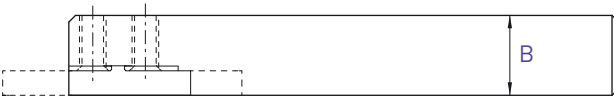
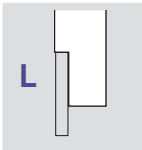
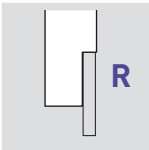
Empfohlene Schnittwerte

Standard machining data

Matière Werkstoff Material		Tournage Drehen Turning 630/640			Tronçonnage Abstechen Parting off 650/660		
		VC	Prof. de passe Schnitttiefe Depth of cut	Avance Vorschub Feed	VC	Largeur de coupe Abstechbreite Cutting width	Avance Vorschub Feed
		(m/min)	(mm)	(mm/U)	(m/min)	(mm)	(mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	80 - 150	0.50 - 1.50 1.50 - 2.50	0.01 - 0.08 0.03 - 0.15
Acier Stahl Steel < 600 N/mm ²	P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25	70 - 120	0.50 - 1.50 1.50 - 2.50	0.01 - 0.06 0.03 - 0.12
Acier Stahl Steel < 800 N/mm ²	P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.05 0.03 - 0.10
Acier Stahl Steel > 800 N/mm ²	P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	40 - 80	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15	60 - 100	0.50 - 1.50 1.50 - 2.50	0.01 - 0.04 0.03 - 0.08
Aluminium Si <12%	N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	180 - 400	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Aluminium Si >12%	N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40	150 - 300	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35	100 - 300	0.50 - 1.50 1.50 - 2.50	0.01 - 0.10 0.03 - 0.20
Titane Titan Titanium	S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15	30 - 50	0.50 - 1.50 1.50 - 2.50	0.01 - 0.03 0.03 - 0.06

L

R



A x B	L	Art. N°	Art. N°
8 x 8	115	630-8	640-8
10 x 10	115	630-10	640-10
10 x 10	50	630-10-50	640-10-50
12 x 12	130	630-12	640-12
12 x 12	90	630-12-90	640-12-90
12.7 x 12.7	130	630-12.7	640-12.7
16 x 16	130	630-16	640-16
16 x 16	75	630-16-75	640-16-75
20 x 20	120	630-20	640-20

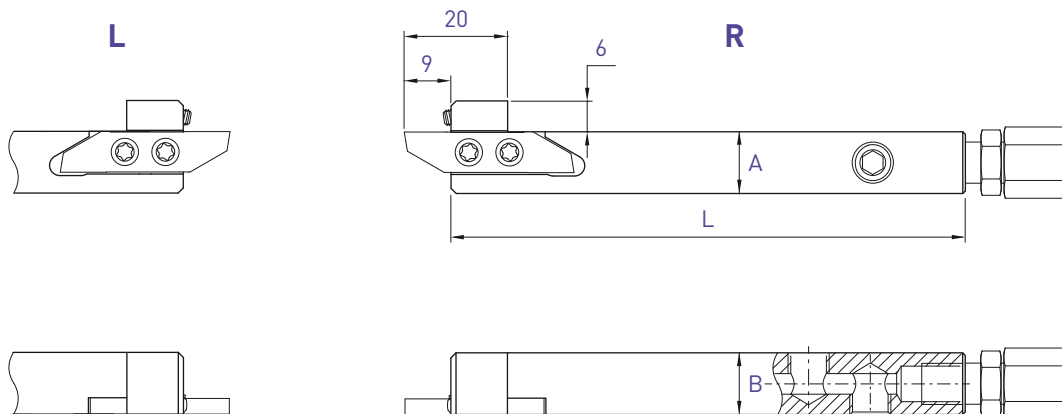
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils avec arrosage intégré

Halter mit integrierter Kühlmittelzufuhr

Holders with integrated coolant supply

630-JET / 640-JET



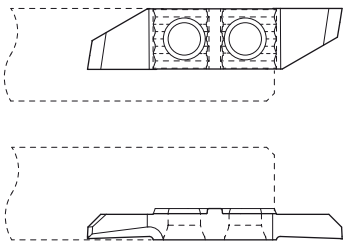
		<div> <div>L</div> <div>R</div> </div>	
A x B	L	Art. N°	Art. N°
10 x 12	100	630-1012-JET	640-1012-JET
12 x 12	100	630-12-JET	640-12-JET
12.7 x 12.7	100	630-12.7-JET	640-12.7-JET
16 x 16	100	630-16-JET	640-16-JET
20 x 20	100	630-20-JET	640-20-JET

Chaque support est livré avec vis, raccord droit et buse d'arrosage Ø 1.5 mm. Les clés sont à commander séparément.

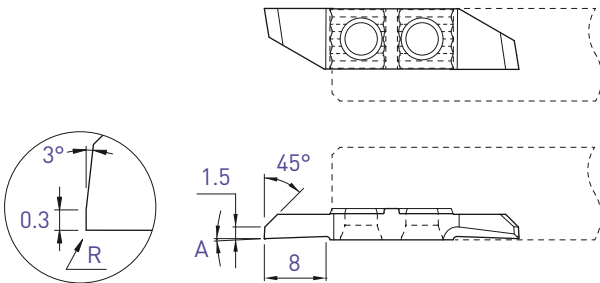
Jeder Halter wird mit Spannschraube(n), gerader Kühlmittelanschluss und Kühlmitteldüse Ø 1.5 mm geliefert. Die Schlüssel sind separat zu bestellen.

Screw(s), straight connector and coolant nozzle Ø 1.5 mm are included with each tool holder. The keys must be ordered separately.

L



R



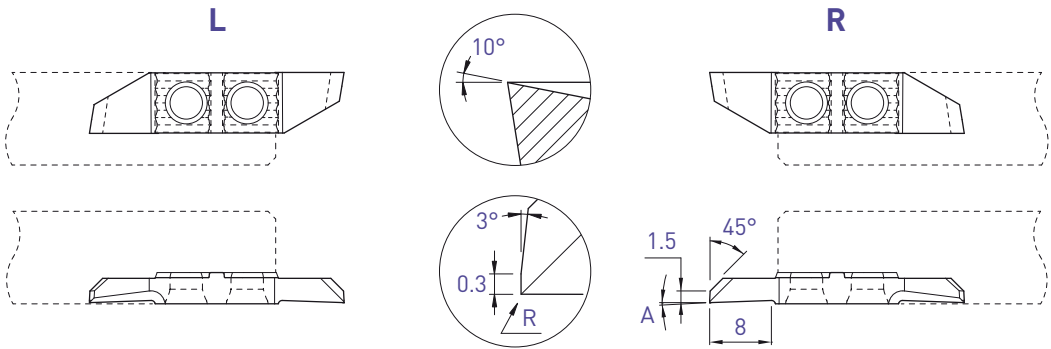
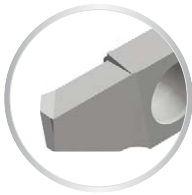
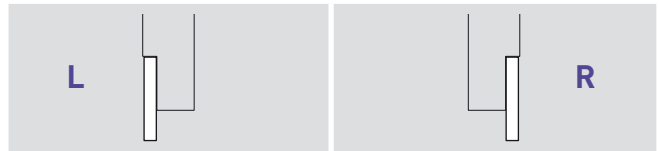
L

R

A	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>		Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	
			TiAlN	N (µk20)	HTA	HN (µk10)		TiAlN	N (µk20)	HTA	HN (µk10)
0°	0	632	•	•			642	•	•		
0°	0.08	-					642-R08	•	•		
0°	0.15	-					642-R15	•	•	•	
2°	0	632-2°	•	•			642-2°	•	•	•	
2°	0.08	-					642-2°-R08	•	•		
2°	0.15	-					642-2°-R15	•	•		

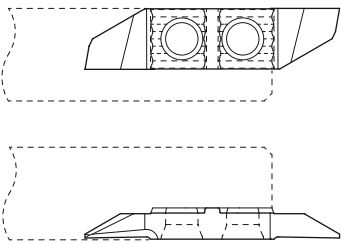
Tournage avant
Vorwärts drehen
Front turning

632X / 642X

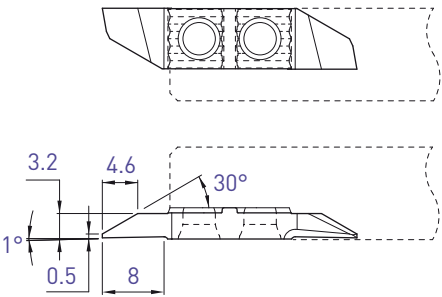


A	R	Art. N°	P		P	
			M	N	M	N
A	R	Art. N°	TiAlN		HTA	
			N [µk20]	HN [µk10]	N [µk20]	HN [µk10]
0°	0	632X10	•	•		
0°	0.08	-				
0°	0.15	-				
2°	0	632X10-2°	•	•		
2°	0.08	-				
2°	0.15	-				
A	R	Art. N°	P		P	
			M	N	M	N
A	R	Art. N°	TiAlN		HTA	
			N [µk20]	HN [µk10]	N [µk20]	HN [µk10]
0°	0	642X10	•	•		
0°	0.08	642X10-R08	•	•		
0°	0.15	642X10-R15	•	•		
2°	0	642X10-2°	•	•		
2°	0.08	642X10-2°-R08	•	•		•
2°	0.15	642X10-2°-R15	•	•	•	•

L



R



Tournage avant
Vorwärts drehen
Front turning

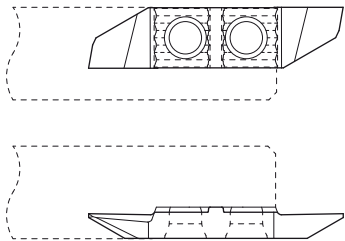
L				R			
Art. N°				Art. N°			
632S05	●	●		642S05	●	●	●

Tournage multifonction

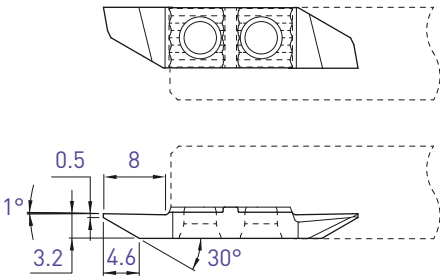
Mehrweck drehen
Multifunction turning

633S / 643S

L



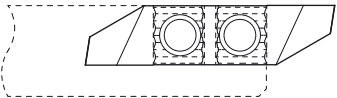
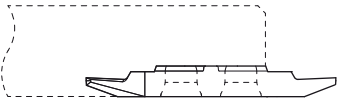
R



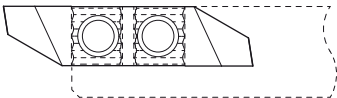
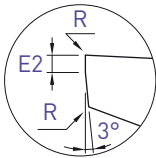
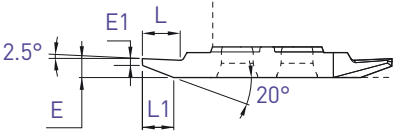
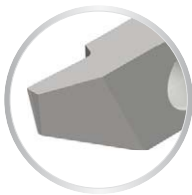
Tournage arrière
Rückwärts drehen
Back turning

L					R				
Art. N°	P				P				
	M				M				
	N	N			N	N			
	S				S				
	TiAlN	N (µk20)	HTA	HN (µk10)	TiAlN	N (µk20)	HTA	HN (µk10)	
633S05	•	•			643S05	•	•	•	

L



R



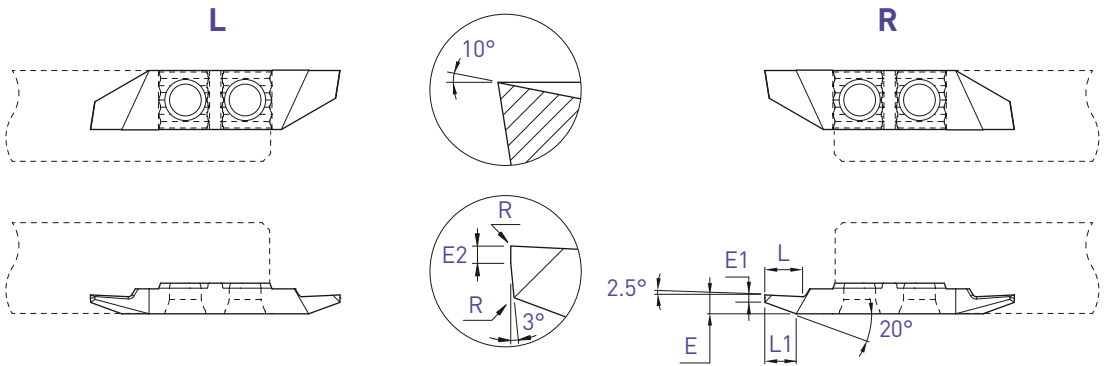
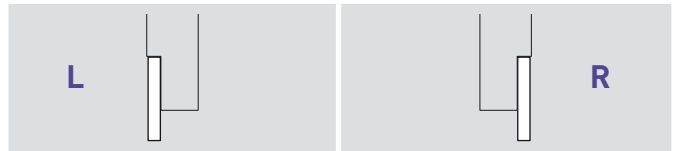
L

R

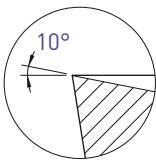
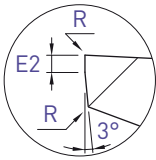
E1	E2	L	L1	E	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div></div><div></div><div>N</div><div></div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div></div><div></div><div>N</div><div></div></div>	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div></div><div></div><div>N</div><div></div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div></div><div></div><div>N</div><div></div></div>
							TiAlN	N (µk20)	HTA	HN (µk10)		TiAlN	N (µk20)	HTA	HN (µk10)
0.5	0.25	3	2.8	1.5	0	633-0.5	●	●			643-0.5	●	●		●
0.5	0.25	3	2.8	1.5	0.08	-					643-0.5-R08	●	●		
0.8	0.40	4.5	3.3	2.0	0	-					643-0.8	●	●		
0.8	0.40	4.5	3.3	2.0	0.08	-					643-0.8-R08	●	●		
1.0	0.40	5	4.2	2.5	0	-					643-1.0	●	●		
1.0	0.40	5	4.2	2.5	0.08	-					643-1.0-R08	●	●		
1.5	0.50	6	4.2	3.0	0	-					643-1.5	●	●		
1.5	0.50	6	4.2	3.0	0.08	-					643-1.5-R08	●	●		

Tournage arrière
Rückwärts drehen
Back turning

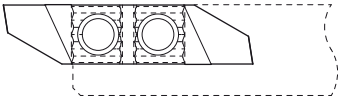
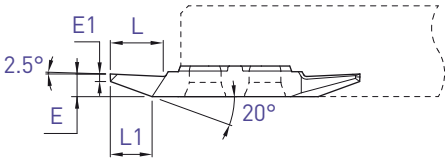
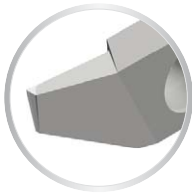
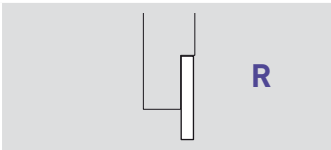
633X / 643X



E1	E2	L	L1	E	R	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	TiAlN	N (µk20)	HTA	HN (µk10)
0.5	0.25	3	2.8	1.5	0	633X10-0.5	●	●			643X10-0.5	●	●	●	●
0.5	0.25	3	2.8	1.5	0.08	-					643X10-0.5-R08	●	●		
0.8	0.40	4.5	3.3	2.0	0	-					643X10-0.8	●	●		
0.8	0.40	4.5	3.3	2.0	0.08	-					643X10-0.8-R08	●	●		
1.0	0.40	5	4.2	2.5	0	-					643X10-1.0	●	●		
1.0	0.40	5	4.2	2.5	0.08	-					643X10-1.0-R08	●	●		
1.5	0.50	6	4.2	3.0	0	-					643X10-1.5	●	●		
1.5	0.50	6	4.2	3.0	0.08	-					643X10-1.5-R08	●	●		



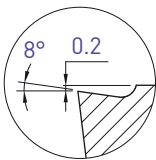
R



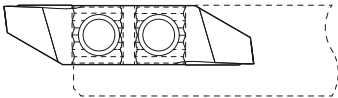
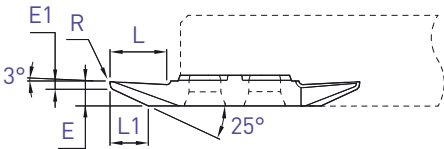
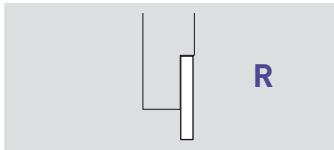
E1	E2	L	L1	E	R	Art. N°	TiAlN N (µk20)	HTA HN (µk10)
1.0	0.4	7	5.5	3.0	0	643X10S-1.0	● ●	
1.0	0.4	7	5.5	3.0	0.08	643X10S-1.0-R08	● ●	

Tournage arrière
Rückwärts drehen
Back turning

643VX8



R



E1	L	L1	E	R	Art. N°	TiAlN	N [µk20]	HTA	HN [µk10]
1.0	7.5	5.0	3.2	0	643VX8	●	●		
1.0	7.5	5.0	3.2	0.08	643VX8-R08	●	●		

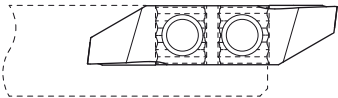
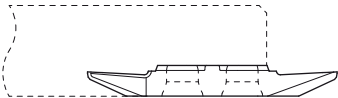
633VX15 / 643VX15

Tournage arrière

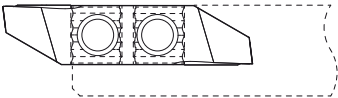
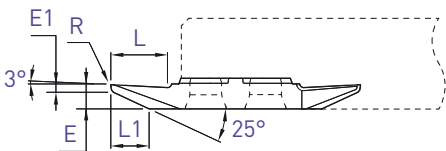
Rückwärts drehen

Back turning

L



R



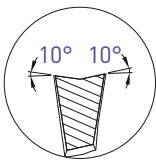
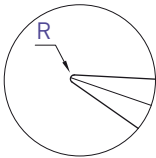
L

R

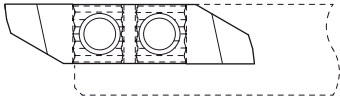
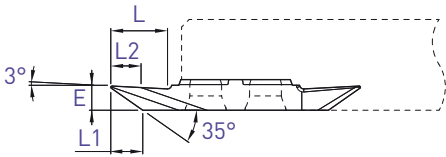
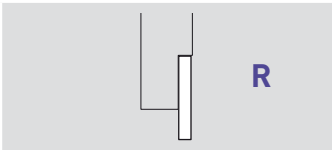
E1	L	L1	E	R	Art. N°	TiAIN N (µk20)	HTA HN (µk10)	Art. N°	TiAIN N (µk20)	HTA HN (µk10)
0.6	7.5	5.2	3.2	0	633VX15	•	•	643VX15	•	•
0.6	7.5	5.2	3.2	0.08	-			643VX15-R08	•	•

Tournage arrière
Rückwärts drehen
Back turning

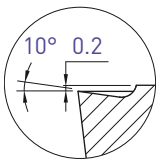
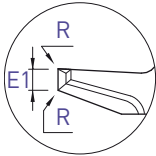
643VUX



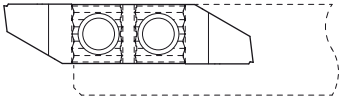
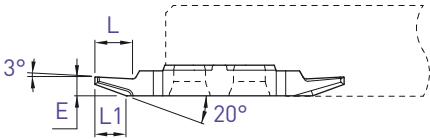
R



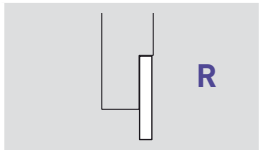
L	L1	L2	E	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>				<div><div>P</div><div>M</div><div>N</div><div>S</div></div>			
						TiAlN	N [µk20]	HTA	HN [µk10]	TiAlN	N [µk20]	HTA	HN [µk10]
7.5	4.2	4.0	3.2	0.15	643VUX10-R15	•	•	•	•	•	•	•	•
7.5	3.8	3.8	3.2	0.35	643VUX10-R35	•	•	•	•	•	•	•	•



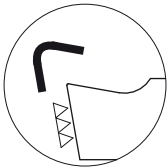
R



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



E1	L	L1	E	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN N [µk20]
1.0	5	4	2.5	0.01	643ZX10-1.0	●
1.0	5	4	2.5	0.08	643ZX10-1.0-R08	●



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

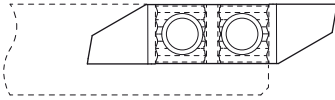
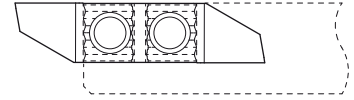
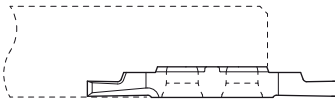
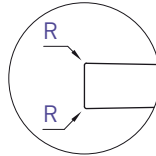
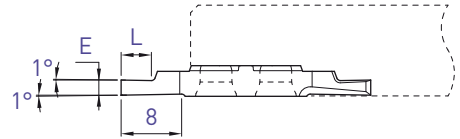
Fonçage-tournage

Einstechen und drehen
Grooving and turning

634 / 644

L

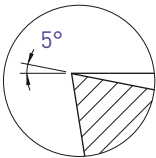
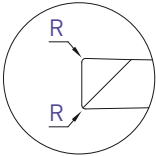
R



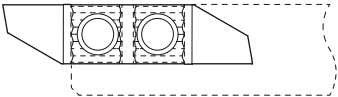
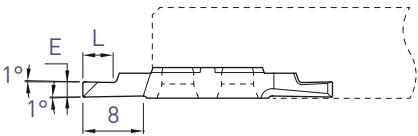
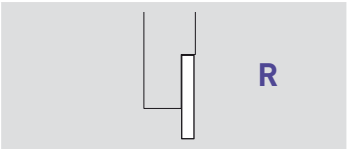
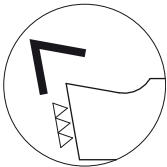
L

R

E	L	R	Art. N°	L				R			
				TIALN	N (µk20)	HTA	HN (µk10)	TIALN	N (µk20)	HTA	HN (µk10)
0.5	1.5	0	634-0.5	●	●			644-0.5	●	●	
0.6	1.8	0	-					644-0.6	●	●	
0.75	2	0	-					644-0.75	●	●	●
0.8	2	0	634-0.8	●	●			644-0.8	●	●	
0.9	2.5	0	-					644-0.9	●	●	
0.95	3	0	-					644-0.95	●	●	
1.0	2.5	0	634-1.0	●	●			644-1.0	●	●	●
1.0	2.5	0.08	-					644-1.0-R08	●	●	●
1.2	3	0	634-1.2	●	●			644-1.2	●	●	
1.2	3	0.08	-					644-1.2-R08	●	●	●
1.5	3	0	634-1.5	●	●			644-1.5	●	●	●
1.5	3	0.08	-					644-1.5-R08	●	●	●
1.5	3	0.15	-					644-1.5-R15	●	●	
1.8	4	0	-					644-1.8	●	●	●
2.0	4	0	634-2.0	●	●			644-2.0	●	●	
2.0	4	0.08	-					644-2.0-R08	●	●	●
2.0	4	0.15	-					644-2.0-R15	●	●	●
2.5	6	0	634-2.5	●	●			644-2.5	●	●	
2.5	6	0.08	-					644-2.5-R08	●	●	
2.5	6	0.15	-					644-2.5-R15	●	●	
3	6	0	634-3.0	●	●			644-3.0	●	●	●
3	6	0.08	-					644-3.0-R08	●	●	●
3	6	0.15	-					644-3.0-R15	●	●	

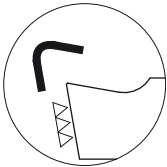


R



Arête de coupe vive
Scharfe Schneidkante
Sharp edge

E	L	R	Art. N°	P		P	
				M	N	M	N
				S		S	
				TiAlN	N (µk20)	HTA	HN (µk10)
1.5	3	0.08	644X5-1.5-R08	•	•		
2	4	0.08	644X5-2.0-R08	•	•		
2	4	0.15	644X5-2.0-R15	•	•		
2.5	6	0.08	644X5-2.5-R08	•	•		
2.5	6	0.15	644X5-2.5-R15	•	•		
3	6	0.08	644X5-3.0-R08	•	•		
3	6	0.15	644X5-3.0-R15	•	•		



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

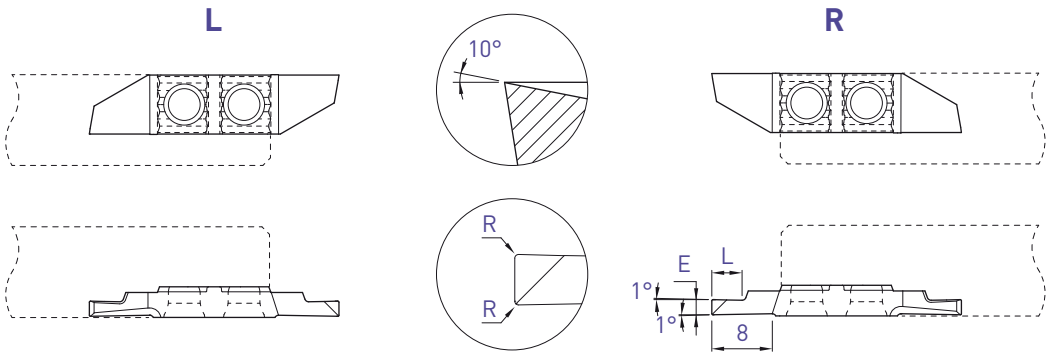
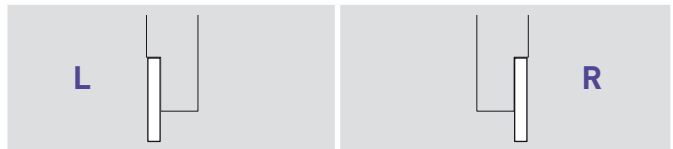
1.5	3	0.08	644X5-1.5-R08-EP	•	•		
2	4	0.08	644X5-2.0-R08-EP	•	•		
2	4	0.15	644X5-2.0-R15-EP	•	•		
2.5	6	0.08	644X5-2.5-R08-EP	•	•		
2.5	6	0.15	644X5-2.5-R15-EP	•	•		
3	6	0.08	644X5-3.0-R08-EP	•	•		
3	6	0.15	644X5-3.0-R15-EP	•	•		

Fonçage-tournage

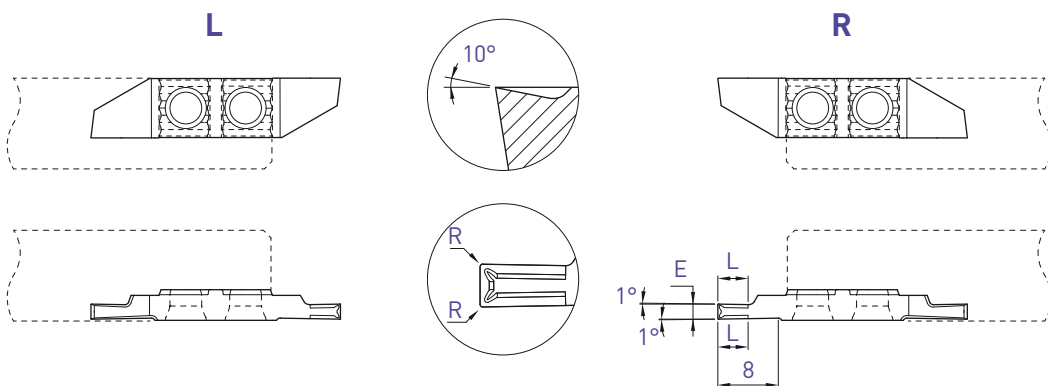
Einstechen und drehen

Grooving and turning

634X10 / 644X10

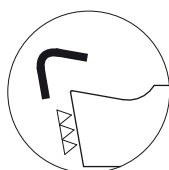


E	L	R	Art. N°	   	   	Art. N°	   	   		
				TiAlN	N (µk20)		HTA	HN (µk10)	TiAlN	N (µk20)
0.8	2	0	634X10-0.8	●	●	644X10-0.8	●	●	●	●
1.0	2.5	0	634X10-1.0	●	●	644X10-1.0	●	●		
1.0	2.5	0.08	634X10-1.0-R08	●	●	644X10-1.0-R08	●	●		
1.2	3	0	-			644X10-1.2	●	●		●
1.2	3	0.08	-			644X10-1.2-R08	●	●		
1.5	3	0	634X10-1.5	●	●	644X10-1.5	●	●		●
1.5	3	0.08	634X10-1.5-R08	●	●	644X10-1.5-R08	●	●		●
1.5	3	0.15	634X10-1.5-R15	●	●	644X10-1.5-R15	●	●		
1.8	4	0	-			644X10-1.8	●	●		
2	4	0	634X10-2.0	●	●	644X10-2.0	●	●		
2	4	0.08	634X10-2.0-R08	●	●	644X10-2.0-R08	●	●		
2	4	0.15	634X10-2.0-R15	●	●	644X10-2.0-R15	●	●		
2.5	6	0	634X10-2.5	●	●	644X10-2.5	●	●		
2.5	6	0.08	634X10-2.5-R08	●	●	644X10-2.5-R08	●	●		
2.5	6	0.15	634X10-2.5-R15	●	●	644X10-2.5-R15	●	●		
3	6	0	634X10-3.0	●	●	644X10-3.0	●	●		
3	6	0.08	634X10-3.0-R08	●	●	644X10-3.0-R08	●	●		
3	6	0.15	634X10-3.0-R15	●	●	644X10-3.0-R15	●	●		



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control

			L		R	
E	L	R	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>TiAlN</div> <div>N (µk20)</div> </div>	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>TiAlN</div> <div>N (µk20)</div> </div>
1.0	2.5	0.01	634ZXB10-1.0	●	644ZXB10-1.0	●
1.5	4	0.01	634ZXB10-1.5	●	644ZXB10-1.5	●
1.5	4	0.08	634ZXB10-1.5-R08	●	644ZXB10-1.5-R08	●
2.0	4	0.01	634ZXB10-2.0	●	644ZXB10-2.0	●
2.0	4	0.08	634ZXB10-2.0-R08	●	644ZXB10-2.0-R08	●
2.0	4	0.15	634ZXB10-2.0-R15	●	644ZXB10-2.0-R15	●
2.5	5	0.08	634ZXB10-2.5-R08	●	644ZXB10-2.5-R08	●
2.5	5	0.15	634ZXB10-2.5-R15	●	644ZXB10-2.5-R15	●
3.0	6	0.08	634ZXB10-3.0-R08	●	644ZXB10-3.0-R08	●
3.0	6	0.15	634ZXB10-3.0-R15	●	644ZXB10-3.0-R15	●
3.0	6	0.35	634ZXB10-3.0-R35	●	644ZXB10-3.0-R35	●



Arête de coupe honée
Gehonte Schneidkante
Honed edge

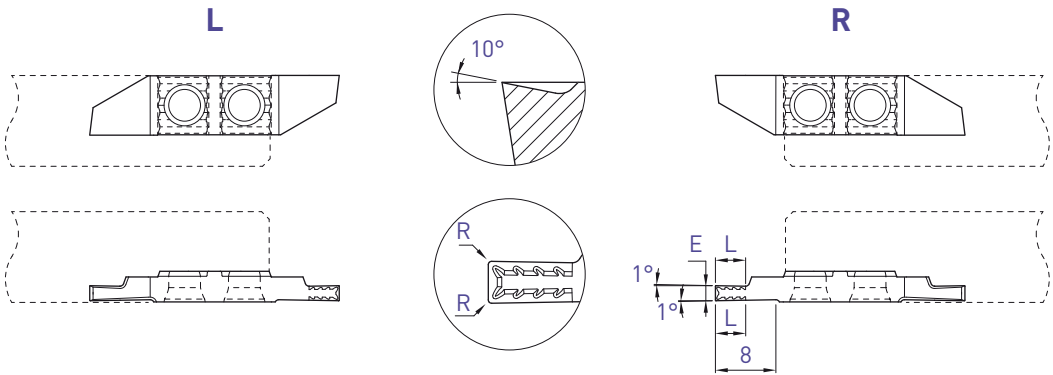
f min: 0.02 mm/U

Fonçage-tournage

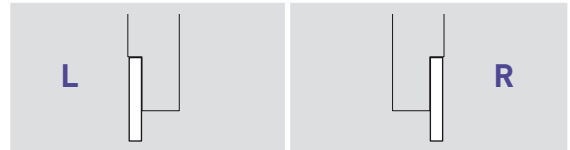
Einstechen und drehen

Grooving and turning

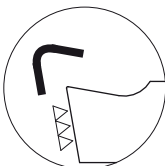
634ZXT / 644ZXT



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



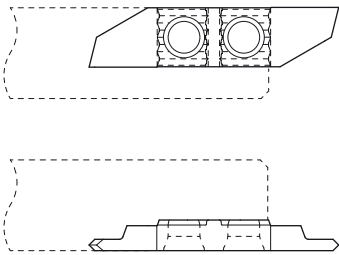
E	L	R	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>TiAlN</div> <div>N (µk20)</div> </div>	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>TiAlN</div> <div>N (µk20)</div> </div>
1.0	2.5	0.01	634ZXT10-1.0	●	644ZXT10-1.0	●
1.5	4	0.01	634ZXT10-1.5	●	644ZXT10-1.5	●
1.5	4	0.08	634ZXT10-1.5-R08	●	644ZXT10-1.5-R08	●
2.0	4	0.01	634ZXT10-2.0	●	644ZXT10-2.0	●
2.0	4	0.08	634ZXT10-2.0-R08	●	644ZXT10-2.0-R08	●
2.0	4	0.15	634ZXT10-2.0-R15	●	644ZXT10-2.0-R15	●
2.5	5	0.08	634ZXT10-2.5-R08	●	644ZXT10-2.5-R08	●
2.5	5	0.15	634ZXT10-2.5-R15	●	644ZXT10-2.5-R15	●
3.0	6	0.08	634ZXT10-3.0-R08	●	644ZXT10-3.0-R08	●
3.0	6	0.15	634ZXT10-3.0-R15	●	644ZXT10-3.0-R15	●
3.0	6	0.35	-		644ZXT10-3.0-R35	●



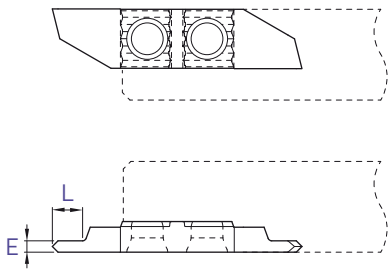
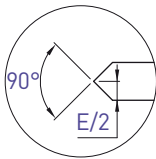
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

L



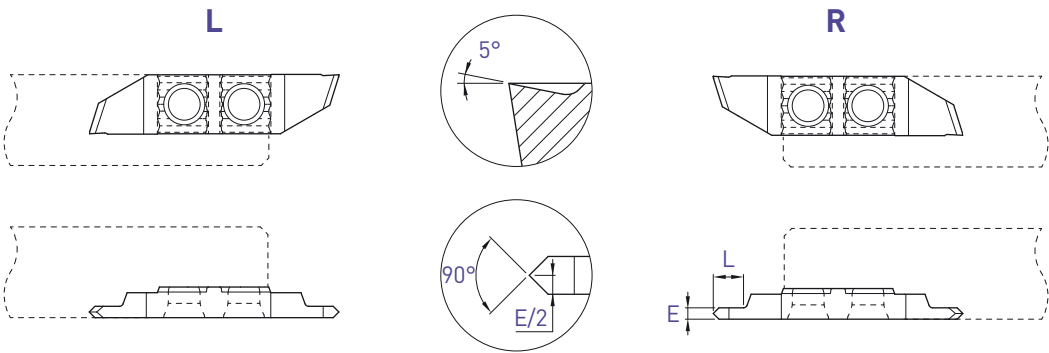
R



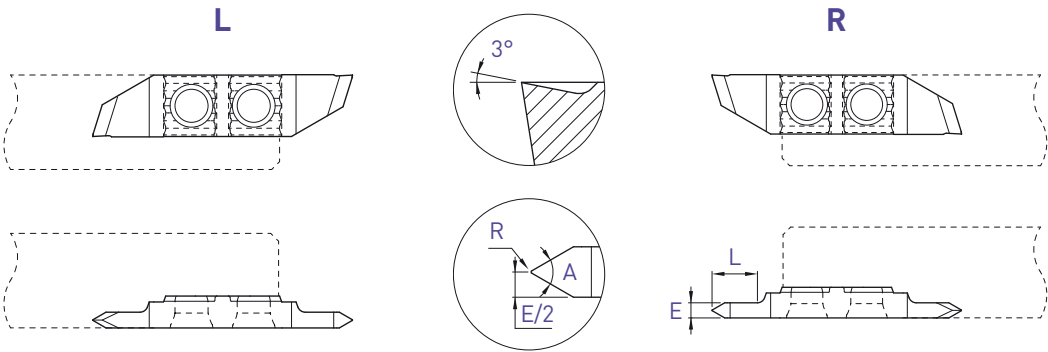
					
E	L	Art. N°	TiAlN N (µk20)	Art. N°	TiAlN N (µk20)
1.5	4	635-90-1.5	● ●	645-90-1.5	● ●

Chanfreinage
Anfasen
Chamfering

635X-90 / 645X-90



		L				R			
E	L	Art. N°	TiAlN	N (µk20)	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	Art. N°	TiAlN	N (µk20)	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>
1.5	4	635X5-90-1.5	•	•		645X5-90-1.5	•	•	



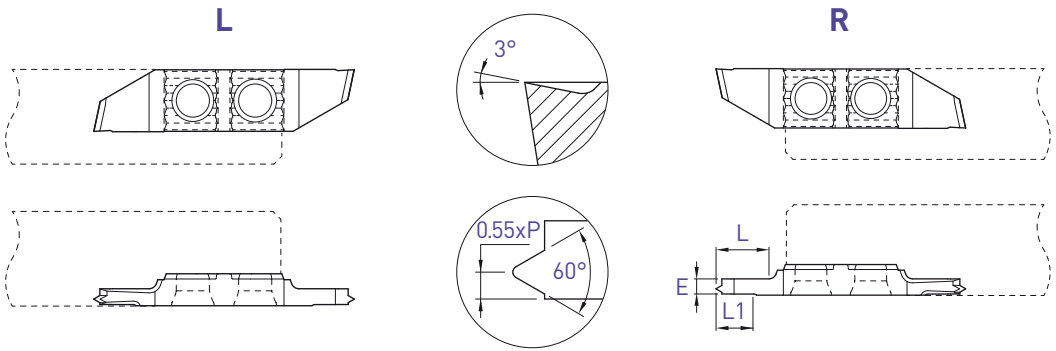
Profil partiel
Teilprofil
Partial profile

				L		R	
							
A	E	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN
					N (µk20)		N (µk20)
55°	1.5	4	0	636X3-55-1.5	• •	646X3-55-1.5	• •
55°	2.0	6	0.03	636X3-55-2.0-R03	• •	646X3-55-2.0-R03	• •
60°	1.5	4	0	636X3-60-1.5	• •	646X3-60-1.5	• •
60°	2.0	6	0.03	636X3-60-2.0-R03	• •	646X3-60-2.0-R03	• •
60°	2.0	6	0.06	636X3-60-2.0-R06	• •	646X3-60-2.0-R06	• •
60°	3.0	8	0.06	636X3-60-3.0-R06	• •	646X3-60-3.0-R06	• •
60°	3.0	8	0.12	636X3-60-3.0-R12	• •	646X3-60-3.0-R12	• •

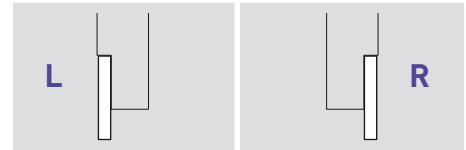
Filetage

Gewinde drehen
Threading

636X-M / 646X-M

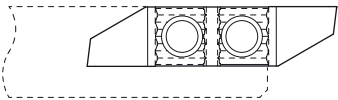
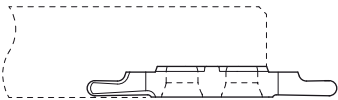


Profil complet métrique
Metrisches Vollprofil
Metric full profile

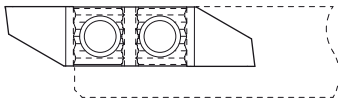
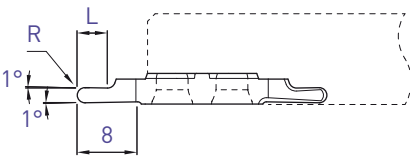


E	L	L1	Pas Steigung Pitch P	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>			Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>		
					TIAIN	N (µk20)			TIAIN	N (µk20)	
1.0	3	3	0.25	636X3-M-0.25	●	●		646X3-M-0.25	●	●	
1.0	3	3	0.30	636X3-M-0.30	●	●		646X3-M-0.30	●	●	
1.0	3	3	0.35	636X3-M-0.35	●	●		646X3-M-0.35	●	●	
1.0	3	3	0.40	636X3-M-0.40	●	●		646X3-M-0.40	●	●	
1.0	3	3	0.45	636X3-M-0.45	●	●		646X3-M-0.45	●	●	
1.0	3	3	0.50	636X3-M-0.50	●	●		646X3-M-0.50	●	●	
1.5	5	5	0.60	636X3-M-0.60	●	●		646X3-M-0.60	●	●	
1.5	5	5	0.70	636X3-M-0.70	●	●		646X3-M-0.70	●	●	
1.5	5	5	0.75	636X3-M-0.75	●	●		646X3-M-0.75	●	●	
1.5	5	5	0.80	636X3-M-0.80	●	●		646X3-M-0.80	●	●	
2.0	7	5	1.00	636X3-M-1.00	●	●		646X3-M-1.00	●	●	
2.0	7	5	1.25	636X3-M-1.25	●	●		646X3-M-1.25	●	●	
2.0	7	5	1.50	636X3-M-1.50	●	●		646X3-M-1.50	●	●	

L



R



L



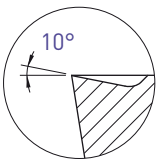
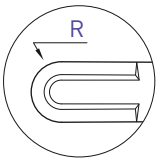
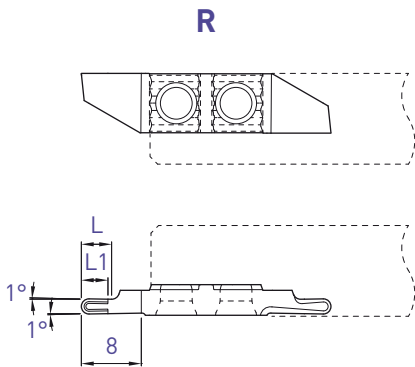
R



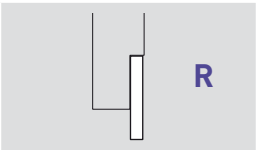
R	L	Art. N°	P M N S		P M N S		Art. N°	P M N S		P M N S	
			TiAlN	N (µk20)	HTA	HN (µk10)		TiAlN	N (µk20)	HTA	HN (µk10)
0.25	1.5	-					647-R0.25	•	•		
0.4	2	-					647-R0.4	•	•		
0.5	2.5	637-R0.5	•	•			647-R0.5	•	•	•	•
0.6	2.5	-					647-R0.6	•	•		
0.75	3	-					647-R0.75	•	•		
0.8	3	-					647-R0.8	•	•		
1.0	4	637-R1.0	•	•			647-R1.0	•	•		
1.5	6	-					647-R1.5	•	•		

Plaquettes à rayon
Radius Wendeplatten
Radius inserts

647ZX10



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



R	L	L1	Art. N°	TiAlN	N [µk20]
1.0	4	3.5	647ZX10-R1.0	●	
1.5	6	4	647ZX10-R1.5	●	

P☐

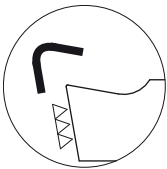
M☐

N☒

S☐

TiAlN

N [µk20]



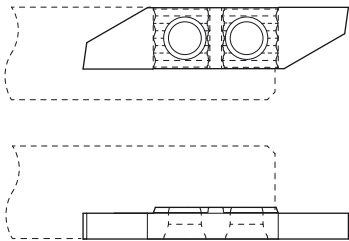
Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

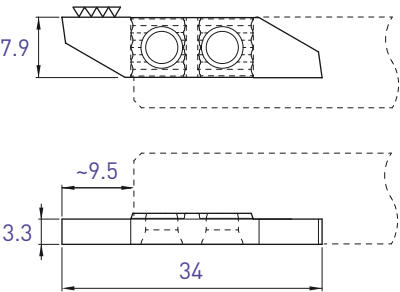
631-EP / 641-EP

Plaquettes ébauches
WSP-Rohlinge
Blank inserts

L



R



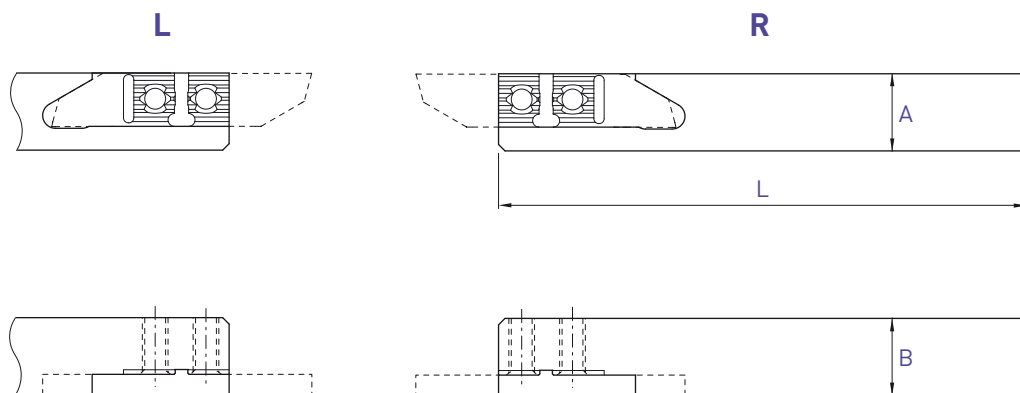
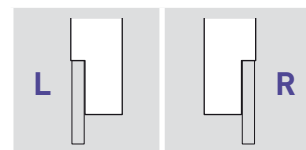
Face de coupe polie
Polierte Schneidfläche
Polished cutting face

L					R				
Art. N°	P		P		P		P		
	M		M		M		M		
	N	N	N	N	N	N	N	N	N
	S		S		S		S		
	TiAlN	N (µk20)	HTA	HN (µk10)	TiAlN	N (µk20)	HTA	HN (µk10)	
631-EP	•	•	•	•	641-EP	•	•	•	•

Porte-outils

Halter
Holders

650 / 660



A x B	L	Art. N°	Art. N°
8 x 8	115	650-8	660-8
10 x 10	115	650-10	660-10
10 x 10	50	650-10-50	660-10-50
12 x 12	130	650-12	660-12
12 x 12	90	650-12-90	660-12-90
12.7 x 12.7	130	650-12.7	660-12.7
16 x 16	130	650-16	660-16
16 x 16	75	650-16-75	660-16-75
20 x 20	120	650-20	660-20

Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
 Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
 Each holder is supplied with one or more screws. The keys must be ordered separately.

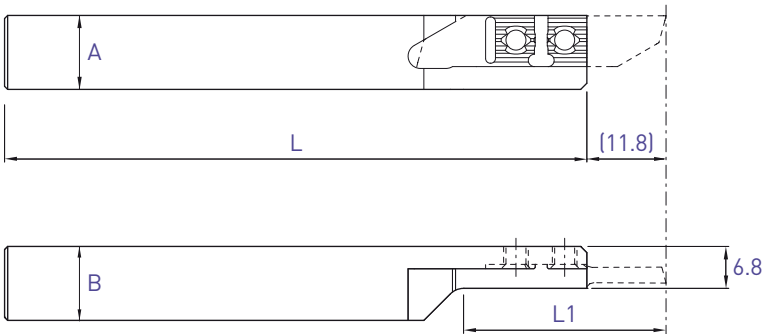
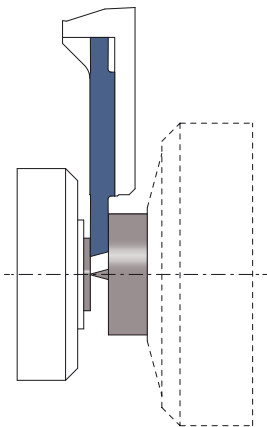
650 RC

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

Porte-outils
Halter
Holders

Utiliser des plaquettes type 651R
WSP Typ 651R verwenden
Use inserts type 651R

Voir dès page 5.39
Siehe ab Seite 5.39
See from page 5.39



<div> L (R)</div> <div>Coupe à droite déportée Versetztes Rechtsschneiden Right cut off line</div>			
A x B	L	L1	Art. N°
10 x 10	115	32	650RC-10
12 x 12	130	32	650RC-12
16 x 16	130	42	650RC-16

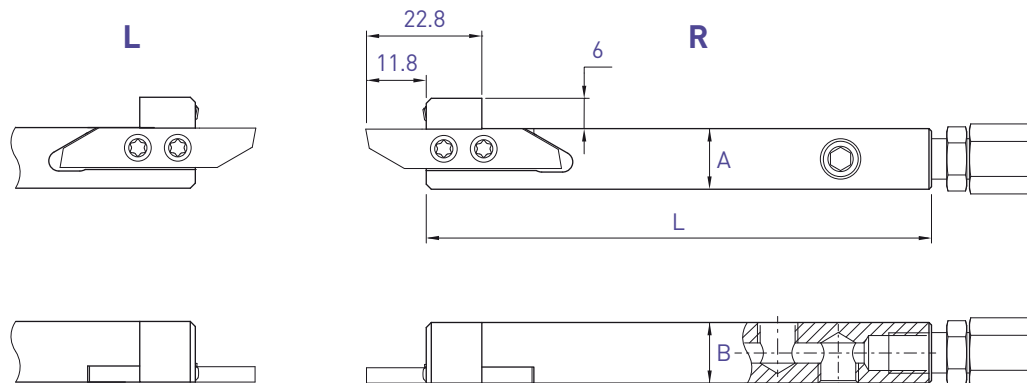
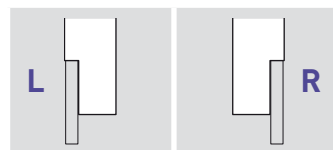
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils avec arrosage intégré

Halter mit integrierter Kühlmittelzufuhr

Holders with integrated coolant supply

650-JET / 660-JET



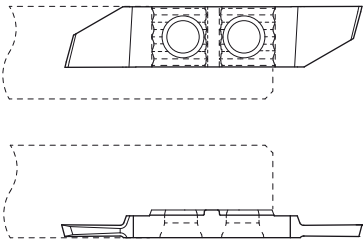
A x B	L	Art. N°	Art. N°
10 x 12	100	650-1012-JET	660-1012-JET
12 x 12	100	650-12-JET	660-12-JET
12.7 x 12.7	100	650-12.7-JET	660-12.7-JET
16 x 16	100	650-16-JET	660-16-JET
20 x 20	100	650-20-JET	660-20-JET

Chaque support est livré avec vis, raccord droit et buse d'arrosage Ø 1.5 mm. Les clés sont à commander séparément.

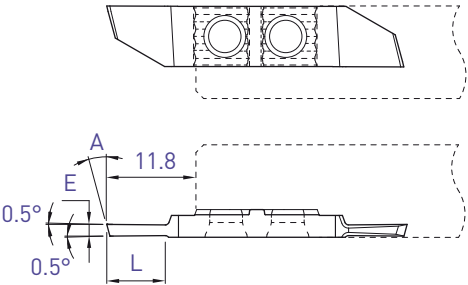
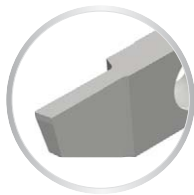
Jeder Halter wird mit Spannschraube(n), gerader Kühlmittelanschluss und Kühlmitteldüse Ø 1.5 mm geliefert. Die Schlüssel sind separat zu bestellen.

Screw(s), straight connector and coolant nozzle Ø 1.5 mm are included with each tool holder. The keys must be ordered separately.

L



R



L

R

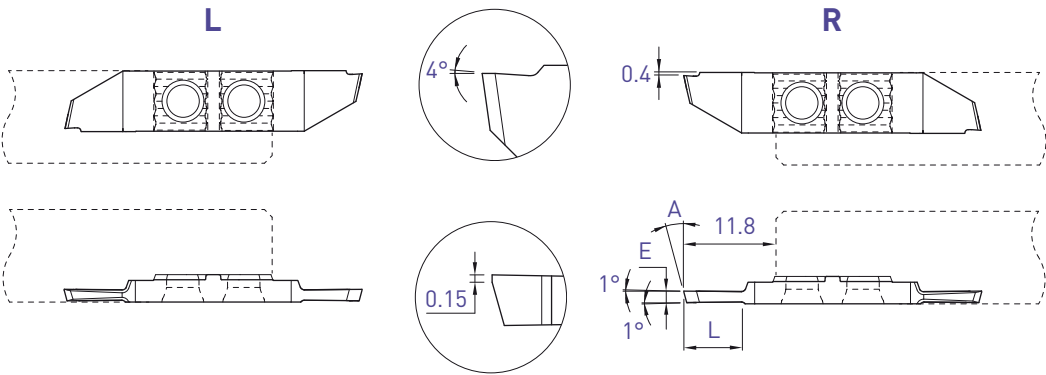
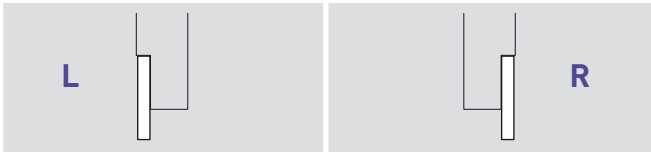
E	A	L	Art. N°	<div><div><div>P</div><div>M</div><div>N</div><div>S</div></div><div>TiAlN</div><div>N (µk20)</div><div>HTA</div><div>HN (µk10)</div></div>				Art. N°	<div><div><div>P</div><div>M</div><div>N</div><div>S</div></div><div>TiAlN</div><div>N (µk20)</div><div>HTA</div><div>HN (µk10)</div></div>			
0.8	20°	5	651-0.8-20°	●	●			661-0.8-20°	●	●	●	●
1.0	15°	5	-					661-1.0-15°	●	●		
1.0	20°	5	651-1.0-20°	●	●			661-1.0-20°	●	●		
1.2	15°	5	-					661-1.2-15°	●	●		
1.2	20°	5	651-1.2-20°	●	●			661-1.2-20°	●	●		
1.5	15°	7.5	651-1.5-15°	●	●			661-1.5-15°	●	●		
1.5	20°	7.5	-					661-1.5-20°	●	●		
1.8	15°	9	651-1.8-15°	●	●			661-1.8-15°	●	●		
2.0	15°	11	651-2.0-15°	●	●	●		661-2.0-15°	●	●	●	●
2.5	15°	11	651-2.5-15°	●	●			661-2.5-15°	●	●		

Tronçonnage

Abstechen

Parting off

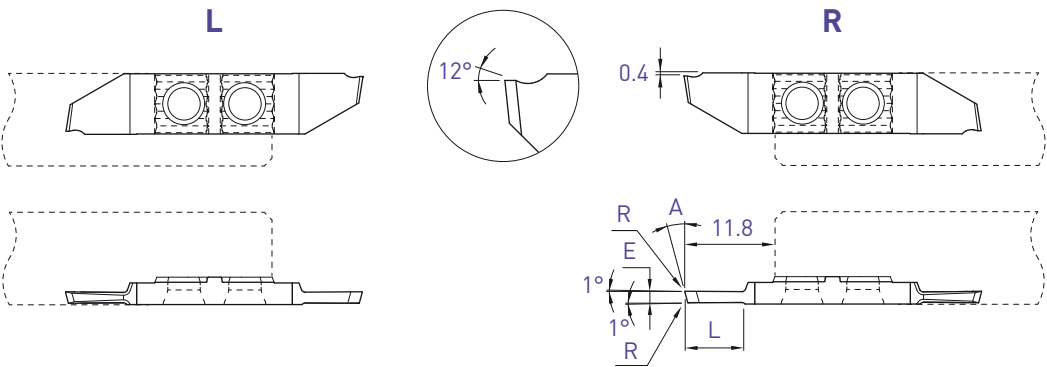
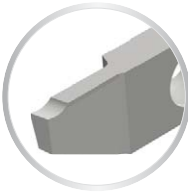
651XF / 661XF



E	A	L	Art. N°	TiAlN		HTA		Art. N°	TiAlN		HTA	
				P	M	N	S		P	M	N	S
1.5	15°	7.5	651XF-1.5	•	•			661XF-1.5	•	•		
2.0	15°	11	651XF-2.0	•	•			661XF-2.0	•	•		

651X12 / 661X12

Tronçonnage
Abstechen
Parting off



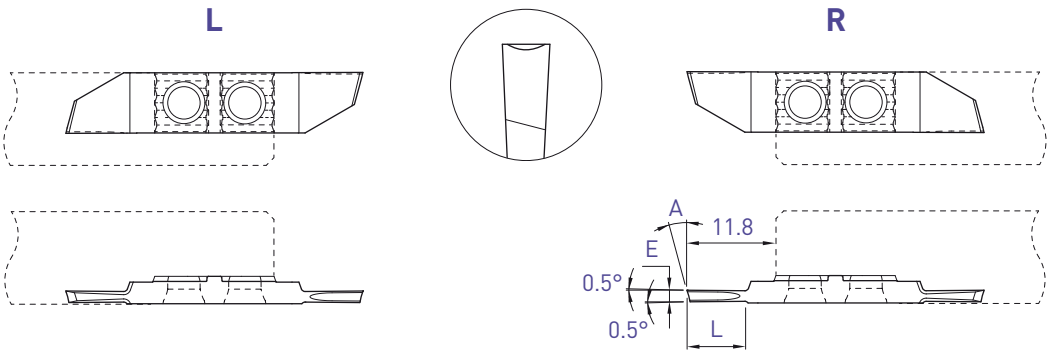
				L				R			
				Art. N°				Art. N°			
E	A	L	R	TiAlN	N (µk20)	HTA	HN (µk10)	TiAlN	N (µk20)	HTA	HN (µk10)
1.0	15°	5	0.03	651X12-1.0	• •			661X12-1.0	• •		
1.5	15°	7.5	0.03	651X12-1.5	• •			661X12-1.5	• •		
2.0	15°	11	0.03	651X12-2.0	• •			661X12-2.0	• •		

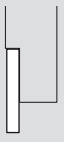
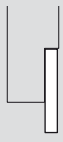
Tronçonnage

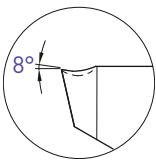
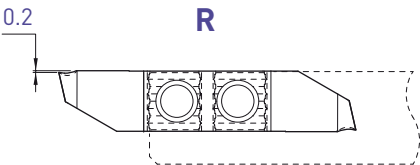
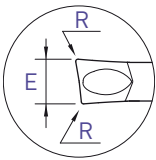
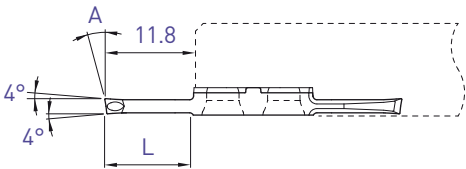
Abstechen

Parting off

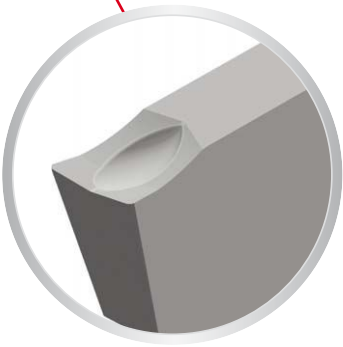
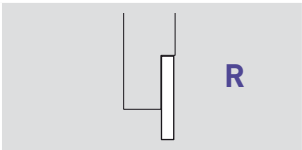
651U / 661U



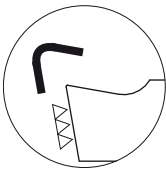
			L		R	
						
			<div><div>P</div><div>M</div><div>N</div><div>S</div></div>		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	
			<div>TiAlN</div> <div>N [µk20]</div>		<div>TiAlN</div> <div>N [µk20]</div>	
E	A	L	Art. N°		Art. N°	
1.5	15°	7.5	651U-1.5		661U-1.5	
2.0	15°	11	651U-2.0		661U-2.0	



Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



E	A	L	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div></div><div>N</div><div></div></div> (µk20)
2.0	8°	11	0.10	661ZU8-2.0-8°-R10	●	



Arête de coupe honée
Gehonte Schneidkante
Honed edge

f min: 0.02 mm/U

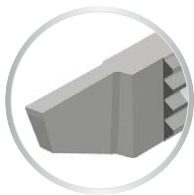
Tronçonnage

Abstechen
Parting off

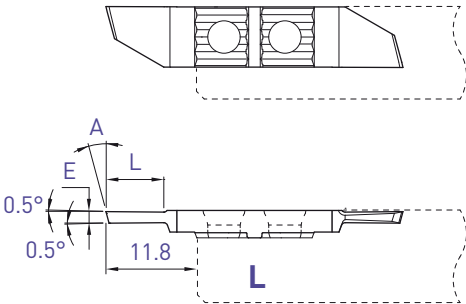
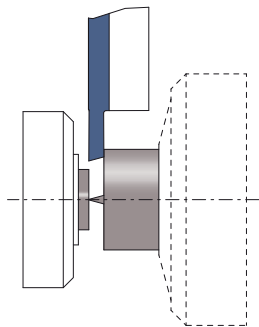
Coupe déportée

Versetztes Schneiden
Cut off line

651R



Cut R



L (R)

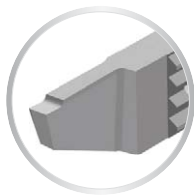
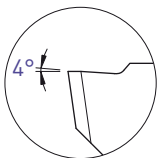
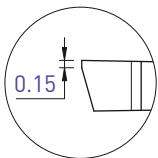
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>				<div><div>P</div><div>M</div><div>N</div><div>S</div></div>			
				TiAlN	N [µk20]	HTA	HN [µk10]	TiAlN	N [µk20]	HTA	HN [µk10]
1.0	15°	5	651R-1.0-15°	●	●			●	●		
1.2	15°	5	651R-1.2-15°	●	●			●	●		
1.5	15°	7.5	651R-1.5-15°	●	●			●	●		
2.0	15°	11	651R-2.0-15°	●	●			●	●		
2.5	15°	11	651R-2.5-15°	●	●			●	●		

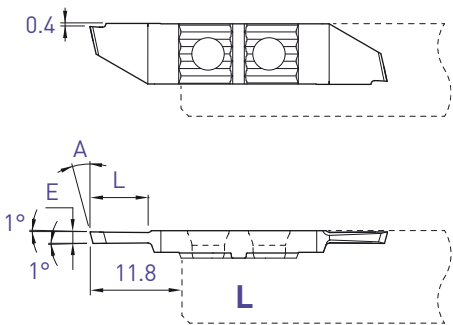
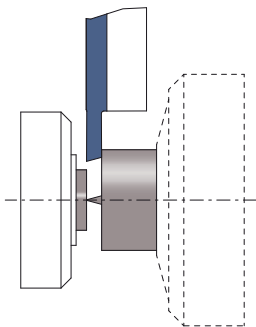
651RXF

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off



Cut R



L (R)

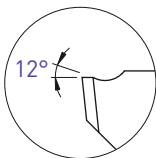
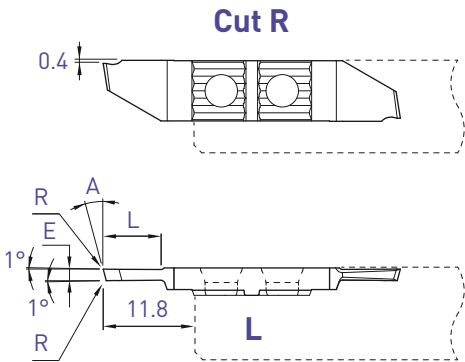
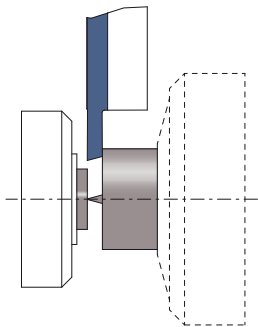
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	Art. N°	TiAlN N (µk20)	HTA HN (µk10)
1.5	15°	7.5	651RXF-1.5	● ●	
2.0	15°	11	651RXF-2.0	● ●	

Tronçonnage
Abstechen
Parting off

Coupe déportée
Versetztes Schneiden
Cut off line

651RX12

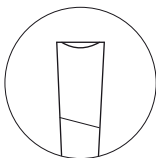


		L (R)			
Coupe à droite déportée		Versetztes Rechtsschneiden			
Right cut off line					
Art. N°		P	☐	P	☐
		M	☐	M	☐
		N	☒	N	☒
		S	☐	S	☐
	TiAlN	N [µk20]		HTA	HN [µk10]
651RX12-1.5	● ●				
651RX12-2.0	● ●				

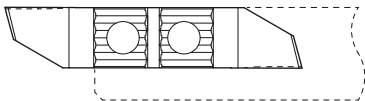
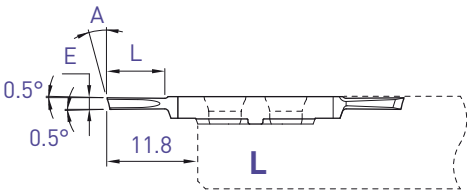
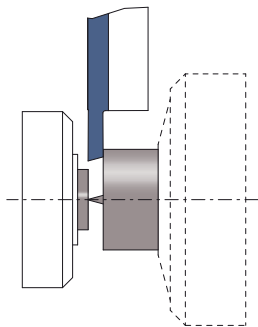
651RU

Coupe déportée
Versetztes Schneiden
Cut off line

Tronçonnage
Abstechen
Parting off



Cut R



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div></div><div></div><div>N</div><div></div></div> (µk20)
1.5	15°	7.5	651RU-1.5	●	●
2.0	15°	11	651RU-2.0	●	●

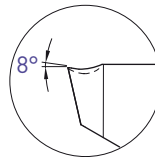
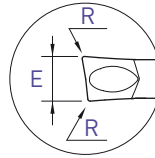
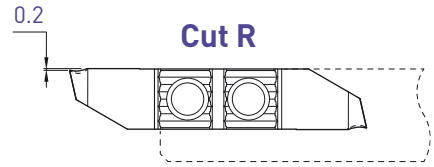
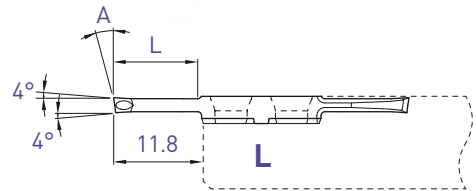
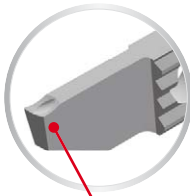
Tronçonnage

Abstechen
Parting off

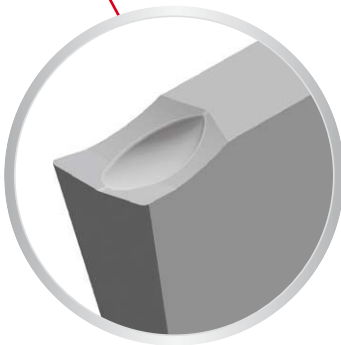
Coupe déportée

Versetztes Schneiden
Cut off line

651RZU



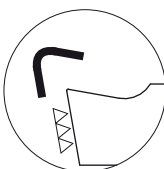
Pour un meilleur contrôle des copeaux
Für eine bessere Spankontrolle
For a better chip control



L (R)

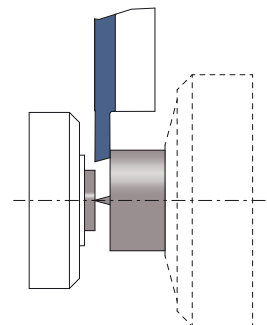
Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	A	L	R	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>TiAlN</div> <div>N (µk20)</div> </div>
2.0	8°	11	0.10	651RZU8-2.0-8°-R10	•

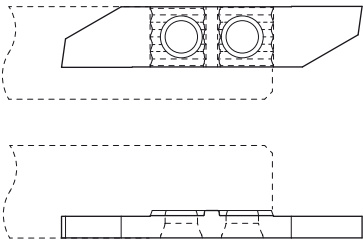


Arête de coupe honée
Gehonte Schneidkante
Honed edge

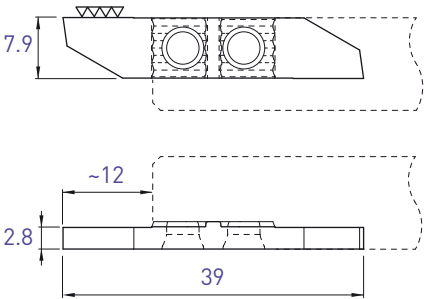
f min: 0.02 mm/U



L



R



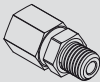
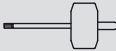
Face de coupe polie
Polierte Schneidfläche
Polished cutting face

L				R			
Art. N°		TiAlN	N (µk20)	HTA	HN (µk10)	Art. N°	
651-EP		●	●	●	●	661-EP	

Pièces de rechange et accessoires

Ersatzteile und Zubehör

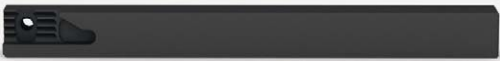
Spare parts and accessories

Porte-outils Halter Holders					Options		
							
						Art. N°	Recommandation de serrage Empfehlung zum Spannen Clamping recommendation
630 640		-	-	-	C-T15	SET- NM3.0-TX15	3 Nm
630-JET 640-JET	V-M4X9-T15	J-M8X1-D6	JB-M8X1	JJ-M3X6-D1.5			
650 660		-	-	-			
650-RC	V-M4X6.5-T15	-	-	-			
650-JET 660-JET	V-M4X9-T15	J-M8X1-D6	JB-M8X1	JJ-M3X6-D1.5			

ECO-Line



APPLITEC
CUTTING TOOLS

Codification Kodifizierung Coding guide			> 6.03
Infos et avantages Infos und Vorteile Infos and advantages			> 6.04
Nuances & paramètres de coupe indicatifs Sorten & empfohlene Schnittwerte Grades & standard machining data			> 6.05
Porte-outils Halter Holders			> 6.08
Tronçonnage Abstechen Parting off	251 / 261		> 6.12
Tournage avant Vorwärts drehen Front turning	252 / 262		> 6.16
Tournage arrière Rückwärts drehen Back turning	253 / 263		> 6.19
Fonçage-tournage Einstechen und drehen Grooving and turning	254 / 264		> 6.24
Filetage Gewinde drehen Threading	256 / 266		> 6.26
Plaquettes ébauches WSP-Rohlinge Blank inserts	251E / 261E		> 6.28
Usinage axial (porte-outils et plaquettes) Axiale Bearbeitung (Halter und WSP) Axial machining (holders and inserts)	RFG		> 6.29
Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories			> 6.31

2	6	4	X	-	2.0	-	R20	-	AP302
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Dimension Abmessung Dimension	Rayon Radius Radius	Nuance Sorte Grade
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Géométrie de coupe Schneidgeometrie Cutting geometry	brise-copeaux Spanbrecher chip breaker	particularités Sondereigenschaften special features
---	--	---

Géométrie d'usinage Bearbeitungsgeometrie Machining geometry					
1	2	3	4	6	

Gamme de produit Produktserie Product series	définit la compatibilité des plaquettes avec le porte-outil bestimmt die WSP und Halter Kompatibilität shows the inserts and holder compatibility
L = 5	(chiffre impair / ungerade Zahl / uneven number)
R = 6	(chiffre pair / gerade Zahl / even number)

<div> <div>L</div> <div>250</div> </div> <div> <div>R</div> <div>260</div> </div>		E max = 3.0 mm L max = 8.5 mm
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Applitec série 200 Applitec 200 Serie Applitec 200 series	Système de serrage à denture avec 1 vis de fixation Spannsystem mit Verzahnung und 1 Schraube Teeth clamping system with 1 screw
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ECO-Line

Infos et avantages

Infos und Vorteile

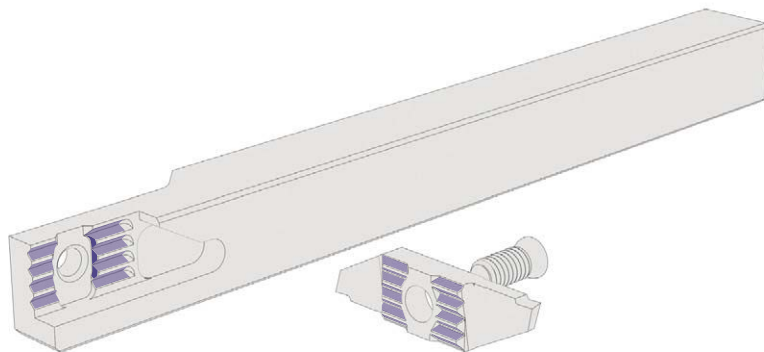
Infos and advantages

Economic performance!

Système de serrage à denture Applitec avec repositionnement au centre

Applitec-Zahnklemmsystem mit zentraler Neupositionierung

Applitec toothed clamping system with central repositioning

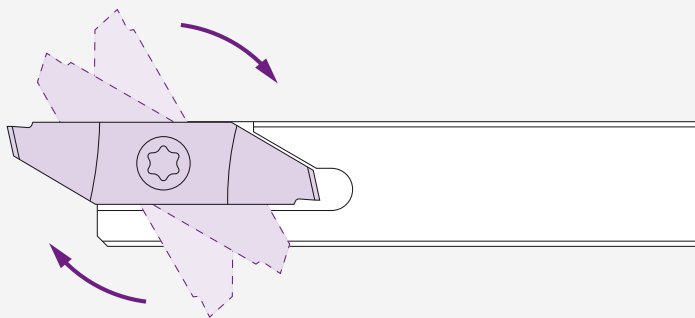


High precision

Grande précision lors du retournement de la plaquette

Hohe Präzision beim Wenden der Platte

High precision when flipping the insert

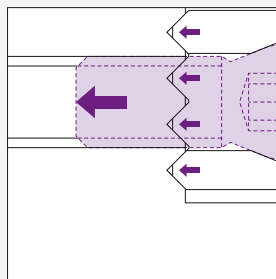


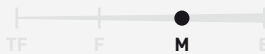
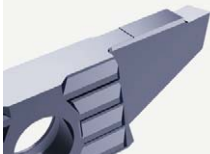
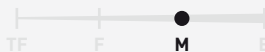
Applitec toothting

Système de serrage en fond de denture

Klemmvorrichtung an der Prothesenbasis

Clamping system at the denture base

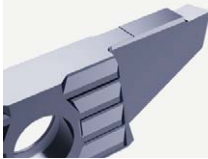
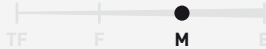


μK20	<div></div> <div>AP302</div> <div></div> <div>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</div> <div></div> <div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div> <div><ul style="list-style-type: none">• excellente nuance universelle• 1^{er} choix pour l'usinage des aciers, aciers inoxydables et alliages de titane• très bonne résistance à la température<ul style="list-style-type: none">• beste Universalsorte• für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bestens geeignet• sehr gute Warmfestigkeit<ul style="list-style-type: none">• best universal grade• first choice for steel, stainless steel and titanium alloys machining• very good heat resistance</div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★								
M	★★★★★								
N	★★★★★								
S	★★★★★								
μK20	<div></div> <div>AP202</div> <div></div> <div>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</div> <div></div> <div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div> <div><ul style="list-style-type: none">• nuance particulièrement adaptée aux faibles vitesses de coupe• ancienne nuance, disponible uniquement sur demande<ul style="list-style-type: none">• besonders geeignete Sorte für niedrige Schnittgeschwindigkeiten• ältere Sorte, nur auf Anfrage erhältlich<ul style="list-style-type: none">• grade particularly suitable for low cutting speeds• previous grade, available on request only</div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
P	★★★★★								
M	★★★★★								
N	★★★★★								
S	★★★★★								
μK20	<div></div> <div>N</div> <div></div> <div>Non revêtu Unbeschichtet Uncoated</div> <div><table><tr><td>P</td><td>★☆☆☆☆</td></tr><tr><td>M</td><td>★☆☆☆☆</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div> <div><ul style="list-style-type: none">• nuance micro-grain tenace• supporte les coupes interrompues et autres conditions d'usinage défavorables<ul style="list-style-type: none">• zähe Feinkornsorte• für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen<ul style="list-style-type: none">• tough micro-grain grade• suitable for interrupted cut and other unfavourable machining conditions</div>	P	★☆☆☆☆	M	★☆☆☆☆	N	★★★★★	S	★★★★★
P	★☆☆☆☆								
M	★☆☆☆☆								
N	★★★★★								
S	★★★★★								

Nuances

Sorten

Grades

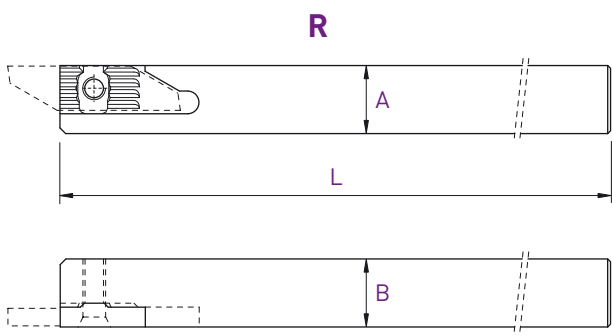
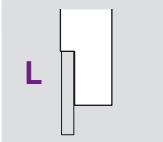
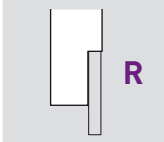
μK10	<div>AH302</div> <div></div>	<div> K10</div> <div>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</div> <div></div>	<div><table><tr><td>P</td><td>★★★★★</td></tr><tr><td>M</td><td>★★★★★</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★	<ul style="list-style-type: none">• nuance très résistante à l'usure• pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titanes	<ul style="list-style-type: none">• sehr verschleissfeste Sorte• für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen	<ul style="list-style-type: none">• very wear resistant grade• for light machining of steel, stainless steel and titanium alloys under favourable machining conditions
	P	★★★★★												
M	★★★★★													
N	★★★★★													
S	★★★★★													
μK10	<div>HN</div> <div></div>	<div> K10</div> <div>Non revêtu Unbeschichtet Uncoated</div>	<div><table><tr><td>P</td><td>★☆☆☆☆</td></tr><tr><td>M</td><td>★☆☆☆☆</td></tr><tr><td>N</td><td>★★★★★</td></tr><tr><td>S</td><td>★★★★★</td></tr></table></div>	P	★☆☆☆☆	M	★☆☆☆☆	N	★★★★★	S	★★★★★	<ul style="list-style-type: none">• nuance micro-grain très résistante à l'usure• recommandé pour l'usinage du titane faiblement allié• déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables	<ul style="list-style-type: none">• verschleissfeste Feinkornsorte• für die Bearbeitung von niedrig legiertem Titan empfehlenswert• für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet	<ul style="list-style-type: none">• wear resistant micro-grain grade• suitable for the machining of low alloyed titanium• not suitable for interrupted cut and other unfavourable machining conditions
	P	★☆☆☆☆												
M	★☆☆☆☆													
N	★★★★★													
S	★★★★★													

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Matière Werkstoff Material		Tournage Drehen Turning		Tronçonnage Abstechen Parting off	
		VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.01 - 0.20	80 - 150	0.01 - 0.15
Acier Stahl Steel < 600 N/mm ²	P	80 - 160	0.01 - 0.18	70 - 120	0.01 - 0.12
Acier Stahl Steel < 800 N/mm ²	P	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.10
Acier Stahl Steel > 800 N/mm ²	P	50 - 100	0.01 - 0.12	40 - 80	0.01 - 0.08
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.08
Aluminium	N	180 - 800	0.01 - 0.30	150 - 300	0.01 - 0.20
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.01 - 0.30	100 - 300	0.01 - 0.20
Titane Titan Titanium	S	30 - 70	0.01 - 0.12	30 - 50	0.01 - 0.06

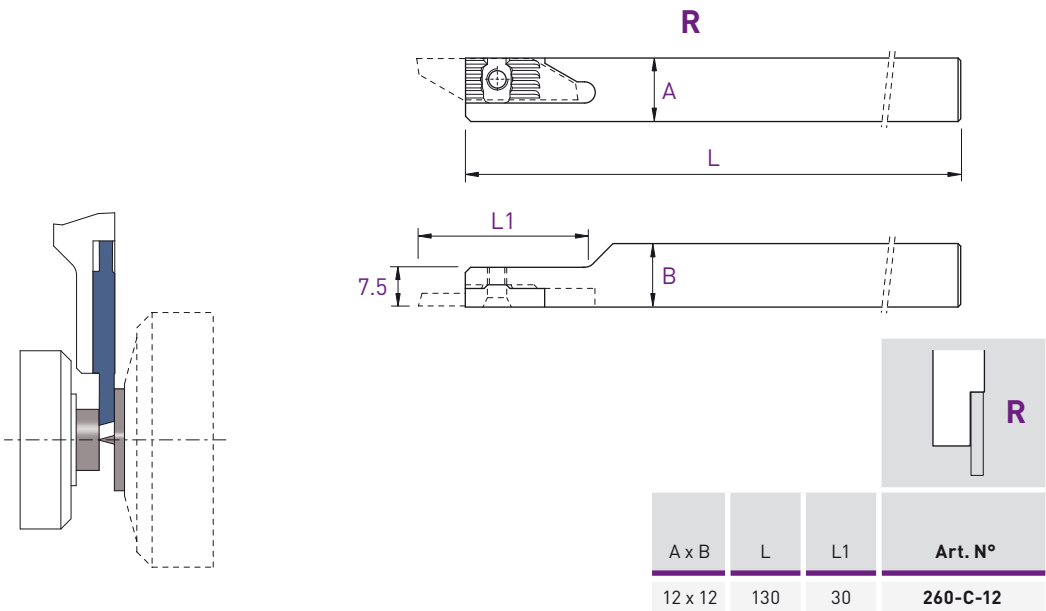


A x B	L	Art. N°	Art. N°
8 x 8	115	250-8	260-8
10 x 10	115	250-10	260-10
12 x 12	130	250-12	260-12
12 x 12	90	250-12-90	260-12-90
12.7 x 12.7	130	250-12.7	260-12.7
16 x 16	130	250-16	260-16
16 x 16	75	250-16-75	260-16-75
20 x 20	120	250-20	260-20

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils
Halter
Holders

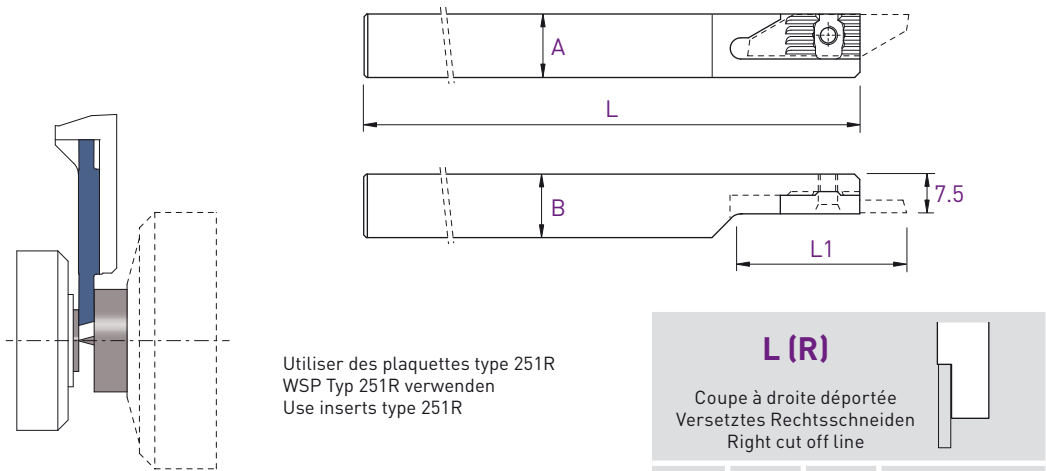
260-C



Porte-outils
Halter
Holders

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

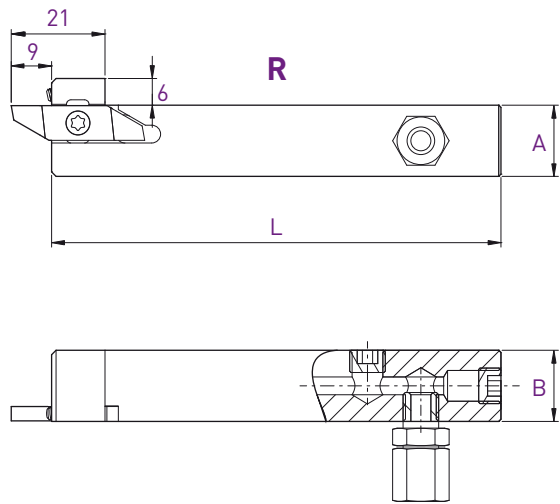
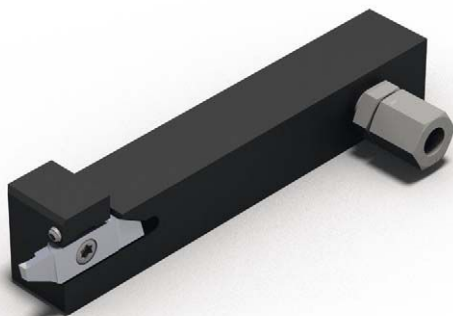
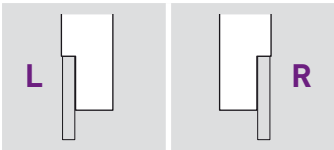
250RC



Chaque support est livré avec une ou plusieurs vis.
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Die Schlüssel sind separat zu bestellen.
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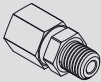
250-JET / 260-JET

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply



A x B	L	Art. N°	Art. N°
10 x 12	100	250-1012-JET	260-1012-JET
12 x 12	100	250-12-JET	260-12-JET
16 x 16	100	250-16-JET	260-16-JET
20 x 20	100	250-20-JET	260-20-JET

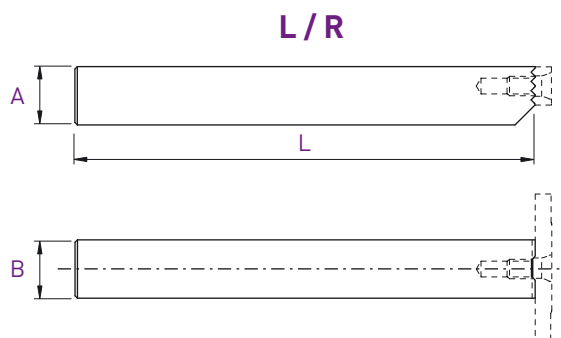
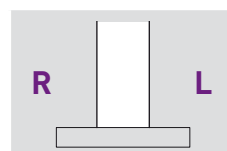
Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Pièces de rechange Ersatzteile Spare parts			Buse Düse Nozzle 
	Art. N°	Art. N°	Art. N°
250-JET / 260-JET	J-M8X1-D6	JB-M8X1	JJ-M3X6-D1.5

Porte-outils

Halter
Holders

260/250F

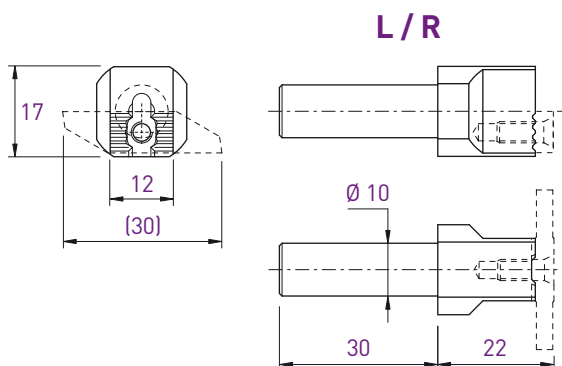
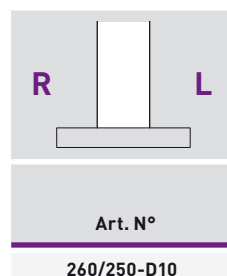


A x B	L	Art. N°
10 x 12	120	260/250F-1012
12 x 12	120	260/250F-1212

Porte-outils

Halter
Holders

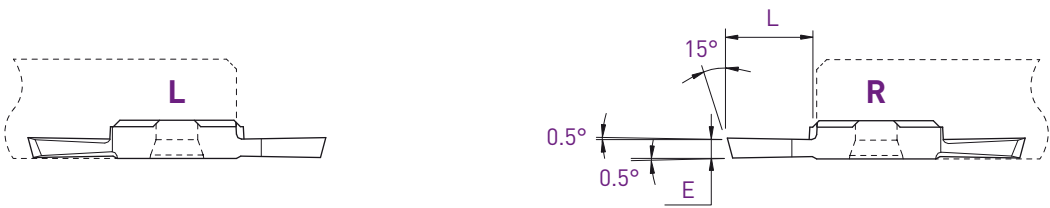
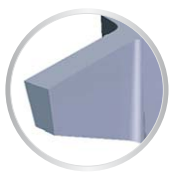
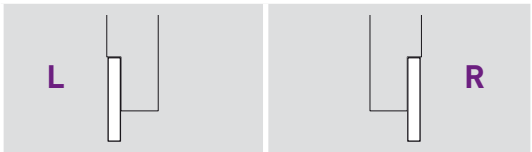
260/250-D



Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.



E	L	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div></div> <div></div> <div>N</div> <div></div> </div>			Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div></div> <div></div> <div>N</div> <div></div> </div>		
			AP302	AP202	N (µk20)		AP302	AP202	N (µk20)
0.8	4	251-0.8	●	●	●	261-0.8	●	●	●
1.0	5	251-1.0	●	●	●	261-1.0	●		●
1.2	5	251-1.2	●	●	●	261-1.2	●	●	●
1.5	7	251-1.5	●		●	261-1.5	●		●
2.0	8.5	251-2.0	●		●	261-2.0	●		●
2.5	8.5	251-2.5	●	●	●	261-2.5	●		●

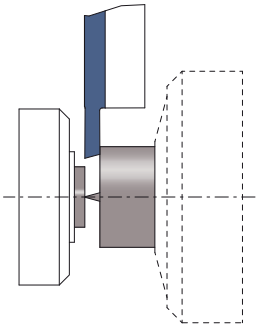
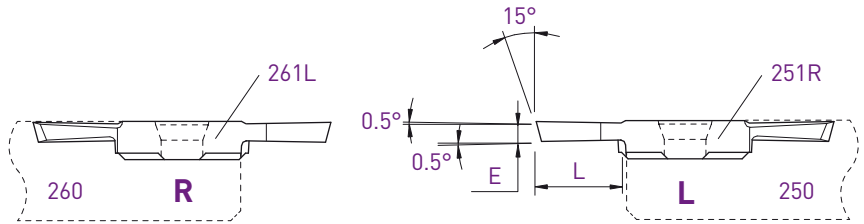
Tronçonnage

Abstechen
Parting off

Coupe déportée

Versetztes Schneiden
Cut off line

261L / 251R



R (L)

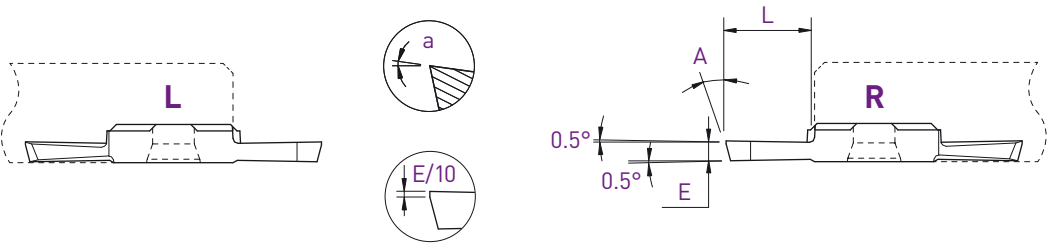
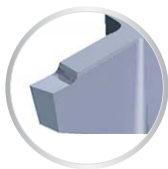
Coupe à gauche déportée
Versetztes Linksschneiden
Left cut off line

L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

E	L	Art. N°	P	P	
			M	M	
			N	N	N
			S	S	
			AP302	AP202	N [µk20]
1.0	5	-			
1.5	7	-			
2.0	8.5	261L-2.0	•	•	•

Art. N°	P	P	
	M	M	
	N	N	N
	S	S	
	AP302	AP202	N [µk20]
251R-1.0	•		•
251R-1.5	•	•	•
251R-2.0	•		•



				L				R			

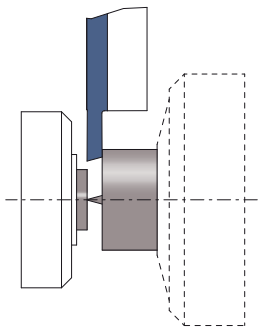
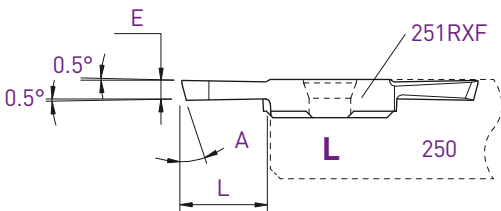
Tronçonnage

Abstechen
Parting off

Coupe déportée

Versetztes Schneiden
Cut off line

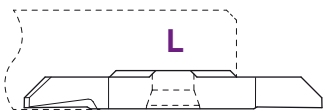
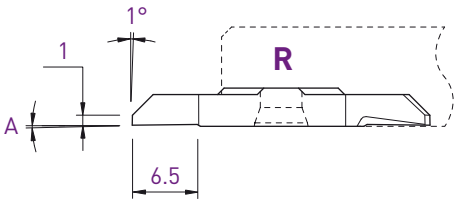
251RXF



L (R)

Coupe à droite déportée
Versetztes Rechtsschneiden
Right cut off line

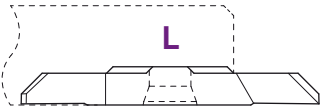
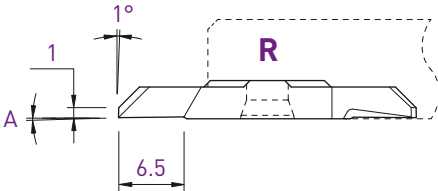
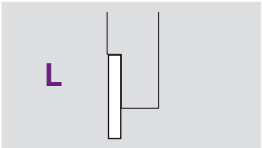
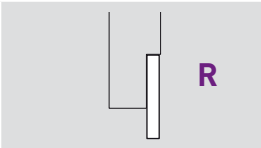
a	E	L	A	Art. N°			
							
							
							
					AP302	AP202	N [µk20]
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4°	1.5	7	15°	251RXF-1.5	●	●	●
4°	2.0	8.5	15°	251RXF-2.0	●		●



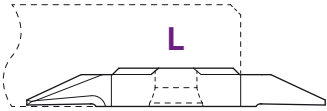
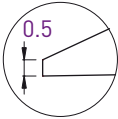
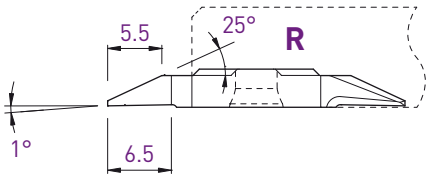
L				R					
A		Art. N°			Art. N°		Art. N°		
		AP302	AP202	N (µk20)			AP302	AP202	N (µk20)
0°	252	●	●	●	262	●	●	●	●
2°	252-2°	●	●	●	262-2°	●	●	●	●

Tournage avant
Vorwärts drehen
Front turning

252X / 262X



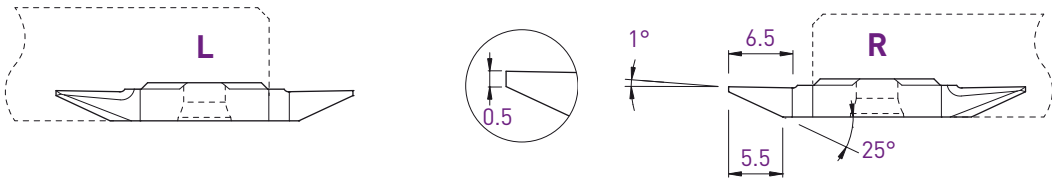
A	Art. N°	P	P		Art. N°	P	P	
		M	M			M	M	
		N	N	N		N	N	N
		S	S			S	S	
		AP302	AP202	N [µk20]		AP302	AP202	N [µk20]
0°	252X	●	●	●	262X	●		●
2°	252X-2°	●	●	●	262X-2°	●	●	●



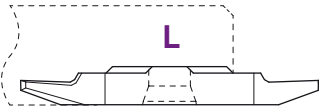
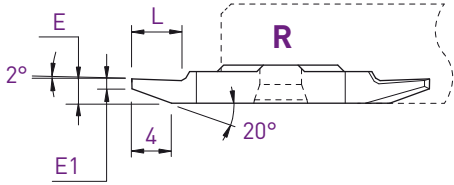
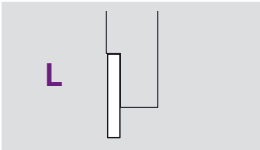
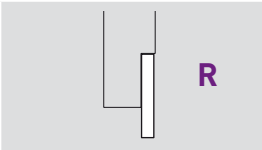
<div>L</div>				<div>R</div>			
Art. N°	P	P		Art. N°	P	P	
	M	M			M	M	
	N	N	N		N	N	N
	S	S			S	S	
	AP302	AP202	N (µk20)		AP302	AP202	N (µk20)
252S05	•	•	•	262S05	•	•	•

Tournage arrière
Rückwärts drehen
Back turning

253S / 263S



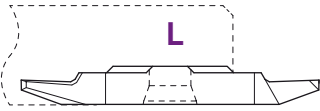
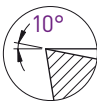
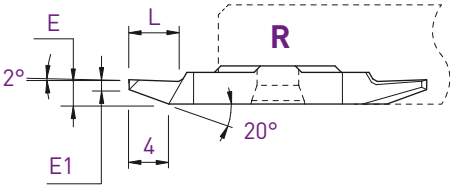
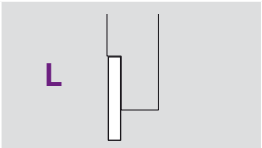
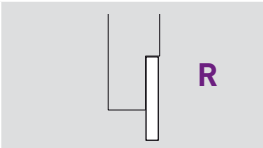
L				R			
Art. N°				Art. N°			
253S05	●	●	●	263S05	●	●	●



E	E1	L	Art. N°	P	M	N	S	AP302	AP202	N (µk20)	Art. N°	P	M	N	S	AP302	AP202	N (µk20)
2.0	0.5	4	253-0.5	●	●	●					263-0.5	●						
2.5	1.0	5	253-1.0	●	●	●					263-1.0	●						

Tournage arrière
Rückwärts drehen
Back turning

253X / 263X



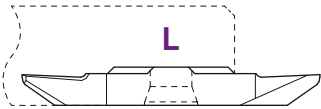
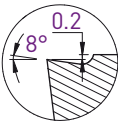
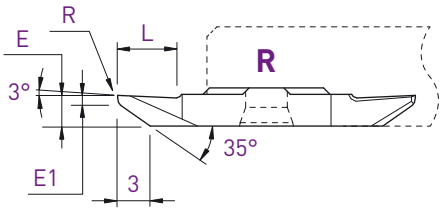
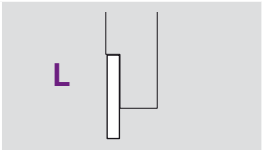
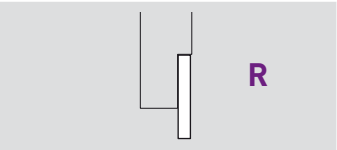
E	E1	L	Art. N°	AP302	AP202	N [µk20]	Art. N°	AP302	AP202	N [µk20]
2.0	0.5	5	253X-0.5	●	●	●	263X-0.5	●	●	●
2.5	1.0	5	253X-1.0	●	●	●	263X-1.0	●		●

253VX-8° / 263VX-8°

Tournage arrière

Rückwärts drehen

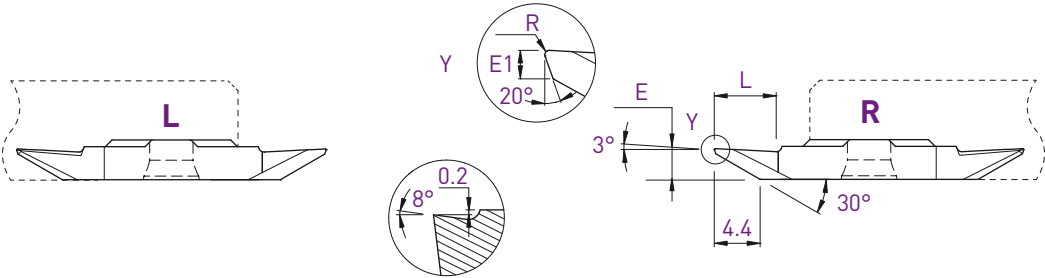
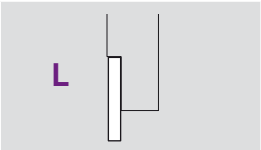
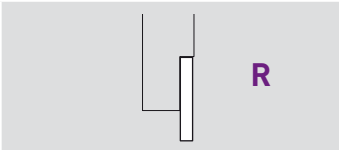
Back turning



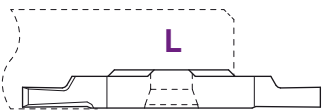
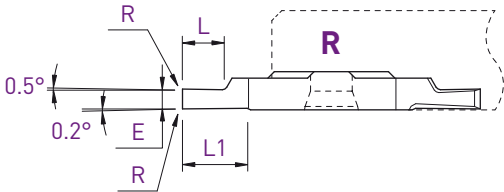
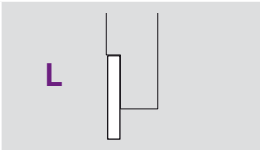
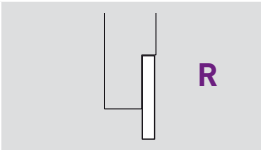
E	E1	L	R	Art. N°	AP302	AP202	N [µk20]	Art. N°	AP302	AP202	N [µk20]	AH302	HN [µk10]
3.1	1.0	6	0	253VX-8°	●	●	●	263VX-8°	●	●	●	●	●
3.1	1.0	6	0.08	-				263VX-8°-R08	●	●	●	●	●
3.1	1.0	6	0.20	-				263VX-8°-R20	●	●	●	●	●

Tournage arrière
Rückwärts drehen
Back turning

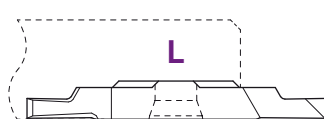
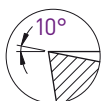
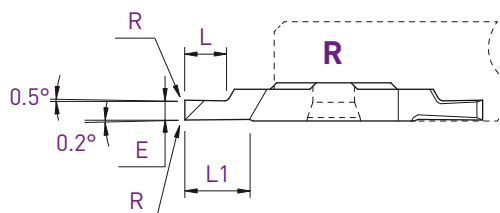
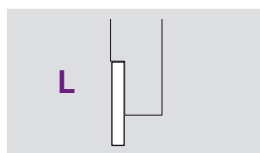
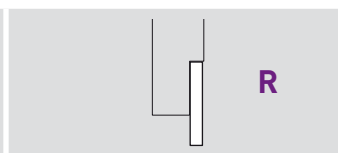
253VX-805 / 263VX-805



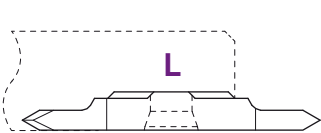
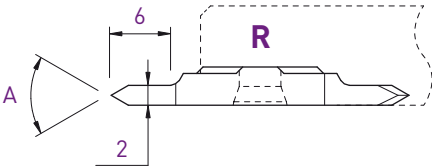
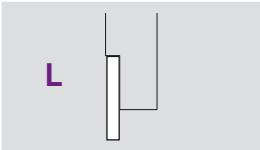
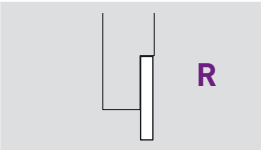
E	E1	L	R	Art. N°	AP302	AP202	N [µk20]	Art. N°	AP302	AP202	N [µk20]	AH302	HN [µk10]
3.0	0.5	6	0.08	253VX-805-R08	●	●	●	263VX-805-R08	●	●	●	●	●



E	L	L1	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>			Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>		
					AP302	AP202	N (µk20)		AP302	AP202	N (µk20)
0.8	2	4	0	254-0.8	●	●	●	264-0.8	●	●	●
1.0	2.5	4	0	254-1.0	●	●	●	264-1.0	●	●	●
1.2	3	4	0	254-1.2	●	●	●	264-1.2	●	●	●
1.5	3	4	0	254-1.5	●	●	●	264-1.5	●	●	●
1.8	4	6.5	0	-				264-1.8	●	●	●
2.0	4	6.5	0	254-2.0	●	●	●	264-2.0	●	●	●
2.5	6	6.5	0	254-2.5	●	●	●	264-2.5	●	●	●
3.0	6.5	6.5	0	254-3.0	●	●	●	264-3.0	●	●	●

Fonçage-tournageEinstechen und drehen
Grooving and turning**254X / 264X**

E	L	L1	R	Art. N°	P M N S	P M N S	N [µk20]	Art. N°	P M N S	P M N S	N [µk20]	AH302 HN [µk10]
0.8	2	4	0	254X-0.8	•	•	•	264X-0.8	•	•	•	
1.0	2.5	4	0	254X-1.0	•	•	•	264X-1.0	•	•	•	
1.0	2.5	4	0.08	-				264X-1.0-R08	•	•	•	• •
1.2	3	4	0	254X-1.2	•	•	•	264X-1.2	•	•	•	
1.5	3	4	0	254X-1.5	•	•	•	264X-1.5	•		•	
1.5	3	4	0.08	-				264X-1.5-R08	•	•	•	• •
1.5	3	4	0.20	-				264X-1.5-R20	•	•	•	• •
2.0	4	6.5	0	254X-2.0	•		•	264X-2.0	•	•	•	
2.0	4	6.5	0.08	-				264X-2.0-R08	•	•	•	• •
2.0	4	6.5	0.20	-				264X-2.0-R20	•	•	•	• •
2.5	6	6.5	0	254X-2.5	•	•	•	264X-2.5	•	•	•	
2.5	6.5	6.5	0.08	-				264X-2.5-R08	•	•	•	• •
2.5	6.5	6.5	0.20	-				264X-2.5-R20	•	•	•	• •
3.0	6.5	6.5	0	254X-3.0	•	•	•	264X-3.0	•		•	
3.0	6.5	6.5	0.08	-				264X-3.0-R08	•	•	•	• •
3.0	6.5	6.5	0.20	-				264X-3.0-R20	•	•	•	• •

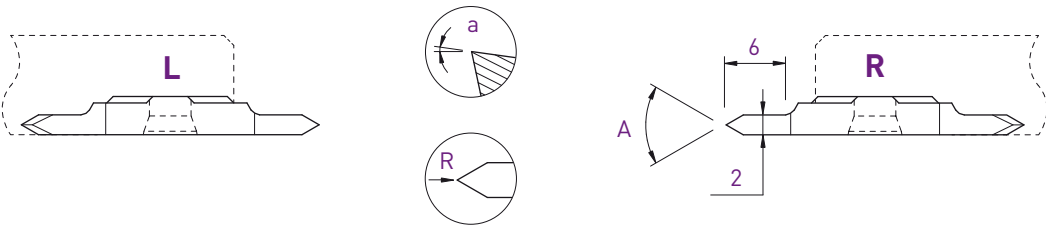
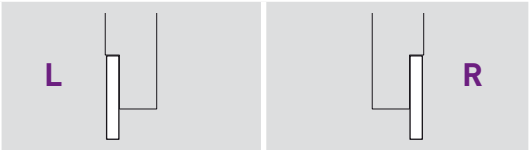


A	R	a	Art. N°	P	M	N	S	AP302	AP202	N (µk20)	Art. N°	P	M	N	S	AP302	AP202	N (µk20)
60°	0	0°	256-60-2.0	•				•			266-60-2.0	•				•		
60°	0.06	3°	256-AG60°	•	•			•			266-AG60°	•				•		

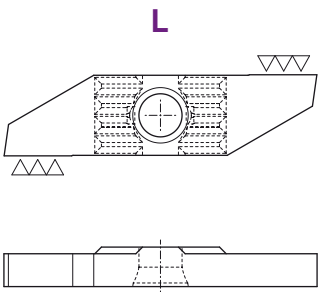
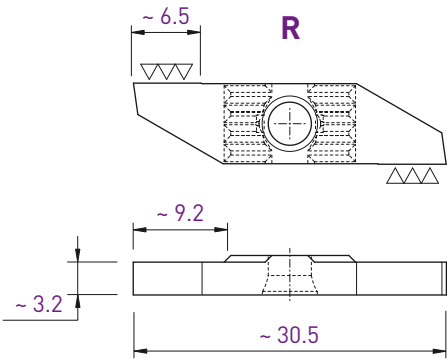
Filetage
Gewinde drehen
Threading

Partial profile 55°

256-55 / 266-55



A	R	a	Art. N°	P	P		Art. N°	P	P	
				M	M			M	M	
				N	N	N		N	N	N
				S	S			S	S	
				AP302	AP202	N (µk20)				
55°	0	0°	256-55-2.0	●	●	●	266-55-2.0	●	●	●
55°	0.06	3°	256-AG55°	●	●	●	266-AG55°	●	●	●



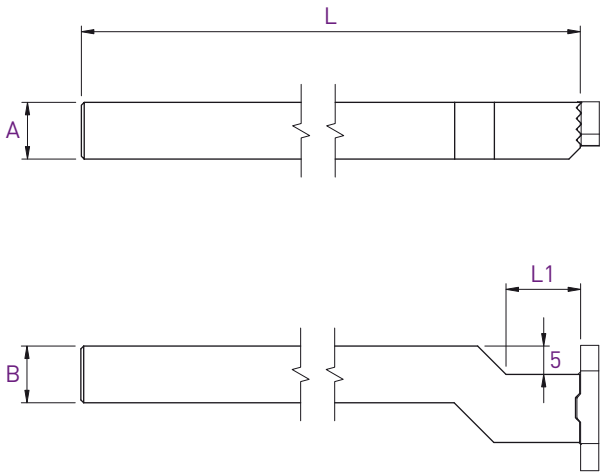
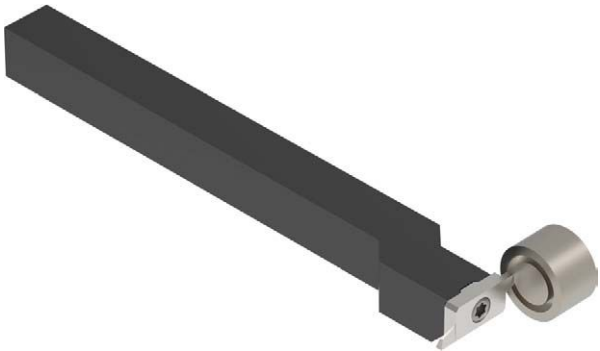
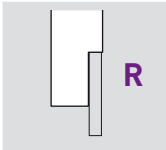
											
Art. N°	AP302										
	AP202										
	N [µk20]										
	AH302										
	HN [µk10]										
251-E	●	●	●	●	●						

											
Art. N°	AP302										
	AP202										
	N [µk20]										
	AH302										
	HN [µk10]										
261-E	●	●	●	●	●						

Porte-outils
Halter
Holders

RFG

250RFG



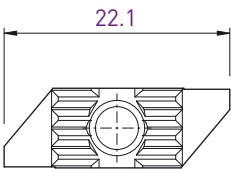
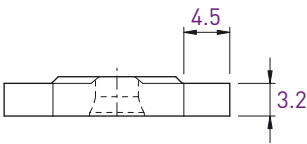
A x B	L	L1	Art. N°
8x10	130	13	250RFG-0810
10x10	130	13	250RFG-1010
12x12	130	13	250RFG-1212
16x16	130	16	250RFG-1616

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

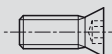
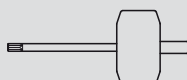
Pièces de rechange Ersatzteile Spare parts	Options
Art. N°	Art. N°
V-M4X9-T15	C-T15



Plaquette ébauche pour porte-outils axial RFG (p. 6.29)
WSP-Rohling für axialen Halter RFG (S. 6.29)
Blank insert for axial holder RFG (p. 6.29)

L			
Art. N°		P	☐
		M	☐
		N	☒
		S	☐
251RFG-EP		AP302	N (µk20)
			☒

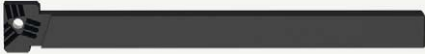
Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories

Porte-outils Halter Holders			Options				
				Recommandation de serrage Drehmoment Empfehlung Clamping recommendation			
			Option Art. N°				
250-8 / 260-8	V-M3.5X7.3-T15	C-T15	SET-NM3.0-TX15	3 Nm			
250-... / 260-...							
260/250-...	V-M4X9-T15						
250RFG							
250RC / 260-C	V-M4X7.3-T15						

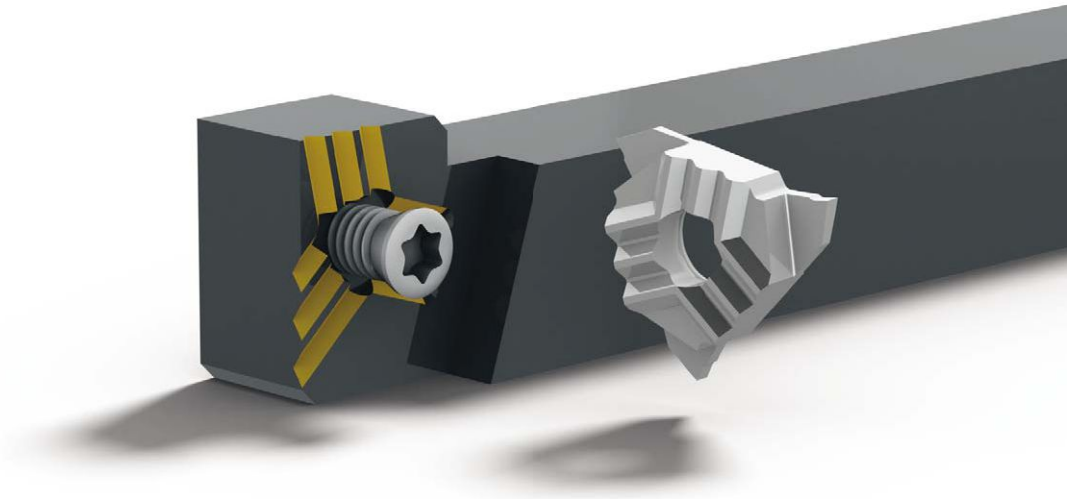
TRIO-Line



APPLITEC
CUTTING TOOLS

	Infos et avantages Infos und Vorteile Infos and advantages				> 7.03
	Codification Bezeichnungssystem Designation system				> 7.04
	Nuances Sorten Grades				> 7.06
	Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data				> 7.07
	Porte-outils Halter Holders				> 7.08
GX	Plaquettes de gorge pour circlips Einstechwendeplatte für Seegerring Grooving inserts for retaining ring	DIN6799 & DIN471			> 7.09
FT	Tournage avant Vorwärts drehen Front turning				> 7.10
GT	Fonçage-tournage Einstechen und drehen Grooving and turning				> 7.11
GTX	Fonçage-tournage avec coupe positive Einstechen und drehen mit positivem Spanwinkel Grooving and turning with positive cut				> 7.12
EP	Plaquettes ébauches WSP-Rohlinge Blank inserts				> 7.13
	Accessoires Zubehöre Accessories				> 7.13

*Rigid clamping system with the famous
Applitec teeth clamping*



**Avantages
Vorteile
Advantages**

- dimensions spécifiques
- système de serrage à denture à 1 vis
- pour opération de faible profondeur
- solution optimisée (proportion réduite de carbure pour un équilibre parfait entre coût et performance)

- spezifische Abmessungen
- Spannsystem mit 1 Schraube
- für geringe Tiefenbearbeitung
- optimierte Lösung (reduzierte Hartmetallschicht für ein perfektes Gleichgewicht zwischen Kosten und Leistung)

- specific dimensions
- clamping system with 1 screw
- for shallow operation
- optimized solution [reduced carbide layer for a perfect balance between cost and performance]

Codification des porte-outils

Kodifizierung für Halter

Coding guide for holders

T216- H0810R -

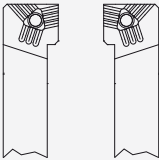
90

Ou / Oder / Or

Porte-outils
Halter
Holders

L

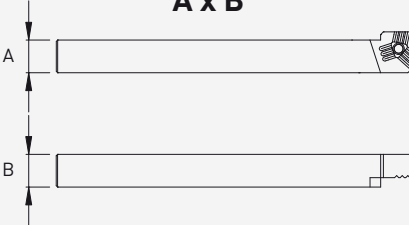
R



Longueur
Länge
Length

A x B	L
8x10	115
10x10	130
12x12	130
16x16	120
20x20	130

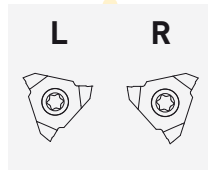
A x B



Applitec TRIO-Line
Applitec TRIO-Line
Applitec TRIO-Line

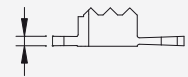
Système de serrage à denture avec 1 vis de fixation
Spannsystem mit Verzahnung mit 1 Spannschraube
Teeth clamping system with 1 screw

T 2 1 6 R - GX 026 - HTA



Nuance
Sorte
Grade

Épaisseur de coupe
Schnittbreite
Cutting thickness



Géométrie d'usinage
Bearbeitungsgeometrie
Machining geometry

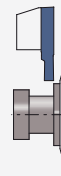
GX
Grooving



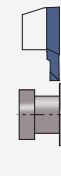
FT
Front turning



GT
Grooving /
turning



GTX
Grooving /
turning positif



EP
Blank



Applitec TRIO-Line
Applitec TRIO-Line
Applitec TRIO-Line

Système de serrage à denture avec 1 vis de fixation
Spannsystem mit Verzahnung mit 1 Spannschraube
Teeth clamping system with 1 screw

Nuances

Sorten

Grades

HN



 K10

Non revêtu
Unbeschichtet
Uncoated

P	★	★	★	★	★
M	★	★	★	★	★
N	★	★	★	★	★
S	★	★	★	★	★

μK10

- nuance micro-grain très résistante à l'usure
- recommandé pour l'usinage du laiton, de l'aluminium et du titane faiblement allié
- pour pièces fragiles de très petits diamètres

- sehr verschleissfeste Feinkornsorte
- für die Bearbeitung von Messing und niedrig legiertem Aluminium und Titan empfehlenswert
- für empfindliche und sehr kleine Werkstücke

- very wear resistant micro-grain grade
- suitable for the machining of brass and low alloyed aluminium and titanium
- for fragile and very small work pieces

HTA



 K10

μK10 + revêtement PVD
μK10 + PVD Beschichtung
μK10 + PVD coating

P	★	★	★	★	★
M	★	★	★	★	★
N	★	★	★	★	★
S	★	★	★	★	★

μK10

- nuance très résistante à l'usure
- pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane

TF

F

M

E

- sehr verschleissfeste Sorte
- für die Feinbearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen bei guten Bearbeitungsbedingungen

- very wear resistant grade
- for light machining of steel, stainless steel and titanium alloys under favourable machining conditions

Paramètres de coupe indicatifs

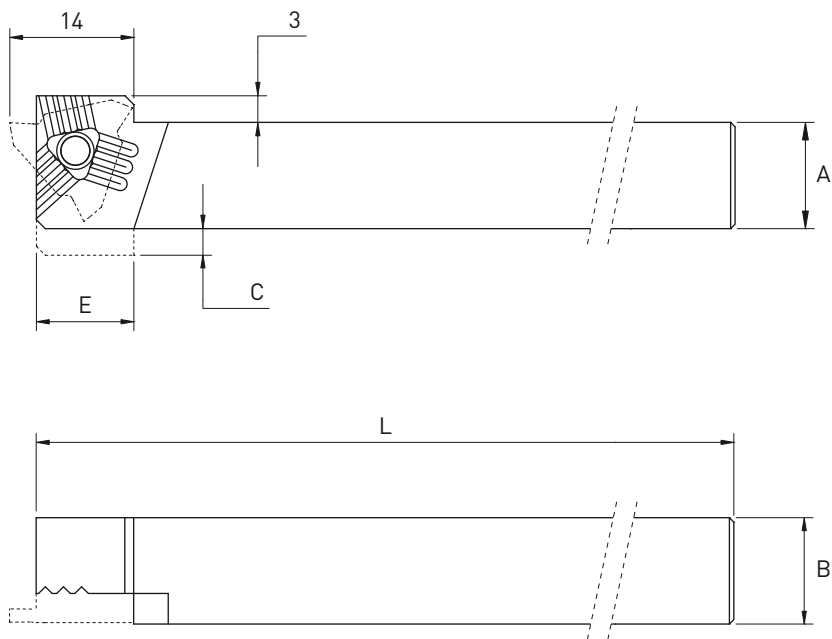
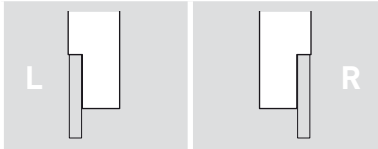
Empfohlene Schnittwerte

Standard machining data

		<div>FTGTGTX</div> <div></div> <div>Tournage Drehen Turning</div>			<div>GXGTGTX</div> <div></div> <div>Foncer Einstechen Grooving</div>		
Matière Werkstoff Material		VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)		
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.01 - 0.20	80 - 150	0.01 - 0.15		
Acier Stahl Steel	< 600 N/mm² P	80 - 160	0.01 - 0.18	70 - 120	0.01 - 0.12		
Acier Stahl Steel	< 800 N/mm² P	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.10		
Acier Stahl Steel	> 800 N/mm² P	50 - 100	0.01 - 0.12	40 - 80	0.01 - 0.08		
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.01 - 0.15	60 - 100	0.01 - 0.08		
Aluminium	N	180 - 800	0.01 - 0.30	150 - 300	0.01 - 0.20		
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.01 - 0.30	100 - 300	0.01 - 0.20		
Titane Titan Titanium	S	30 - 70	0.01 - 0.12	30 - 50	0.01 - 0.06		

T216-L/R

Porte-outils
Halter
Holders

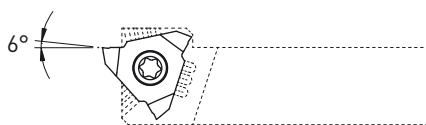
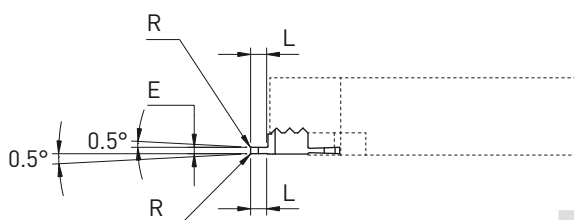
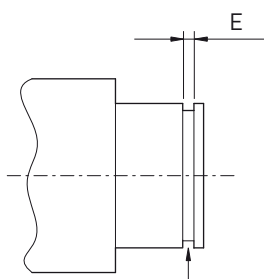


AxB	C	E	L	Art. N°	Art. N°
8x10	4	11	115	T216-H0810L	T216-H0810R
10x10	2	8	130	T216-H1010L	T216-H1010R
12x12	-	-	130	T216-H1212L	T216-H1212R
12x12	-	-	90	T216-H1212L-90	T216-H1212R-90
16x16	-	-	120	T216-H1616L	T216-H1616R
20x20	-	-	130	T216-H2020L	T216-H2020R

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben
geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Plaquettes de gorge pour circlips
 Einstechwendeplatte für Seegerring
 Grooving inserts for retaining ring

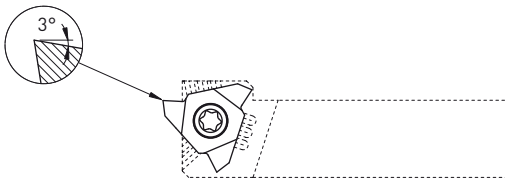
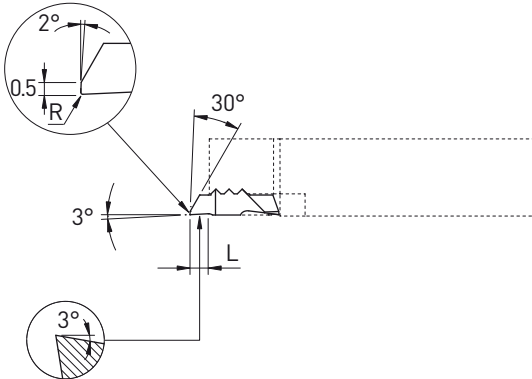
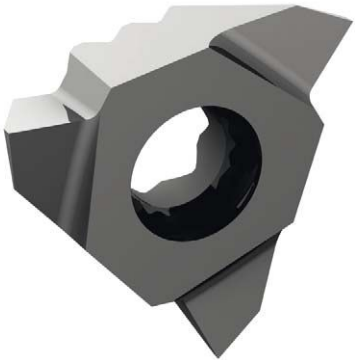
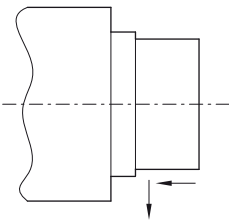
GX



Selon DIN6799 et DIN471
 Gemäss DIN6799 und DIN471
 According to DIN6799 and DIN471



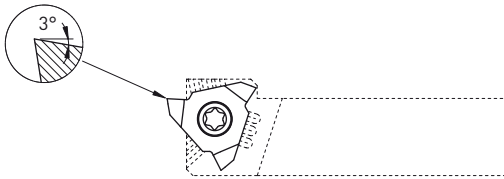
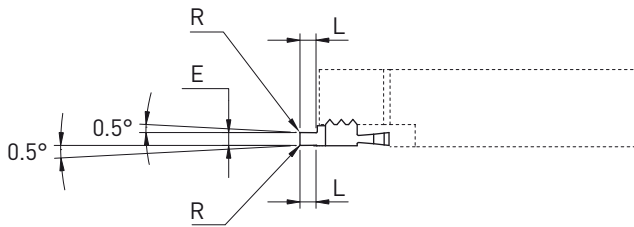
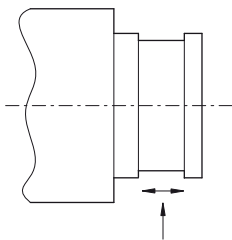
			L		R	
			<div> <div></div> <div></div> </div>		<div> <div></div> <div></div> </div>	
			<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>		<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div>	
			<div> <div>HTA</div> <div>HN (μk10)</div> </div>		<div> <div>HTA</div> <div>HN (μk10)</div> </div>	
E ±0.01	L	R	Art. N°		Art. N°	
0.26	0.8	0.03	T216L-GX026		T216R-GX026	
0.36	0.8	0.03	T216L-GX036		T216R-GX036	
0.46	0.8	0.03	T216L-GX046		T216R-GX046	
0.50	1.5	0.03	T216L-GX050		T216R-GX050	
0.57	1.5	0.03	T216L-GX057		T216R-GX057	
0.67	1.5	0.03	T216L-GX067		T216R-GX067	
0.77	2.0	0.03	T216L-GX077		T216R-GX077	
0.87	2.0	0.03	T216L-GX087		T216R-GX087	
0.97	2.5	0.03	T216L-GX097		T216R-GX097	
1.00	2.5	0.03	T216L-GX100		T216R-GX100	
1.10	2.5	0.03	T216L-GX110		T216R-GX110	
1.20	2.5	0.03	T216L-GX120		T216R-GX120	
1.30	2.5	0.03	T216L-GX130		T216R-GX130	
1.50	2.5	0.03	T216L-GX150		T216R-GX150	
1.60	2.5	0.03	T216L-GX160		T216R-GX160	
1.85	2.5	0.03	T216L-GX185		T216R-GX185	
2.00	2.5	0.03	T216L-GX200		T216R-GX200	
2.50	2.5	0.03	T216L-GX250		T216R-GX250	



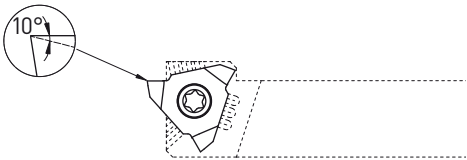
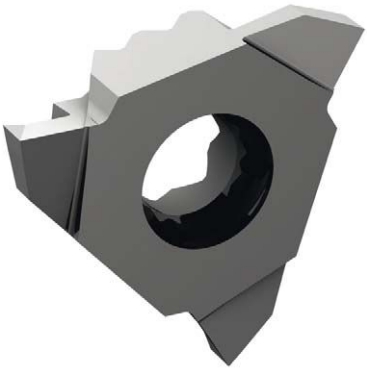
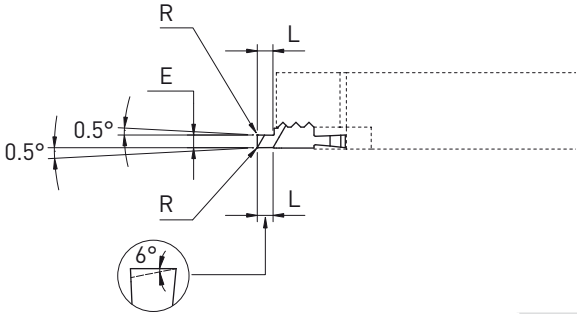
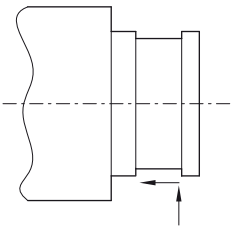
		L		R	
		L		R	
		Art. N°		Art. N°	
		HTA		HTA	
		HN (µk10)		HN (µk10)	
L	R	T216L-FT		T216R-FT	
3.0	0.03	● ●		● ●	
3.0	0.08	T216L-FT-R08		T216R-FT-R08	
		● ●		● ●	

Fonçage-tournage

Einstechen und drehen
Grooving and turning

GT

			L		R	
			L		R	
E	L	R	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>HTA</div> <div>HN (µk10)</div> </div>	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>HTA</div> <div>HN (µk10)</div> </div>
0.5	1.5	0.03	T216L-GT050	• •	T216R-GT050	• •
1.0	2.5	0.03	T216L-GT100	• •	T216R-GT100	• •
1.0	2.5	0.08	T216L-GT100-R08	• •	T216R-GT100-R08	• •
1.5	2.5	0.03	T216L-GT150	• •	T216R-GT150	• •
1.5	2.5	0.08	T216L-GT150-R08	• •	T216R-GT150-R08	• •
1.5	2.5	0.15	T216L-GT150-R15	• •	T216R-GT150-R15	• •
2.0	2.5	0.03	T216L-GT200	• •	T216R-GT200	• •
2.0	2.5	0.08	T216L-GT200-R08	• •	T216R-GT200-R08	• •
2.0	2.5	0.15	T216L-GT200-R15	• •	T216R-GT200-R15	• •
2.5	2.5	0.15	T216L-GT250-R15	• •	T216R-GT250-R15	• •

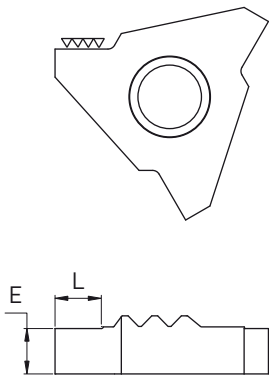


			L		R	
						
			<div><div>P</div><div>M</div><div>N</div><div>S</div></div>		<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	
			HTA		HTA	
			HN (µk10)		HN (µk10)	
E	L	R	Art. N°		Art. N°	
1.0	2.5	0.03	T216L-GTX100	• •	T216R-GTX100	• •
1.0	2.5	0.08	T216L-GTX100-R08	• •	T216R-GTX100-R08	• •
1.5	2.5	0.03	T216L-GTX150	• •	T216R-GTX150	• •
1.5	2.5	0.08	T216L-GTX150-R08	• •	T216R-GTX150-R08	• •
1.5	2.5	0.15	T216L-GTX150-R15	• •	T216R-GTX150-R15	• •
2.0	2.5	0.03	T216L-GTX200	• •	T216R-GTX200	• •
2.0	2.5	0.08	T216L-GTX200-R08	• •	T216R-GTX200-R08	• •
2.0	2.5	0.15	T216L-GTX200-R15	• •	T216R-GTX200-R15	• •
2.5	2.5	0.15	T216L-GTX250-R15	• •	T216R-GTX250-R15	• •

Plaquettes ébauches

WSP-Rohlinge
Blank inserts

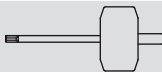
EP



		L		R	
					
E	L	Art. N°	HTA HN (µk10) <div>P M N S</div>	Art. N°	HTA HN (µk10) <div>P M N S</div>
~3	3	T216L-EP	●	T216R-EP	●

Accessoires

Zubehöre
Accessories

Porte-outils Halter Holders		Options	
			
T216-H...	V-M4X9-T15	C-T15	SET-NM3.0-TX15

Recommandation de serrage
Drehmoment Empfehlung
Clamping recommendation

3.0 Nm

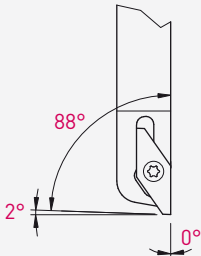
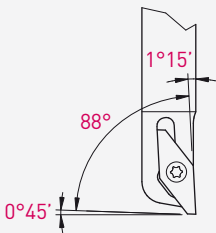
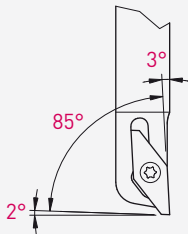
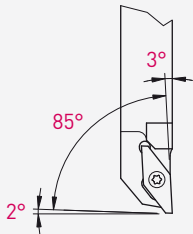
TURN-Line



APPLITEC
CUTTING TOOLS

Index

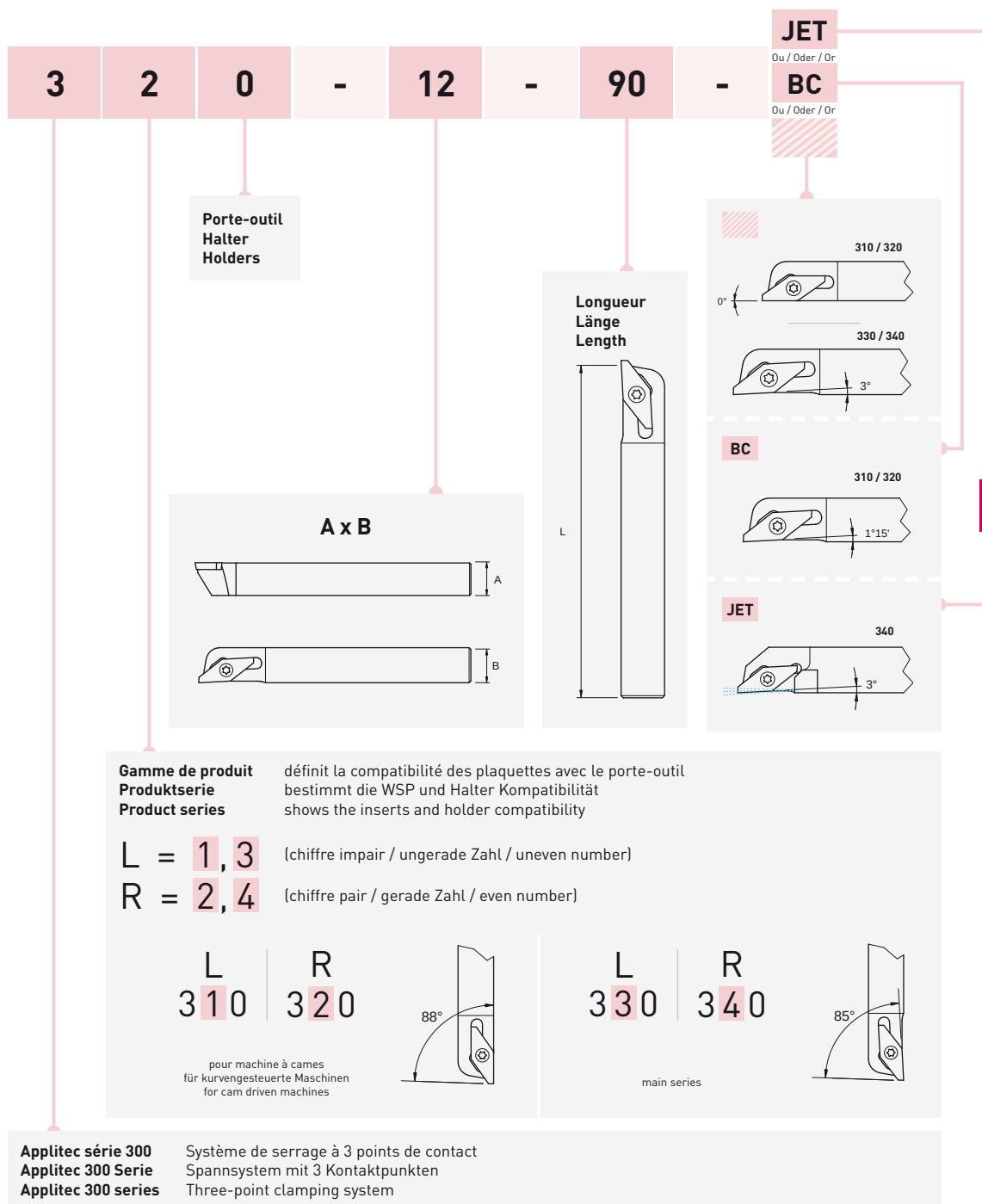
Codification Kodifizierung Coding guide	> 8.03
Infos et avantages Infos und Vorteile Infos and advantages	> 8.05
Conseils d'utilisation Anwendungsempfehlungen Application recommendations	> 8.06
Nuances Sorten Grades	> 8.07
Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data	> 8.11

88°	Tournage avant Vorwärts drehen Front turning	310 / 320	310-BC / 320-BC	 > 8.12
				
85°	Tournage avant Vorwärts drehen Front turning	330 / 340	340-JET	 > 8.16
				

Codification des porte-outils

Kodifizierung für Halter

Coding guide for holders

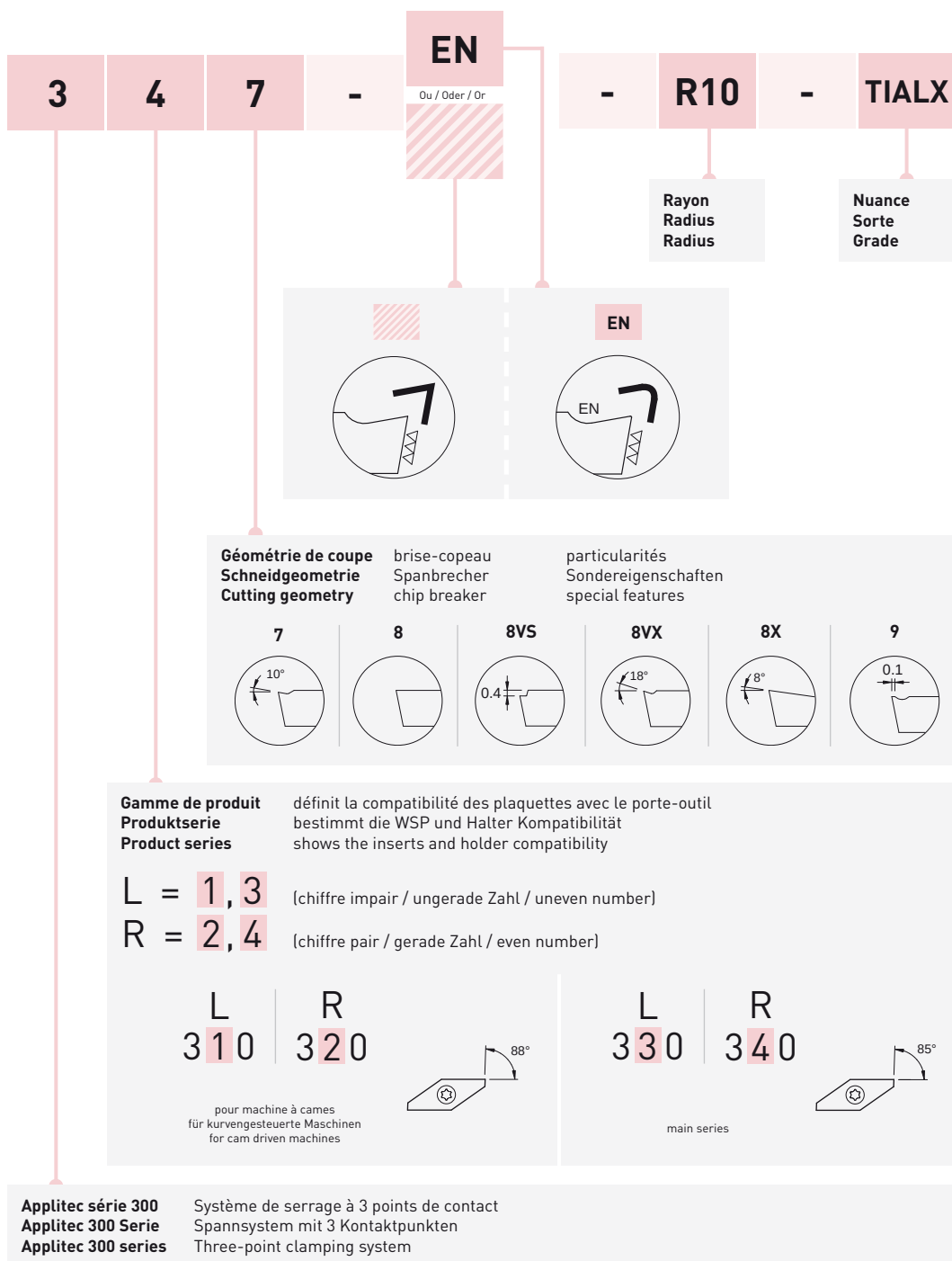


TURN-Line

Codification des plaquettes

Kodifizierung für WSP

Coding guide for inserts

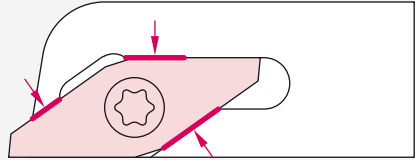


3 contact points

Pour de meilleures performances

Für bessere Leistung

For better performance

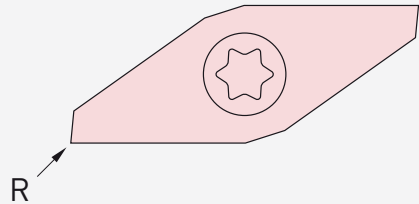


R min = 0

Disponible avec et sans rayon

Verfügbar mit und ohne Radius

Available with and without radius

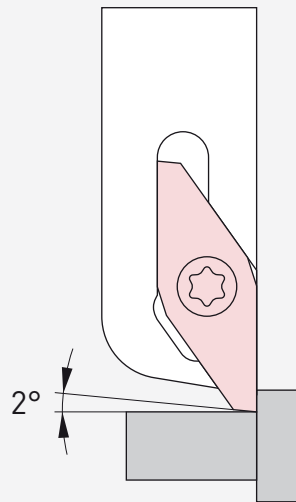


Wiper effect

Pour un meilleur état de surface

Für eine bessere Oberflächengüte

For a better surface finish



Conseils d'utilisation

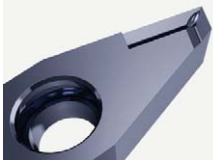
Anwendungsempfehlungen

Application recommendations

Géométries de coupe Spanformgeometrien Cutting geometry		(P) Acier de décolletage Automatenstahl Free-cutting steel	(P) Acier Stahl Steel	(M) Acier inoxydable Rostfreistahl Stainless steel	(N) Aluminium	(N) Laiton, bronze Messing, Bronze Brass, bronze	(N) Cuivre Kupfer Copper	(S) Titane Titane Titanium	★ 1 ^{er} choix 1. Wahl 1 st choice	☆ Recommandé Empfohlen Recommended	☑ Pour pièces fragiles de très petits diamètres Für zerbrechliche Teile mit sehr kleinen Durchmessern For fragile and very small work pieces
	3_7	★	★	★	★		★	☆	Géométrie universelle, très bonne maîtrise du copeau Allgemeine Geometrie, sehr gute Spankontrolle All-round insert with efficient chip control		
	3_7-EN	☆	★	☆					Arête renforcée (augmente l'effort de coupe) Verstärkte Schneidkante (Schneidkraftehöhung) Reinforced cutting edge (increases cutting force) f min : 0.02 mm/U		
	3_8	☑	☑	☑		★			Géométrie plate classique Standard flache Geometrie Standard flat geometry		
	3_8VS	☆		☆	☑		☑	☑	Brise-copeau pour usinage léger en finition Spanbrecher für leichte Schlichtbearbeitung Chip-breaker for light finishing operation		
	3_8VX	★	★	★	★		★	★	Très bonne maîtrise du copeau Sehr gute Spankontrolle Very efficient chip control		
	3_8X	★	★	★	☆		☆	★	Coupe positive traditionnelle Standard positive Geometrie Standard positive geometry		
	3_9	☆	☆	☆		☆			Témoin plat sur la coupe pour réduire les vibrations Vibrationsreduzierung durch einer Flachfase und der Schneidkante Vibration reduction through flat ended cutting edge		

μK20

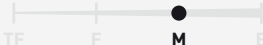
TiAlN



 K20

μK20 + revêtement PVD

μK20 + PVD Beschichtung
μK20 + PVD coating



P

 ★★★★★

M

 ★★★★★

N

 ★★★★★

S

 ★★★★★

- excellente nuance universelle
- 1^{er} choix pour l'usinage des aciers, aciers inoxydables et alliages de titane
- très bonne résistance à la température

- beste Universalsorte
- erste Wahl für die Bearbeitung von Stahl, rostfreien Stähle und Titanlegierungen
- sehr gute Warmfestigkeit

- best universal grade
- first choice for steel, stainless steel and titanium alloys machining
- very good heat resistance

μK20

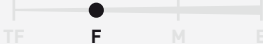
TiAlX



 K20

μK20 + revêtement PVD

μK20 + PVD Beschichtung
μK20 + PVD coating



P

 ★★★★★

M

 ★★★★★

N

 ★★★★★

S

 ★★★★★

- nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox
- aciers alliés contenant : chrome nickel, vanadium, molybdène, ...

- sehr verschleissfeste und temperaturbeständige Sorte, für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox
- legierter Stahl enthaltend : Chrom-Nickel, Vanadium, Molybdän, ...

- very wear and high temperature resistant grade, recommended for following material : Inox 304, 316L, 317L, 904, Phynox
- alloy steel containing : Chrome-nickel, Vanadium, Molybdenum, ...

μK20

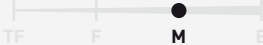
ST



 K20

μK20 + revêtement PVD

μK20 + PVD Beschichtung
μK20 + PVD coating



P

 ★★★★★

M

 ★★★★★

N

 ★★★★★

S

 ★★★★★

- nuance résistante à la température, destinée à l'usinage des matières suivantes : Inox, titane allié, alliages à base de nickel, chrome cobalt, les matières avec une dureté supérieure à > 50 HRC

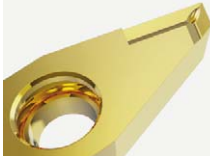
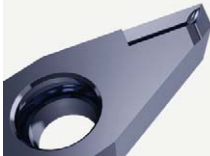
- verschleissfeste und temperaturbeständige Sorte, für folgende Materialien empfohlen : Inox, legiertes Titan, Nickellegierungen, Chrom-Kobalt, Materialien härter als > 50 HRC

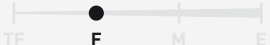
- wear and temperature-resistant grade, recommended for following materials : Inox, titanium alloys, nickel-based alloys, chrome-cobalt, and materials harder than > 50 HRC

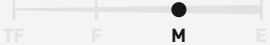
Nuances

Sorten

Grades

<div>μK20</div>	<div><div>TiN</div></div>	<div><div>● K20</div><div>μK20 + revêtement PVD μK20 + PVD Beschichtung μK20 + PVD coating</div><div><div>TF</div><div>F</div><div>M</div><div>E</div></div></div>	<div><div>P★★★★★</div><div>M★★★★★</div><div>N★★★★★</div><div>S★★★★★</div></div> <div><ul style="list-style-type: none">• nuance pour l'usinage des matières peu résistantes qui créent des arêtes rapportées• très faible coefficient de frottement• à éviter pour l'usinage du titane</div>	<div><ul style="list-style-type: none">• Sorte für die Bearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden• sehr geringer Reibwert• bei der Bearbeitung von Titan zu vermeiden</div>	<div><ul style="list-style-type: none">• grade for the machining of low resistance materials which causes edge build-up• very low friction ratio• not suitable for titanium machining</div>
<div>μK20</div>	<div><div>N</div></div>	<div><div>● K20</div><div>Non revêtu Unbeschichtet Uncoated</div><div><div>TF</div><div>F</div><div>M</div><div>E</div></div></div>	<div><div>P★☆☆☆☆</div><div>M★★★☆☆</div><div>N★★★★★</div><div>S★★★★★</div></div> <div><ul style="list-style-type: none">• supporte les coupes interrompues et autres conditions d'usinage défavorables</div>	<div><ul style="list-style-type: none">• für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen geeignet</div>	<div><ul style="list-style-type: none">• suitable for interrupted cut and other unfavourable machining conditions</div>
<div>μK10</div>	<div><div>HTA</div></div>	<div><div>● K10</div><div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div><div><div>TF</div><div>F</div><div>M</div><div>E</div></div></div>	<div><div>P★★★★★</div><div>M★★★★★</div><div>N★★★★★</div><div>S★★★★★</div></div> <div><ul style="list-style-type: none">• nuance très résistante à l'usure• pour l'usinage en finition dans des conditions favorables des aciers, aciers inoxydables et alliages de titane</div>	<div><ul style="list-style-type: none">• sehr verschleißfeste Sorte• für die Feinbearbeitung von Stähle, rostfreien Stähle und Titanlegierungen bei guten Bearbeitungsbedingungen</div>	<div><ul style="list-style-type: none">• very wear resistant grade• for light machining of steel, stainless steel and titanium alloys under favourable machining conditions</div>

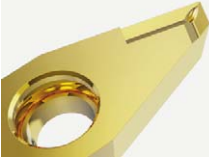
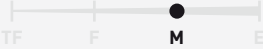
<p>μK10</p>	<p>HTAX</p> 	<p> K10</p> <p>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</p> 	<table border="1"> <tr> <td>P</td> <td>★★★★★</td> </tr> <tr> <td>M</td> <td>★★★★★</td> </tr> <tr> <td>N</td> <td>★★★★★</td> </tr> <tr> <td>S</td> <td>★★★★★</td> </tr> </table>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
	P	★★★★★									
	M	★★★★★									
	N	★★★★★									
S	★★★★★										
<ul style="list-style-type: none"> • nuance très résistante à l'usure et à la température, pour l'usinage en finition avec faible avance de petites pièces. Recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox • aciers alliés contenant : chrome nickel, vanadium, molybdène, ... 	<ul style="list-style-type: none"> • sehr verschleissfeste und temperaturbeständige Sorte, für Feinbearbeitung von kleinen Teilen mit geringer Vorschub. Für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox • legierter Stahl enthaltend : Chrom-Nickel, Vanadium, Molybdän, ... 	<ul style="list-style-type: none"> • very wear and high temperature resistant grade, for light machining of small parts with low cutting feed. Recommended for following material: Inox 304, 316L, 317L, 904, Phynox • alloy steel containing : Chromenickel, Vanadium, Molybdenum, ... 									

<p>μK10</p>	<p>HST</p> 	<p> K10</p> <p>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</p> 	<table border="1"> <tr> <td>P</td> <td>★★★★★</td> </tr> <tr> <td>M</td> <td>★★★★★</td> </tr> <tr> <td>N</td> <td>★★★★★</td> </tr> <tr> <td>S</td> <td>★★★★★</td> </tr> </table>	P	★★★★★	M	★★★★★	N	★★★★★	S	★★★★★
	P	★★★★★									
	M	★★★★★									
	N	★★★★★									
S	★★★★★										
<ul style="list-style-type: none"> • nuance résistante à la température et à l'usure pour des opérations de finition • recommandé pour l'usinage des matières suivantes : Inox, titane allié, alliages à base de nickel, chrome cobalt, les matières avec une dureté supérieure à > 50 HRC 	<ul style="list-style-type: none"> • verschleissfeste und temperaturbeständige Sorte für Feinbearbeitungen • für folgende Materialien empfohlen : Inox, legiertes Titan, Nickellegierungen, Chrom-Kobalt, Materialien härter als > 50 HRC 	<ul style="list-style-type: none"> • wear- and temperature-resistant grade for finishing operations • recommended for the following materials : Inox, titanium alloys, nickel-based alloys, chrome-cobalt, and materials harder than > 50 HRC 									

Nuances

Sorten

Grades

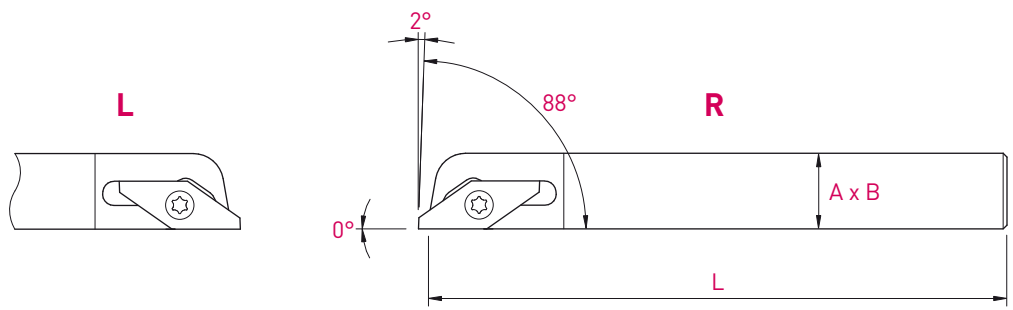
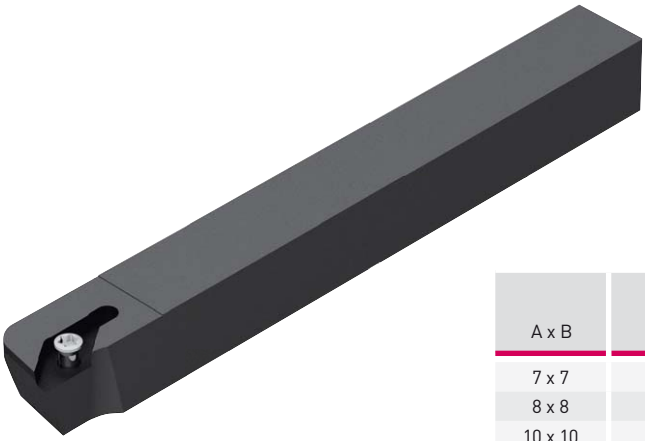
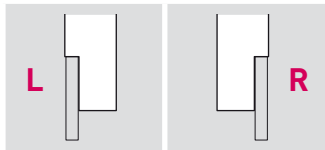
μK10	<div>HTiN</div> 	<div> K10</div> <div>μK10 + revêtement PVD μK10 + PVD Beschichtung μK10 + PVD coating</div> <div></div>	<div></div> <div></div> <div></div> <div></div>
	<ul style="list-style-type: none">• nuance pour l'usinage en finition des matières peu résistantes qui créent des arêtes rapportées• très faible coefficient de frottement• à éviter pour l'usinage du titane	<ul style="list-style-type: none">• Sorte für die Feinbearbeitung von weichen Werkstoffen mit Tendenz zur Bildung von Aufbauschneiden• sehr geringer Reibwert• für die Bearbeitung von Titan nicht geeignet	<ul style="list-style-type: none">• grade for light machining of low resistance materials which causes edge build-up• very low friction ratio• not suitable for titanium machining
μK10	<div>HN</div> 	<div> K10</div> <div>Non revêtu Unbeschichtet Uncoated</div>	<div></div> <div></div> <div></div> <div></div>
	<ul style="list-style-type: none">• nuance micro-grain très résistante à l'usure• recommandé pour l'usinage du titane faiblement allié• déconseillé en cas de coupe interrompue et autres conditions d'usinage défavorables	<ul style="list-style-type: none">• verschleissfeste Feinkornsorte• für die Bearbeitung von niedrig legiertem Titan empfehlenswert• für unterbrochene Schnitte und andere ungünstige Bearbeitungsbedingungen nicht geeignet	<ul style="list-style-type: none">• wear resistant micro-grain grade• suitable for the machining of low alloyed titanium• not suitable for interrupted cut and other unfavourable machining conditions

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Matière Werkstoff Material		Tournage Drehen Turning		
		VC	Prof. de passe Schnitttiefe Depth of cut	Avance Vorschub Feed
		(m/min)	(mm)	(mm/U)
Acier de décolletage Automatenstahl Free-cutting steel	P	120 - 200	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25
Acier Stahl Steel	< 600 N/mm ² P	80 - 160	0.05 - 1.0 1.0 - 4.0	0.01 - 0.15 0.05 - 0.25
Acier Stahl Steel	< 800 N/mm ² P	60 - 120	0.05 - 1.0 1.0 - 4.0	0.01 - 0.10 0.05 - 0.20
Acier Stahl Steel	> 800 N/mm ² P	50 - 100	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15
Acier inoxydable Rostfreistahl Stainless steel	M	60 - 120	0.05 - 1.0 1.0 - 3.0	0.01 - 0.08 0.05 - 0.15
Aluminium Si <12%	N	200 - 1000	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40
Aluminium Si >12%	N	180 - 800	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.40
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 500	0.05 - 1.0 1.0 - 4.0	0.01 - 0.20 0.05 - 0.35
Titane Titan Titanium	S	30 - 70	0.05 - 1.0 1.0 - 4.0	0.01 - 0.08 0.05 - 0.15



A x B	L	Art. N°	Art. N°
7 x 7	115	310-7	320-7
8 x 8	115	310-8	320-8
10 x 10	115	310-10	320-10
10 x 10	140	-	320-10-140
12 x 12	115	310-12	320-12
12 x 12	90	310-12-90	320-12-90
12 x 12	140	310-12-140	320-12-140
12.7 x 12.7	140	310-12.7	320-12.7
16 x 16	100	310-16	320-16
16 x 16	140	310-16-140	320-16-140
20 x 20	120	310-20	320-20

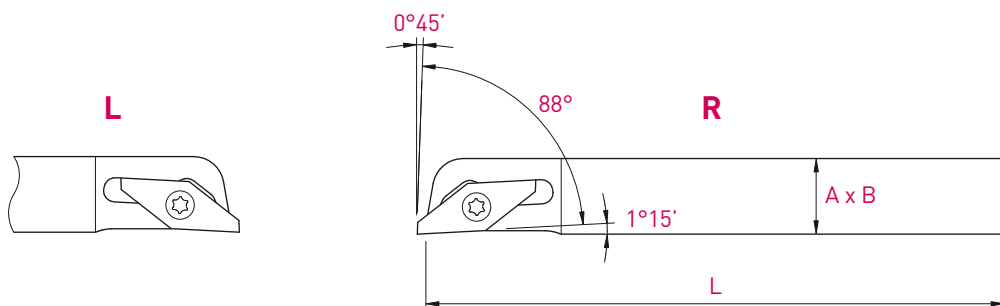
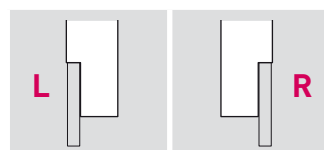
Chaque support est livré avec une ou plusieurs vis. Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert. Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws. The keys must be ordered separately.

Porte-outils

Halter
Holders

88°

310-BC / 320-BC



A x B	L	Art. N°	Art. N°
7 x 7	115	310-7-BC	320-7-BC
8 x 8	115	310-8-BC	320-8-BC
10 x 10	115	310-10-BC	320-10-BC
10 x 10	140	-	320-10-140-BC
12 x 12	115	310-12-BC	320-12-BC
12 x 12	90	310-12-90-BC	320-12-90-BC
12 x 12	140	310-12-140-BC	320-12-140-BC
12.7 x 12.7	140	310-12.7-BC	320-12.7-BC
16 x 16	100	310-16-BC	320-16-BC
16 x 16	140	310-16-140-BC	320-16-140-BC
20 x 20	120	310-20-BC	320-20-BC

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.

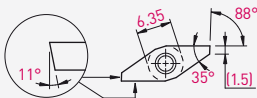
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Option 
310-7 / 320-7	V-M2.5X6.5-T8	C-T8
310-8 - 310-20	V-M2.5X7.8-T8	
320-8 - 320-20		

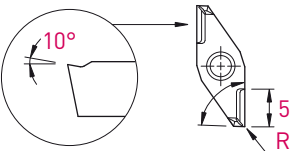
310 / 320

88°



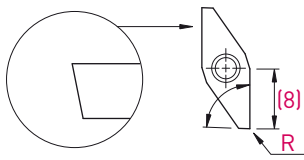
Tournage avant
Vorwärts drehen
Front turning

317 / 327



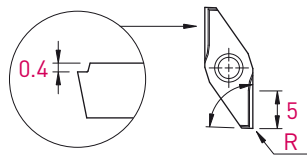
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		M	M		M	M			M	M		M	M		
		N	N	N	N	N	N		N	N	N	N	N	N	N
		S		S	S		S		S		S	S		S	S
		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)		TiAlN	TiN	N (µk20)	HTA	HTiN	HN (µk10)	
R	Art. N°							Art. N°							
0	317	●	●	●	●	●	●	327	●	●	●	●	●	●	
0.03	317-R03	●	●	●	●	●	●	327-R03	●	●	●	●	●	●	
0.08	317-R08	●	●	●	●	●	●	327-R08	●	●	●	●	●	●	
0.10	317-R10	●	●	●	●	●	●	327-R10	●	●	●	●	●	●	
0.20	317-R20	●	●	●	●	●	●	327-R20	●	●	●	●	●	●	

318 / 328



	L	P	P	P	R	P	P	P
		M	M	N		M	M	N
		N	N	N		N	N	N
		HTA	HTiN	HN (µk10)		HTA	HTiN	HN (µk10)
R	Art. N°				Art. N°			
0	318	•	•	•	328	•	•	•
0.05	318-R05	•	•	•	328-R05	•	•	•
0.10	318-R10	•	•	•	328-R10	•	•	•
0.20	318-R20	•	•	•	328-R20	•	•	•
0.40	318-R40	•	•	•	328-R40	•	•	•

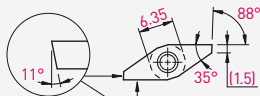
318VS / 328VS



	L	P	P	P	R	P	P	P
		M	M	N		M	M	N
		N	N	S		N	N	S
		S				S		
		HTA	HTiN	HN (µk10)		HTA	HTiN	HN (µk10)
R	Art. N°				Art. N°			
0	318VS	•	•	•	328VS	•	•	•
0.10	318VS-R10	•	•	•	328VS-R10	•	•	•

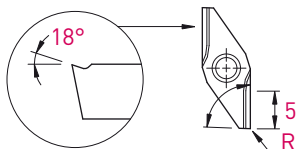
Tournage avant
Vorwärts drehen
Front turning

88°



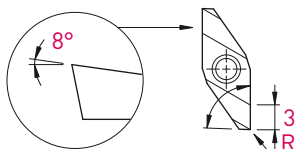
310 / 320

318VX / 328VX



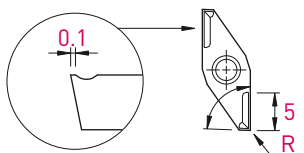
R	L	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>
		HTA	HTiN	HN [µk10]			HTA	HTiN	HN [µk10]
0	318VX	●	●	●	328VX		●	●	●
0.05	318VX-R05	●	●	●	328VX-R05		●	●	●
0.10	318VX-R10	●	●	●	328VX-R10		●	●	●
0.20	-				328VX-R20		●	●	●
0.40	-				328VX-R40		●		●

318X / 328X

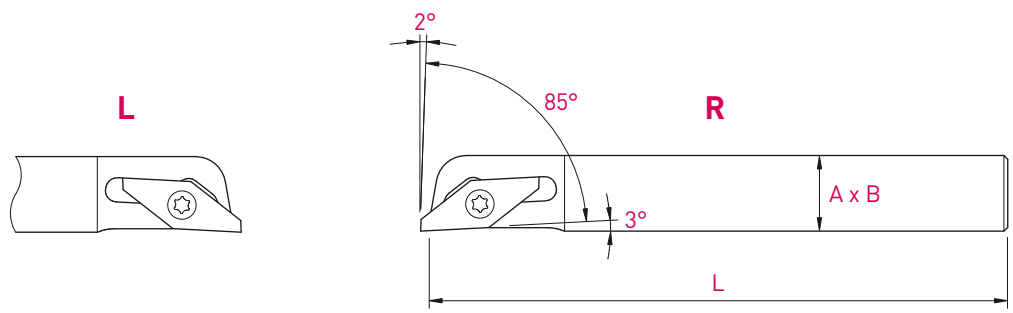
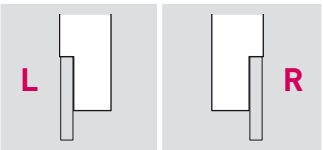


R	L	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>	R	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>			
		HTA	HTiN	HN μ k10		HTA	HTiN	HN μ k10			
		Art. N°				Art. N°					
		0	318X	●		●	●	328X	●	●	●
		0.10	318X-R10	●		●	●	328X-R10	●	●	●

319 / 329



R	L	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div></div><div>N</div></div>	R	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div></div><div>N</div></div>
		HTA	HTiN	HN [µk10]		HTA	HTiN	HN [µk10]
		Art. N°				Art. N°		
0	319	●	●	●	329	●	●	●
0.10	319-R10	●	●	●	329-R10	●	●	●
0.20	319-R20	●	●	●	329-R20	●	●	●



A x B	L	Art. N°	Art. N°
8 x 8	90	-	340-8-90
8 x 8	115	330-8	340-8
10 x 10	115	330-10	340-10
10 x 10	140	-	340-10-140
12 x 12	115	330-12	340-12
12 x 12	90	330-12-90	340-12-90
12 x 12	140	330-12-140	340-12-140
12.7 x 12.7	140	330-12.7	340-12.7
16 x 16	100	330-16	340-16
16 x 16	140	330-16-140	340-16-140
20 x 20	120	330-20	340-20

Chaque support est livré avec une ou plusieurs vis.
Les clés sont à commander séparément.
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.
Each holder is supplied with one or more screws.
The keys must be ordered separately.

Porte-outils Halter Holders	Serrage standard (A) Standard Spannsystem (A) Standard clamping system (A) 	Option 
330 340	V-M2.5X7.8-T8	C-T8

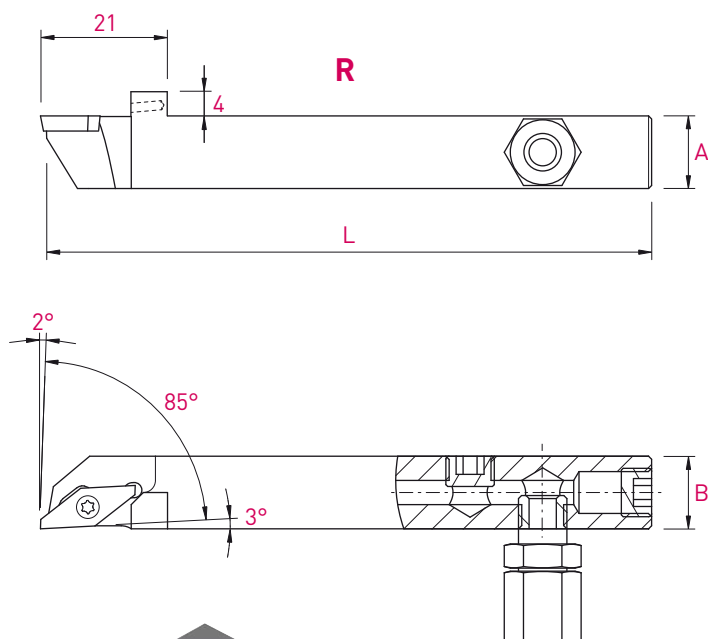
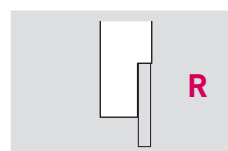
Porte-outils avec arrosage intégré

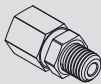
Halter mit integrierter Kühlmittelzufuhr

Holders with integrated coolant supply

85°

340-JET



Pièces de rechange Ersatzteile Spare parts		Option 	
	Art. N°	Art. N°	Art. N°
340-0810-JET	J-M5-D5	JC-M5-D5	JB-M5
340-JET	J-M8X1-D6	-	JB-M8X1

A x B	L	Art. N°
8 x 10	100	340-0810-JET
10 x 12	100	340-1012-JET
12 x 12	100	340-12-JET
12.7 x 12.7	100	340-12.7-JET
16 x 16	100	340-16-JET
20 x 20	100	340-20-JET

Chaque support est livré avec une ou plusieurs vis.

Les clés sont à commander séparément.

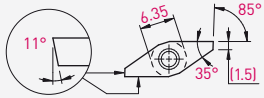
Jeder Halter wird mit einer oder mehreren Schrauben geliefert.
Die Schlüssel sind separat zu bestellen.

Each holder is supplied with one or more screws.

The keys must be ordered separately.

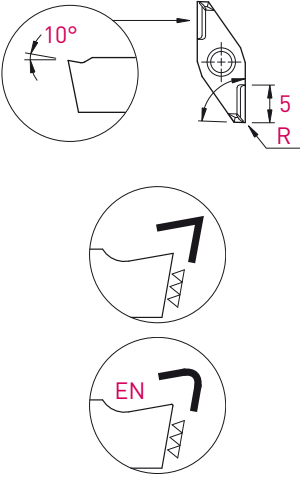
330 / 340

85°



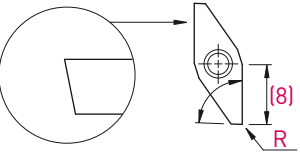
Tournage avant
Vorwärts drehen
Front turning

337 / 347



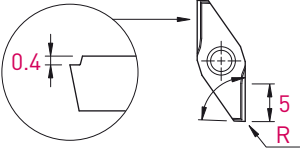
R	L	P P P P P P P P								R	P P P P P P P P										
		M M M N S S	M M N		S	M M N S S	M M N		S		M M M M N	M M N		S	M M M M N	M M N		S			
	Art. N°	TiAlN	TiAlX	TiN	N (µk20)	HTA	HTAX	HTiN	HN (µk10)		Art. N°	ST	TiAlN	TiAlX	TiN	N (µk20)	HST	HTA	HTAX	HTiN	HN (µk10)
0	337	●	●	●	●	●	●	●	347	●	●	●	●	●	●	●	●	●	●	●	●
0.03	337-R03	●	●	●	●	●	●	●	347-R03	●	●	●	●	●	●	●	●	●	●	●	●
0.08	337-R08	●	●	●	●	●	●	●	347-R08	●	●	●	●	●	●	●	●	●	●	●	●
0.10	337-R10	●	●	●	●	●	●	●	347-R10	●	●	●	●	●	●	●	●	●	●	●	●
0.20	337-R20	●	●	●	●	●	●	●	347-R20	●	●	●	●	●	●	●	●	●	●	●	●
0.35	-								347-R35	●	●	●	●	●	●	●	●	●	●	●	●
0	337-EN	●	●	●					347-EN	●	●	●	●	●	●	●	●	●	●	●	●
0.03	337-EN-R03	●	●	●	●	●		●	347-EN-R03	●	●	●	●	●	●	●	●	●	●	●	●
0.08	337-EN-R08	●		●					347-EN-R08	●	●	●	●	●	●	●	●	●	●	●	●
0.10	337-EN-R10	●	●	●					347-EN-R10	●	●	●	●	●	●	●	●	●	●	●	●
0.20	337-EN-R20	●		●					347-EN-R20	●	●	●	●	●	●	●	●	●	●	●	●
0.35	-								347-EN-R35	●	●	●	●	●	●	●	●	●	●	●	●

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R	Art. N°	L			Art. N°	R		
		HTA	HTiN	HN (µk10)		HTA	HTiN	HN (µk10)
0	338	•	•	•	348	•	•	•
0.05	338-R05	•	•	•	348-R05	•	•	•
0.10	338-R10	•	•	•	348-R10	•	•	•
0.20	338-R20	•	•	•	348-R20	•	•	•
0.40	338-R40	•	•	•	348-R40	•	•	•

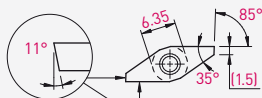
338VS / 348VS



R	Art. N°	L			Art. N°	R		
		HTA	HTiN	HN (µk10)		HTA	HTiN	HN (µk10)
0	338VS	•	•	•	348VS	•	•	•
0.10	338VS-R10	•	•	•	348VS-R10	•	•	•

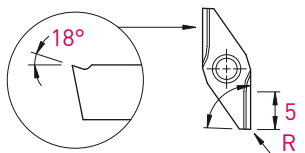
Tournage avant
Vorwärts drehen
Front turning

85°



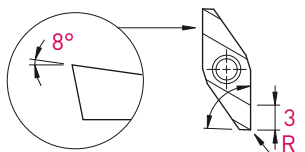
330 / 340

338VX / 348VX



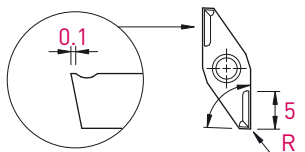
	L	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div></div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>	R	Art. N°	HTA	HTiN	HN [μk10]	Art. N°	HTA	HTiN	HN [μk10]
0	338VX	●	●	●	348VX	●	●	●		348VX	●	●	●
0.05	338VX-R05	●	●	●	348VX-R05	●	●	●		348VX-R05	●	●	●
0.10	338VX-R10	●	●	●	348VX-R10	●	●	●		348VX-R10	●	●	●

338X / 348X



R	L	P	P	P	R	P	P	P
		M	M			M	M	
		N	N	N		N	N	N
		S		S		S		S
HTA	HTiN	HN (μk10)	Art. N°	HTA	HTiN	HN (μk10)		
0	338X	●	●	●	348X	●	●	●
0.10	338X-R10	●	●	●	348X-R10	●	●	●

339 / 349



R	L	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div></div><div>N</div></div>	R	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div>M</div><div>N</div></div>	<div><div>P</div><div></div><div>N</div></div>
		HTA	HTiN	HN (μk10)		HTA	HTiN	HN (μk10)
		Art. N°				Art. N°		
0	339	●	●	●	349	●	●	●
0.10	339-R10	●	●	●	349-R10	●	●	●
0.20	339-R20	●	●	●	349-R20	●	●	●

ISO-Line



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D	C	G	T	-	11	T3	04	-	FN	-

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Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

P	M	N	S
VC (m/min)		F (mm/U)	

> 9.16

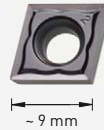
80°

Porte-outils
Halter
Holders



> 9.20

Plaquettes
WSP
Inserts



> 9.26

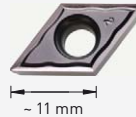
55°

Porte-outils
Halter
Holders



> 9.34

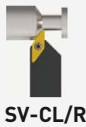
Plaquettes
WSP
Inserts



> 9.45

35°

Porte-outils
Halter
Holders



> 9.53

Plaquettes
WSP
Inserts



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Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories



> 9.71

Codification

Kodifizierung

Coding guide

Méthode de serrage Klemmsystem Clamping system	Forme de la plaquette Plattenform Insert shape	Géométrie du porte-outil Halterform Holder geometry	Angle de dépouille de la plaquette WSP-Freiwinkel Insert clearance angle	Direction de coupe Schneidrichtung Cut direction		Hauteur du porte-outil Halter Höhe Holder height	Largeur du porte-outil Halter Breite Holder width	Longueur du porte-outil Halter Länge Holder length		Dimension de la plaquette (L) WSP Grösse (L) Insert size (L)
S	D	J	C	R	-	12	12	G	-	11

C = 7°

α:

A = 0°
J = 3°
L = 5°
H = 17.5°
X = 27.5°

U = 3°

A x B (or Ø) [mm]

08 x 08
10 x 10
12 x 12
12.7 x 12.7 (1/2 in)
16 x 16
20 x 20
Ø: D10 / D20 / D25.4 (Ø1 in)

Length: [mm]

F = 75
G = 90
J = 110
X = Special

C = 80°

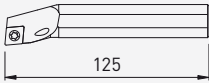
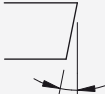
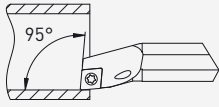
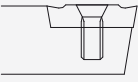
D = 55°

V = 35°

S = vis
Schraube
screw

**Compatibilité porte-outil - plaquette
WSP - Halter Kompatibilität
Holder - insert compatibility**

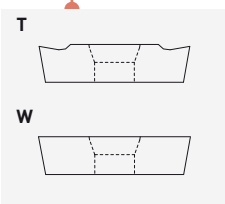
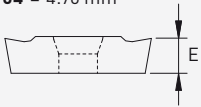
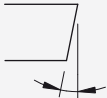
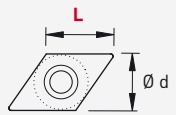
S	D	J	C	R	-	12	12	G	-	11
D	C	G	T	-	11	T3	04	-	FN	-

Matière Material Material	Diamètre queue Shank Shank	Longueur du porte-outil Holder-Länge Holder length		Méthode de serrage Klemmsystem Clamping system	Forme de la plaquette Plattenform Insert shape	Géométrie du porte-outil Holderform Holder geometry	Angle de dépouille de la plaquette WSP-Freiwinkel Insert clearance angle	Direction de coupe Schneidrichtung Cut direction		Dimension de la plaquette (L) WSP Grösse (L) Insert size (L)
A	12	K	-	S	C	L	C	R	-	06
<p>Longueur Länge Length F = 80 H = 100 J = 110 K = 125 M = 150 Q = 180</p> 										
<p>Ø queue Shank Ø Shank Ø</p> 										
<p>C = 7°</p> 										
<p>L = 95° Q = 107.5° U = 93°</p> 										
<p>C = 80° </p> <p>D = 55° </p> <p>V = 35° </p>										
<p>S = vis Schraube screw</p> 										
<p>A = acier avec lubrification Stahl mit Kühlung Steel with coolant</p> <p>E = carbure avec lubrification Hartmetall mit Kühlung Carbide with coolant</p>										
<p>L</p> 										

Codification

Kodifizierung

Coding guide

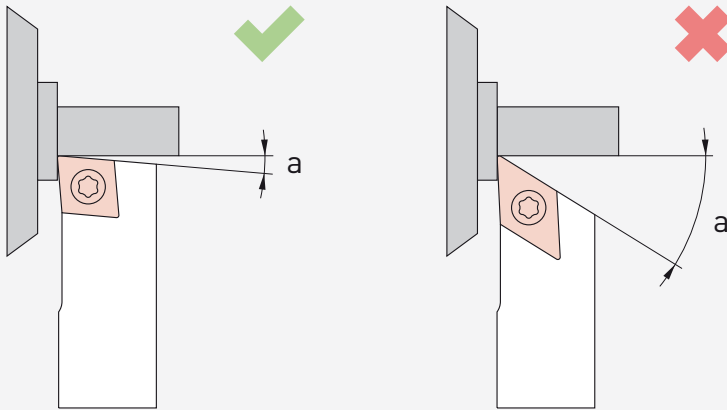
Forme de la plaquette Plattenform Insert shape	Angle de dépouille de la plaquette WSP-Freiwinkel Insert clearance angle	Classe de tolérance Toleranz Klasse Tolerance class	Brise-copeau Spanbrecher Chip breaker		Dimension de la plaquette (L) WSP Grösse (L) Insert size (L)	Épaisseur de la plaquette (E) WSP Dicke (E) Insert thickness (E)	Rayon de pointe de la plaquette WSP Eckenradius Insert corner radius		Exécution d'arête et direction de coupe Schneidkante Ausführung und Schneidrichtung Edge type and cutting direction		Géométrie de coupe Spanformgeometrie Cutting geometry												
D	C	G	T	-	11	T3	04	-	FN	-	X8												
<div style="display: flex; justify-content: space-between;"> <div style="width: 20%;"> <p>T</p>  </div> <div style="width: 20%;"> <p>R:</p> <ul style="list-style-type: none"> 003 = 0.03 mm 005 = 0.05 mm 008 = 0.08 mm 01 = 0.1 mm 015 = 0.15 mm 02 = 0.2 mm 04 = 0.4 mm 08 = 0.8 mm  </div> <div style="width: 20%;">  <p>cf.: Géométrie de coupe Spanformgeometrie Cutting geometry</p> </div> </div>																							
<div style="display: flex; justify-content: space-between;"> <div style="width: 20%;"> <p>G = ±0.025 mm</p>  <p>M = ±0.05 mm</p>  </div> <div style="width: 20%;"> <p>02 = 2.38 mm 03 = 3.18 mm T3 = 3.97 mm 04 = 4.76 mm</p>  </div> <div style="width: 20%;"> <p>FN</p>  <p>EN</p>  <p>ENP</p>  <p>FL / FR</p>  <p>ELP / ERP</p>  </div> </div>																							
<div style="display: flex; justify-content: space-between;"> <div style="width: 20%;"> <p>C = 7°</p>  </div> <div style="width: 20%;"> <p>L</p>  <p>[mm]</p> </div> <div style="width: 20%;"> <table border="1"> <thead> <tr> <th>L</th> <th>Ø d [mm]</th> </tr> </thead> <tbody> <tr> <td>CC...06</td> <td rowspan="3">6.350</td> </tr> <tr> <td>DC...07</td> </tr> <tr> <td>VC... 11</td> </tr> <tr> <td>VC... 13</td> <td>7.940</td> </tr> <tr> <td>CC...09</td> <td rowspan="3">9.525</td> </tr> <tr> <td>DC... 11</td> </tr> <tr> <td>VC... 16</td> </tr> </tbody> </table> </div> </div>												L	Ø d [mm]	CC... 06	6.350	DC... 07	VC... 11	VC... 13	7.940	CC... 09	9.525	DC... 11	VC... 16
L	Ø d [mm]																						
CC... 06	6.350																						
DC... 07																							
VC... 11																							
VC... 13	7.940																						
CC... 09	9.525																						
DC... 11																							
VC... 16																							
<div style="display: flex; justify-content: space-between;"> <div style="width: 20%;"> <p>C = 80°</p>  <p>D = 55°</p>  <p>V = 35°</p>  </div> </div>																							

Better surface finish

pour un meilleur état de surface et une stabilité d'usinage optimale, choisir une géométrie d'outil permettant un angle "a" le plus petit possible

für bessere Oberflächegüte und optimale Bearbeitungsstabilität, muss die Werkzeuggeometrie mit kleinstmöglichem Winkel "a" ausgewählt werden

for a better surface finish and optimal machining stability, choose a tool geometry with angle "a" as small as possible



Proportion

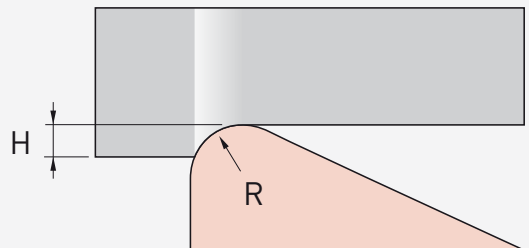
rapport hauteur de passe / rayon d'outil

Verhältnis zwischen Spantiefe und Werkzeugradius

machining depth / tool radius ratio

$$H \text{ min} = 0.7 \times R$$

$$R \text{ max} = 1.4 \times H$$



Plaquettes en métal dur rectifiées

VHM geschliffene WSP

Carbide ground inserts

G

tolerance class

Géométries de coupe

Spanformgeometrien

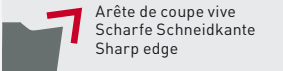
Cutting geometries

Finishing

FN-X8



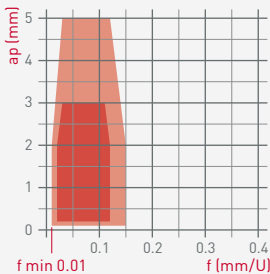

8°



Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished



ap (mm)

f (mm/U)

f min 0.01

P	★★★★★
M	★★★★
N	★★★★
S	★★★

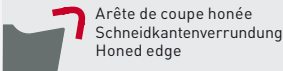
CCGT	DCGT	VCGT
p. 9.26	p. 9.45	p. 9.64

Semi-finishing

ENP-X8



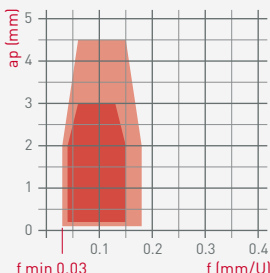

8°



Arête de coupe honée
Schneidkantenverrundung
Honed edge



Poli
Poliert
Polished



ap (mm)

f (mm/U)

f min 0.03

P	★★★★★
M	★★★
N	★★★
S	★★★

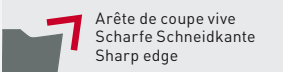
CCGT	DCGT	VCGT
p. 9.26	p. 9.45	p. 9.64

Finishing

FN-X17



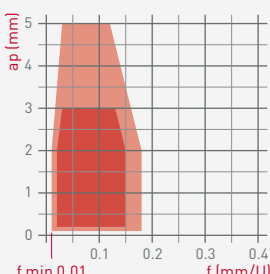

17°



Arête de coupe vive
Scharfe Schneidkante
Sharp edge



Poli
Poliert
Polished



ap (mm)

f (mm/U)

f min 0.01

P	★★★
M	★★★★★
N	★★★★★
S	★★★★★

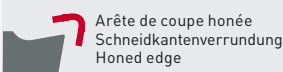
CCGT	DCGT	VCGT
p. 9.27	p. 9.46	p. 9.65

Semi-finishing

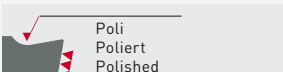
ENP-X17



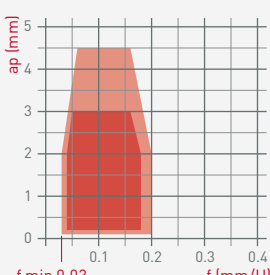

17°



Arête de coupe honée
Schneidkantenverrundung
Honed edge



Poli
Poliert
Polished



ap (mm)

f (mm/U)

f min 0.03

P	★★★
M	★★★★★
N	★★★
S	★★★★★

CCGT	DCGT	VCGT
p. 9.27	p. 9.46	p. 9.65

Géométries de coupe

Spanformgeometrien

Cutting geometries

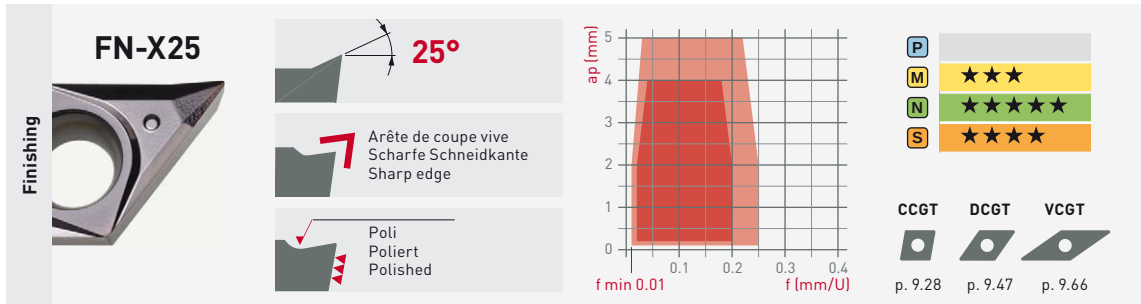
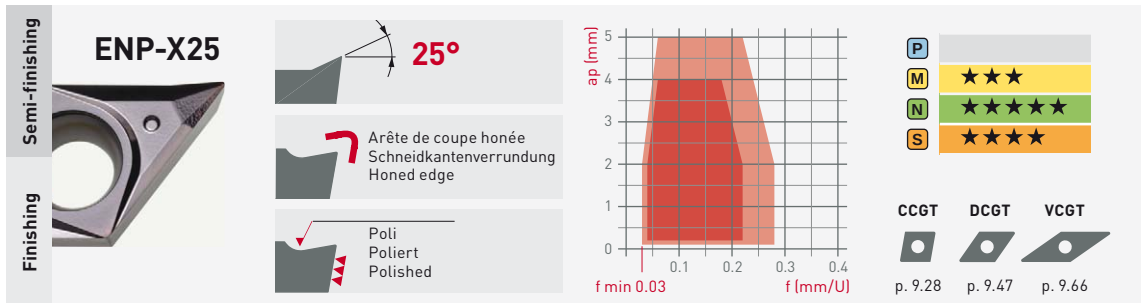
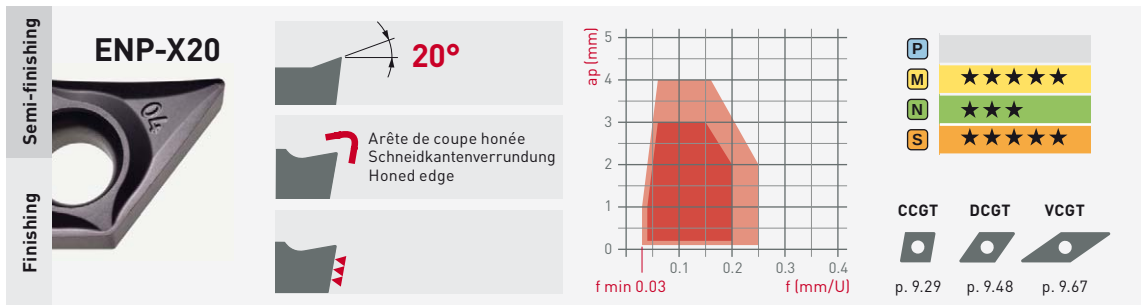
G

tolerance class

Plaquettes en métal dur rectifiées

VHM geschliffene WSP

Carbide ground inserts



ISO-Line

Plaquettes en métal dur

VHM-Wendeplatten

Carbide inserts

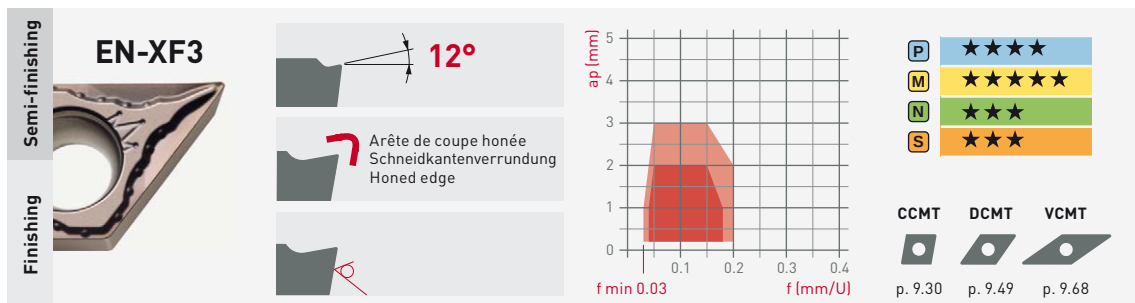
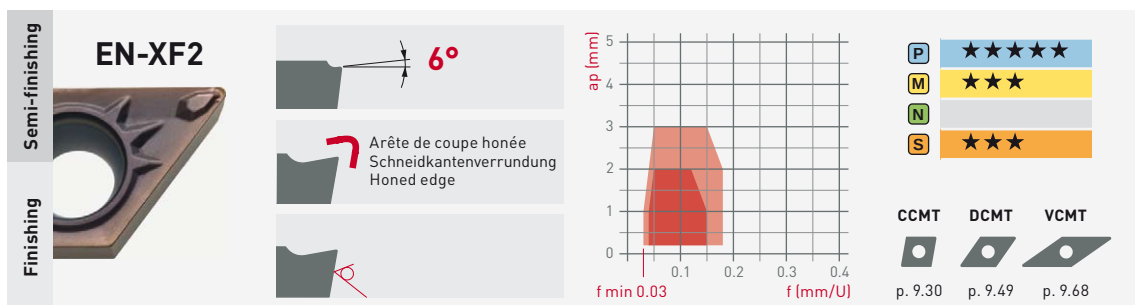
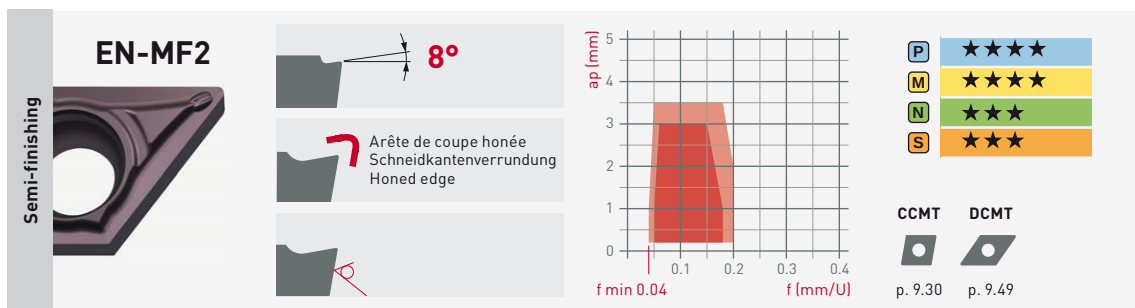
M

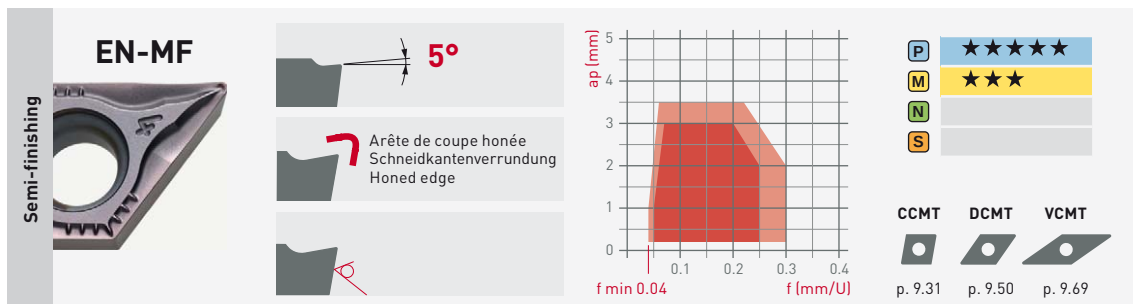
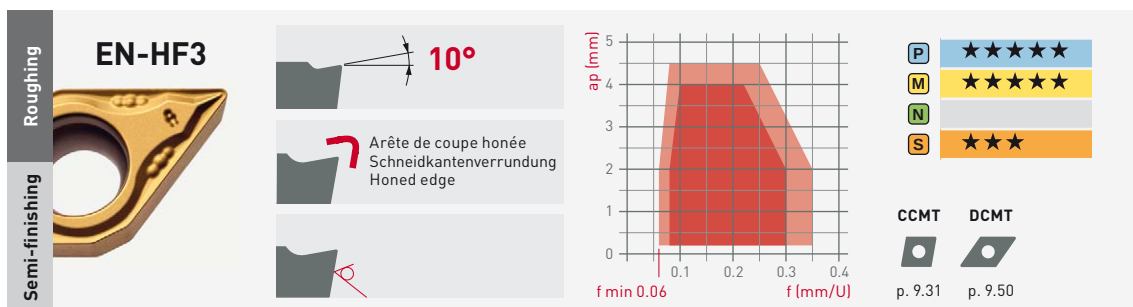
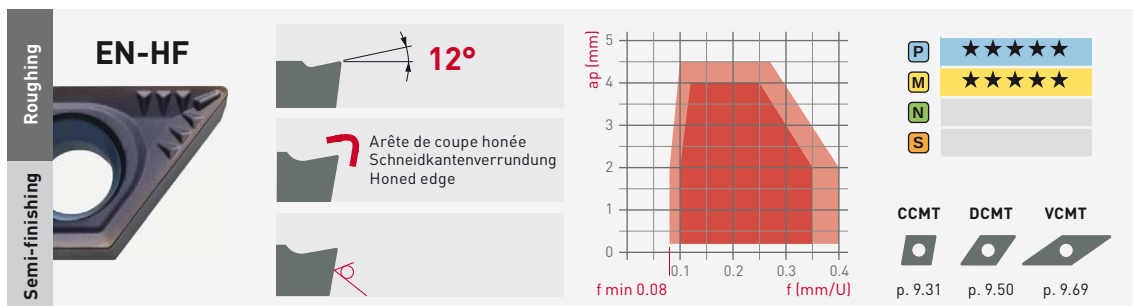
tolerance class

Géométries de coupe

Spanformgeometrien

Cutting geometries





ISO-Line

Plaquettes en métal dur rectifiées

VHM geschliffene WSP

Carbide ground inserts

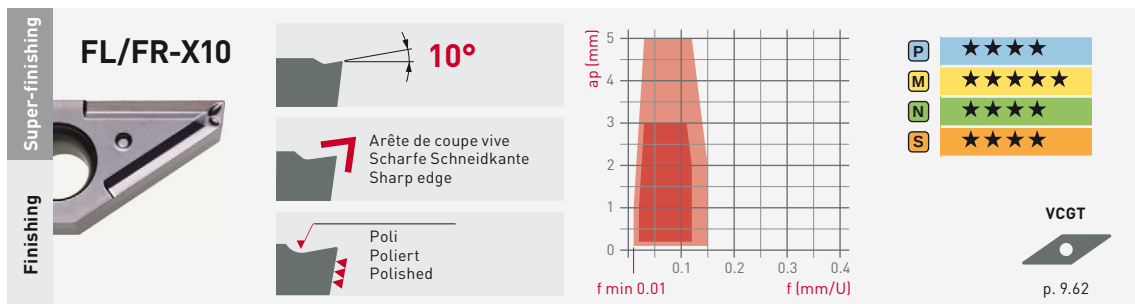
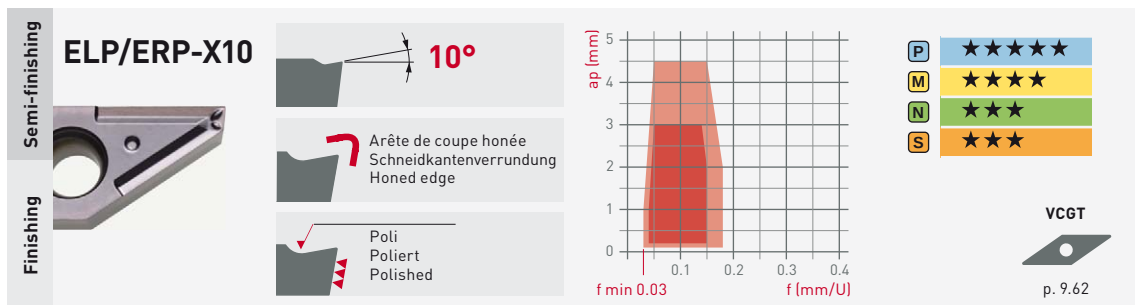
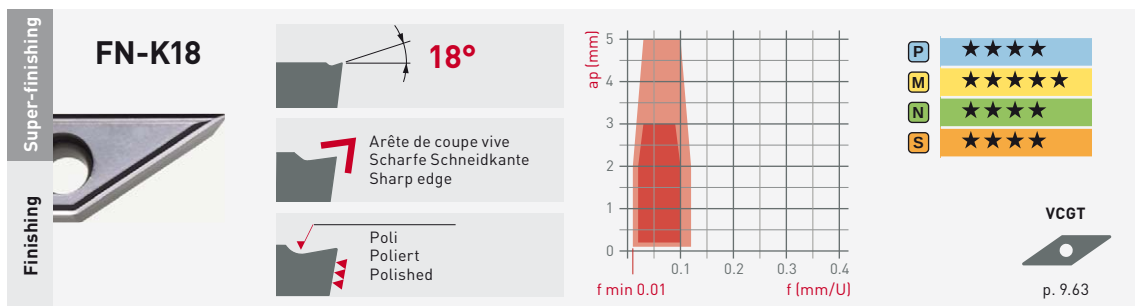
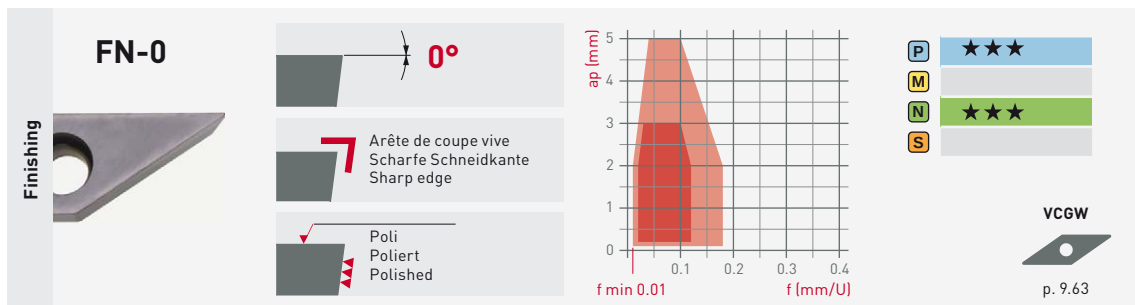
G

tolerance class

Géométries de coupe

Spanformgeometrien

Cutting geometries



Géométries de coupe

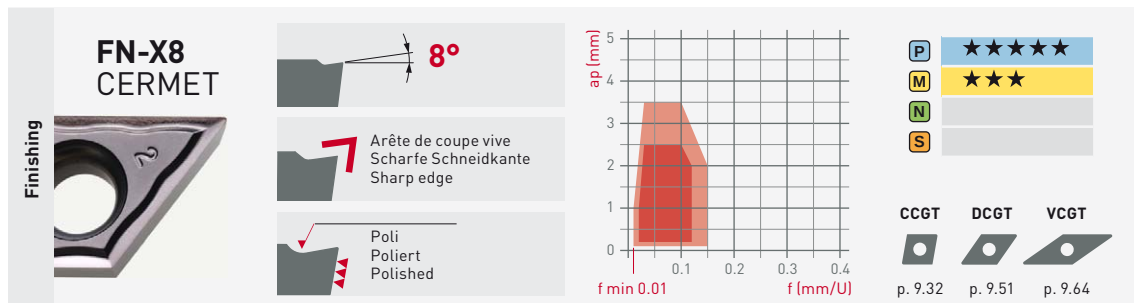
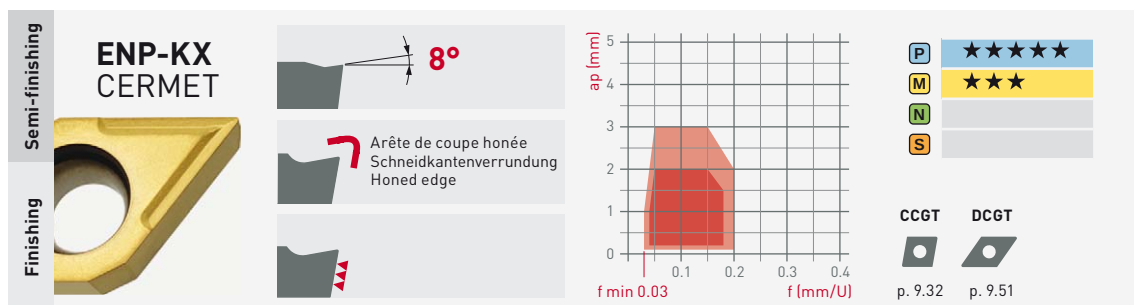
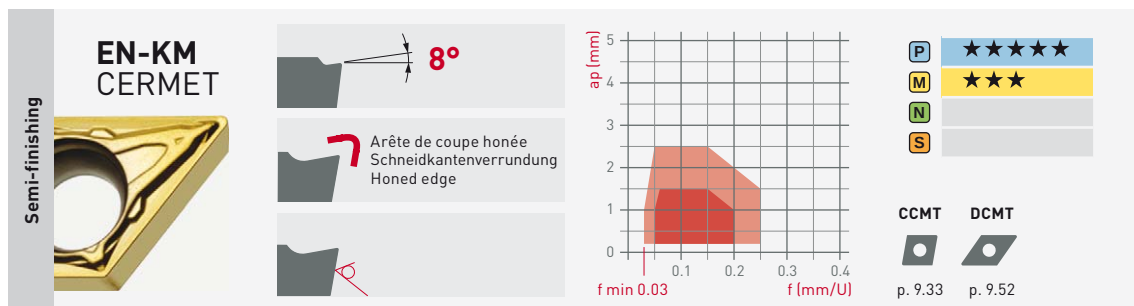
Spanformgeometrien

Cutting geometries

G / M

tolerance class

CERMET



Nuances

Sorten

Grades

Nuances Sorten Grades	Domaine d'application Anwendungsbereich Application area	Finishing / light machining	Semi-finishing / medium cut	Roughing / heavy machining	Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries	Résistance à l'usure Verschleissfestigkeit Wear resistance	Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance	Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance	Revêtement et couleur Beschichtung und Farbe Coating and colour	Recommandations spéciales Sonder Empfehlungen Special recommendations
Carbide + PVD										
TiAlN	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●	●	●	FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10	■■■■■□	■■■■■□	■■■■■□	PVD	
HTA	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●			FN-X8 FN-X17 FN-X25 L/R-X10 FN-K18 FN-0	■■■■■	■■■■■□	■■■■■□	PVD	
TiN	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●	●	●	FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 L/R-X10	■■■■■□	■■■■■□	■■■■■□	PVD	High resistance to edge build up
HTiN	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●			FN-K18 FN-0	■■■■■□	■■■■■□	■■■■■□	PVD	High resistance to edge build up
TAC	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●	●	●	EN-XF3 EN-XF2 EN-MF2 EN-HF	■■■■■□	■■■■■□	■■■■■□	PVD	
HTAC	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●	●		EN-XF3 EN-XF2 EN-MF2	■■■■■	■■■■■□	■■■■■□	PVD	
TiX	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★			●	EN-HF3	■■■■■□	■■■■■□	■■■■■□	PVD	Easy wear out control with TiN top layer
HTiX	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★		●	●	ENP-X20 EN-HF3	■■■■■□	■■■■■□	■■■■■□	PVD	Easy wear out control with TiN top layer
Tmax	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★		●	●	EN-MF EN-HF	■■■■■□	■■■■■□	■■■■■□	PVD	
ZTA	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●	●		ENP-X20	■■■■■□	■■■■■□	■■■■■□	PVD	Perfect for titanium alloys & superalloys
TiAlX	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●	●		X8 R-X10 X17 X25	■■■■■□	■■■■■□	■■■■■□	PVD	Perfect for titanium alloys & superalloys
HTAX	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●			X8 R-X10 X17 X25	■■■■■	■■■■■□	■■■■■□	PVD	Perfect for titanium alloys & superalloys
ST	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●	●		X17 ENP-X17 FL/FR-X10 ELP/ERP-X10	■■■■■□	■■■■■□	■■■■■	PVD	Hard materials >50HRC, refractory materials, nickel- or cobalt-based, stainless steel, titanium alloys
HST	★★★★★ ★★★★★ ★★★★★ ★★★★★ ★★★★★	●	●		X17	■■■■■□	■■■■■□	■■■■■	PVD	Hard materials >50HRC, refractory materials, nickel- or cobalt-based, stainless steel, titanium alloys

Nuances Sorten Grades	Domaine d'application Anwendungsbereich Application area	Finishing / light machining	Semi-finishing / medium cut	Roughing / heavy machining	Géométries de coupe disponibles Verfügbare Spanformgeometrien Available cutting geometries	Résistance à l'usure Verschleissfestigkeit Wear resistance	Ténacité, résistance à la rupture Zähigkeit, Bruchwiderstand Toughness, crack resistance	Résistance à la température Bearbeitungswarmfestigkeit Machining heat resistance	Revêtement et couleur Beschichtung und Farbe Coating and colour	Recommandations spéciales Sonder Empfehlungen Special recommendations
Carbide + CVD										
Ti4	★★★★★ ★★★		●	●	EN-MF EN-HF3 EN-HF	■■■■■□	■■■■■□	■■■■■	CVD	
Ti5	★★★★★ ★★★		●	●	EN-MF2 EN-HF	■■■■■□	■■■■■□	■■■■■	CVD	Easy wear out control with TiN top layer
HTi5	★★★★★ ★★★		●	●	EN-XF2 EN-MF2 EN-HF	■■■■■	■■■□□	■■■■■	CVD	Easy wear out control with TiN top layer
Ti6	★★★ ★★★★★ ★★★★		●	●	EN-HF3	■■■■■□	■■■■■□	■■■■■	CVD	
Ti7	★★★ ★★★★★ ★★★★		●	●	EN-MF	■■■□□	■■■■■□	■■■■■	CVD	titanium alloys, refractory materials, iron-, nickel- or cobalt-based, austenitic stainless steel
Carbide uncoated										
K10	★★★ ★★★	●			FN-X8 FN-X17 FN-X25 ELP-X10/ERP-X10 FN-K18 FN-0	■■■□□	■■■□□	■■□□□	uncoated	
K20	★★ ★★	●			FN/ENP-X8 FN/ENP-X17 FN/ENP-X25 ELP-X10/ERP-X10	■■□□□	■■■□□	■■□□□	uncoated	
CERMET										
CTA	★★★★★ ★★★	●			FN-X8	■■■■■□	■■■■■□	■■■■■	CERMET +PVD	
CT7	★★★★★ ★★★	●	●	●	ENP-KX EN-KM	■■■■■□	■■■■■□	■■■■■	CERMET + PVD	Easy wear out control with TiN top layer
HCT7	★★★★★ ★★★	●	●		ENP-KX EN-KM	■■■■■	■■■□□	■■■■■	CERMET + PVD	Easy wear out control with TiN top layer
CN6	★★★★	●			FN-X8 ENP-KX EN-KM	■■□□□	■■■■■□	■■■■■□	CERMET uncoated	

ISO-Line	G tolerance class	Tough grade, for normal to difficult machining conditions	Wear resistant grade, for finishing and light machining	Acier Stahl Steel						Inox Rostfreistahl Stainless steel			
				Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Hochlegierter Stahl High alloyed steel		Austénitique Austenitisch Austenitic		Martensitique Martensitisch Martensitic	
				VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
				P		M							
FN-X8	K20	HTA		80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiAlX	HTAX		80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN			80-170	0.01-0.12	60-140	0.01-0.10			60-120	0.01-0.12	60-120	0.01-0.12
	K20	K10											
ENP-X8	TiAlN			80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiN			80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.03-0.12	60-120	0.03-0.15
	K20												
FN-X17	TiAlN			80-180	0.01-0.12	60-150	0.01-0.10			60-140	0.01-0.15	60-140	0.01-0.15
	TiAlX			80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	ST	HST		80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-150	0.01-0.12	60-150	0.01-0.12
	TiN			80-170	0.01-0.12					60-120	0.01-0.15	60-120	0.01-0.15
	K20	K10											
ENP-X17	TiAlN	HTA		80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.15	60-140	0.03-0.18
	ST			80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-150	0.01-0.12	60-150	0.01-0.12
	TiAlX	HTAX		80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN			80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.01-0.15	60-120	0.03-0.18
	K20	K10											
FN-X25	TiAlN	HTA								60-140	0.01-0.12		
	TiN									60-120	0.01-0.12		
	K20	K10											
ENP-X25	TiAlN									60-140	0.03-0.12	60-140	0.03-0.15
	TiAlX			80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiN									60-120	0.03-0.12	60-120	0.03-0.15
	K20												
ENP-X20	ZTA									60-140	0.03-0.18	60-140	0.03-0.18
		HTiX								60-140	0.03-0.18	60-140	0.03-0.18
G tolerance class Special 35° VC...-11													
FL / FR-X10	TiAlN	HTA		80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	TiAlX	HTAX		80-180	0.01-0.12	60-150	0.01-0.10	50-120	0.01-0.08	60-140	0.01-0.12	60-140	0.01-0.12
	ST	HST		80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-150	0.03-0.12	60-150	0.01-0.12
	TiN			80-170	0.01-0.12	60-140	0.01-0.10			60-120	0.01-0.12	60-120	0.01-0.12
	K20	K10											
ELP/ERP-X10	TiAlN	HTA		80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	TiAlX	HTAX		80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
	ST			80-180	0.03-0.15	60-160	0.03-0.12	50-120	0.03-0.10	60-150	0.03-0.12	60-150	0.01-0.12
	TiN			80-170	0.03-0.15	60-150	0.03-0.12			60-120	0.03-0.12	60-120	0.03-0.15
	K20	K10											
FN-K18		HTA		80-180	0.01-0.10	60-150	0.01-0.10			60-140	0.01-0.10	60-140	0.01-0.10
		HTiN		80-170	0.01-0.10	60-140	0.01-0.10			60-120	0.01-0.10	60-120	0.01-0.10
		K10											
FN-0		HTA		80-150	0.01-0.10								
		HTiN		80-140	0.01-0.10								
		K10											

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

N Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								S Titane et superalliages Titan und Superlegierungen Titanium and superalloys							
Aluminium		Al-Si		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Ti grade 1 - 3		Ti grade 4 - 6		Superalliages Superlegierungen Superalloys			
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
		150-1600	0.01-0.15	80-300	0.01-0.12	100-400	0.01-0.15			30-60	0.01-0.12	40-70	0.01-0.10		
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10		
120-2200	0.01-0.18	150-1600	0.01-0.15	80-300	0.01-0.12	100-400	0.01-0.15								
120-2000	0.01-0.18	150-1500	0.01-0.15	80-250	0.01-0.12	100-300	0.01-0.15	30-70	0.01-0.12						
		150-800	0.03-0.18	80-300	0.03-0.15					30-60	0.03-0.12	40-70	0.03-0.10		
		150-800	0.03-0.18	80-300	0.03-0.15										
		150-800	0.03-0.18	80-250	0.03-0.15										
		150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18			30-70	0.01-0.15	40-80	0.01-0.12		
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10		
										40-80	0.01-0.08	40-80	0.01-0.08		
120-2200	0.01-0.25	150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18								
120-2000	0.01-0.25	150-1500	0.01-0.18	80-250	0.01-0.15	100-300	0.01-0.18	40-80	0.01-0.15						
		150-800	0.03-0.20	80-300	0.03-0.18					30-70	0.03-0.15	40-80	0.03-0.12		
										40-80	0.01-0.08	40-80	0.01-0.08		
		150-800	0.03-0.20	80-300	0.03-0.18			30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10		
		150-800	0.03-0.20	80-250	0.03-0.18										
		150-1600	0.01-0.22	80-300	0.01-0.18					30-60	0.01-0.12	40-70	0.01-0.10		
120-2200	0.01-0.30	150-1600	0.01-0.22	80-300	0.01-0.18										
120-2000	0.01-0.30	150-1500	0.01-0.22	80-250	0.01-0.18			30-70	0.01-0.12						
		150-800	0.03-0.25	80-300	0.03-0.20					30-60	0.03-0.12	40-70	0.03-0.10		
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10		
		150-800	0.03-0.25	80-300	0.03-0.20										
		150-800	0.03-0.25	80-250	0.03-0.20										
		150-800	0.03-0.25	80-300	0.03-0.20					40-90	0.03-0.15	40-100	0.03-0.15		
		150-800	0.03-0.25	80-300	0.03-0.20					40-80	0.03-0.15	40-90	0.03-0.15		
		150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18			30-60	0.01-0.12	40-70	0.01-0.10		
								30-70	0.01-0.12	30-60	0.01-0.12	40-70	0.01-0.10		
										40-80	0.01-0.08	40-80	0.01-0.08		
120-2200	0.01-0.20	150-1600	0.01-0.18	80-300	0.01-0.15	100-400	0.01-0.18								
120-2000	0.01-0.20	150-1500	0.01-0.18	80-250	0.01-0.15	100-300	0.01-0.18	30-70	0.01-0.12						
		150-1600	0.03-0.20	80-300	0.03-0.18					30-60	0.03-0.12	40-70	0.03-0.10		
										30-60	0.03-0.12	40-70	0.03-0.10		
										40-80	0.01-0.08	40-80	0.01-0.08		
		150-1600	0.03-0.20	80-300	0.01-0.18										
		150-1500	0.03-0.20	80-250	0.01-0.18										
		150-1600	0.01-0.12	80-300	0.01-0.10					30-70	0.01-0.10	40-80	0.01-0.10		
120-2200	0.01-0.15	150-1600	0.01-0.12	80-300	0.01-0.10										
120-2000	0.01-0.15	150-1500	0.01-0.12	80-250	0.01-0.10			40-80	0.01-0.10						
						100-400	0.01-0.18								
						100-400	0.01-0.18								
						100-300	0.01-0.18								

ISO-Line

Paramètres de coupe indicatifs

Empfohlene Schnittwerte
Standard machining data

★★★★★

★★★★

★★★

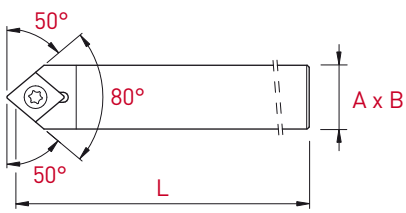
ISO-Line	M tolerance class	Tough grade, for normal to difficult machining conditions	Wear resistant grade, for finishing and light machining	Acier Stahl Steel						Inox Rostfreistahl Stainless steel			
				Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Hochlegierter Stahl High alloyed steel		Austénitique Austenitisch Austenitic		Martensitique Martensitisch Martensitic	
				VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
EN-XF3		TAC	HTAC	100-200	0.03-0.15	80-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
EN-XF2		TAC	HTAC	100-200	0.03-0.15	80-160	0.03-0.12	50-120	0.03-0.10	60-140	0.03-0.12	60-140	0.03-0.15
			HTi5	100-250	0.03-0.15	80-220	0.03-0.12	50-180	0.03-0.10	80-200	0.03-0.12	80-200	0.03-0.15
EN-MF2		TAC	HTAC	100-200	0.04-0.15	80-160	0.04-0.12	50-120	0.04-0.10	60-140	0.04-0.12	60-140	0.04-0.15
			HTi5	100-250	0.04-0.15	80-220	0.04-0.12	50-180	0.04-0.10	80-200	0.04-0.12	80-200	0.04-0.15
EN-MF		Tmax		100-220	0.04-0.30	80-180	0.04-0.25	50-150	0.04-0.20	60-150	0.04-0.25	60-150	0.04-0.25
		Ti4		100-250	0.05-0.30	80-220	0.05-0.25	50-180	0.05-0.20	80-200	0.05-0.25	80-200	0.05-0.25
		Ti7								60-150	0.05-0.20	60-150	0.05-0.20
EN-HF3		TiX	HTiX	100-220	0.06-0.35	80-180	0.06-0.30	50-150	0.06-0.25	60-150	0.06-0.25	60-150	0.06-0.25
			Ti6	100-250	0.06-0.35	80-220	0.06-0.30	50-180	0.06-0.25	80-200	0.06-0.25	80-200	0.06-0.25
EN-HF		Tmax		100-220	0.08-0.40	80-180	0.08-0.35	50-150	0.08-0.30	60-150	0.08-0.30	60-150	0.08-0.30
		TAC		100-200	0.08-0.40	80-160	0.08-0.35	50-140	0.08-0.30	60-140	0.08-0.30	60-140	0.08-0.30
		Ti4		100-250	0.08-0.40	80-220	0.08-0.35	50-180	0.08-0.30	80-200	0.08-0.30	80-200	0.08-0.30
		Ti5	HTi5	100-280	0.08-0.40	80-250	0.08-0.35	50-200	0.08-0.30	80-220	0.08-0.30	80-220	0.08-0.30

ISO-Line CERMET		CTA											
				100-350	0.01-0.12	80-300	0.01-0.10	70-250	0.01-0.08	80-250	0.01-0.12	80-250	0.01-0.12
FN-X8 CERMET		CN6		100-300	0.01-0.12	80-250	0.01-0.10	70-200	0.01-0.08				
ENP-KX CERMET		CT7	HCT7	100-350	0.03-0.20	80-300	0.03-0.18	70-250	0.03-0.15	80-250	0.03-0.18	80-250	0.03-0.18
		CN6		100-300	0.03-0.20	80-250	0.03-0.18	70-200	0.03-0.15				
EN-KM CERMET		CT7	HCT7	100-350	0.03-0.25	80-300	0.03-0.20	70-250	0.03-0.18	80-250	0.03-0.20	80-250	0.03-0.20
		CN6		100-300	0.03-0.25	80-250	0.03-0.20	70-200	0.03-0.18				

9.19



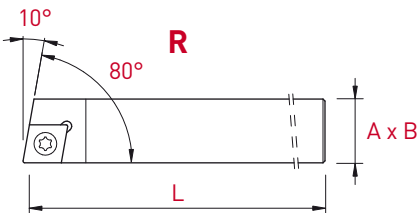
SCM



Plaquettes WSP Inserts	A x B	L	Art. N°
CC...-0602..	8 x 8	115	SCMCN-0808X-06
	10 x 10	115	SCMCN-1010X-06
	12 x 12	130	SCMCN-1212X-06
	12 x 12	90	SCMCN-1212G-06
	12.7 x 12.7	130	SCMCN-12.7X-06
	16 x 16	130	SCMCN-1616X-06
	16 x 16	75	SCMCN-1616F-06
CC...-09T3..	12 x 12	130	SCMCN-1212X-09
	12 x 12	90	SCMCN-1212G-09
	12.7 x 12.7	130	SCMCN-12.7X-09
	16 x 16	130	SCMCN-1616X-09
	16 x 16	75	SCMCN-1616F-09
	20 x 20	120	SCMCN-2020X-09



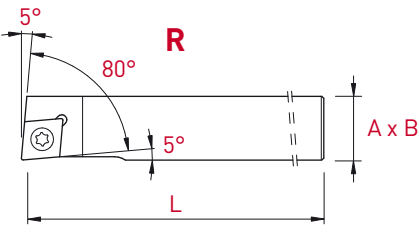
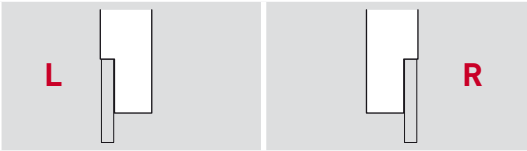
SCA



				
Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
CC..-0602..	8 x 8	115	SCACL-0808X-06	SCACR-0808X-06
	10 x 10	115	SCACL-1010X-06	SCACR-1010X-06
	12 x 12	130	SCACL-1212X-06	SCACR-1212X-06
	12 x 12	90	SCACL-1212G-06	SCACR-1212G-06
	12.7 x 12.7	130	SCACL-12.7X-06	SCACR-12.7X-06
	16 x 16	130	SCACL-1616X-06	SCACR-1616X-06
	16 x 16	75	SCACL-1616F-06	SCACR-1616F-06
CC..-09T3..	12 x 12	130	SCACL-1212X-09	SCACR-1212X-09
	12 x 12	90	SCACL-1212G-09	SCACR-1212G-09
	12.7 x 12.7	130	SCACL-12.7X-09	SCACR-12.7X-09
	16 x 16	130	SCACL-1616X-09	SCACR-1616X-09
	16 x 16	75	SCACL-1616F-09	SCACR-1616F-09
	20 x 20	120	SCACL-2020X-09	SCACR-2020X-09



SCL



Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
CC...-0602..	8 x 8	115	SCLCL-0808X-06	SCLCR-0808X-06
	10 x 10	115	SCLCL-1010X-06	SCLCR-1010X-06
	12 x 12	130	SCLCL-1212X-06	SCLCR-1212X-06
	12 x 12	90	SCLCL-1212G-06	SCLCR-1212G-06
	12.7 x 12.7	130	SCLCL-12.7X-06	SCLCR-12.7X-06
	16 x 16	130	SCLCL-1616X-06	SCLCR-1616X-06
	16 x 16	75	SCLCL-1616F-06	SCLCR-1616F-06
CC...-09T3..	12 x 12	130	SCLCL-1212X-09	SCLCR-1212X-09
	12 x 12	90	SCLCL-1212G-09	SCLCR-1212G-09
	12.7 x 12.7	130	SCLCL-12.7X-09	SCLCR-12.7X-09
	16 x 16	130	SCLCL-1616X-09	SCLCR-1616X-09
	16 x 16	75	SCLCL-1616F-09	SCLCR-1616F-09
	20 x 20	120	SCLCL-2020X-09	SCLCR-2020X-09

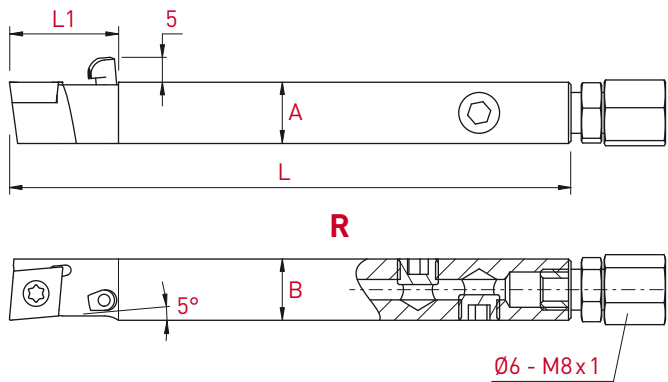
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

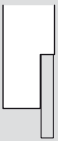
80°

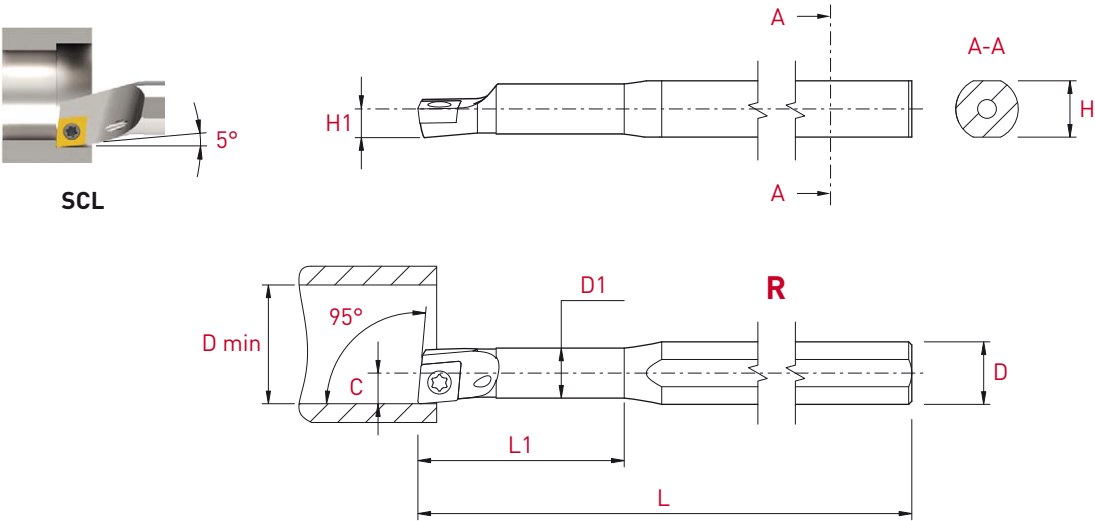
SCL-JET

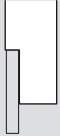


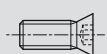
SCL



					
Plaquettes WSP Inserts	A x B	L	L1	Art. N°	Art. N°
CC...0602..	10 x 10	110	21	SCLCL-1010J-06-JET	SCLCR-1010J-06-JET
	12 x 12	110	21	SCLCL-1212J-06-JET	SCLCR-1212J-06-JET
	12.7 x 12.7	110	21	SCLCL-12.7J-06-JET	SCLCR-12.7J-06-JET
	16 x 16	110	21	SCLCL-1616J-06-JET	SCLCR-1616J-06-JET
CC...09T3..	12 x 12	110	21	SCLCL-1212J-09-JET	SCLCR-1212J-09-JET
	12.7 x 12.7	110	21	SCLCL-12.7J-09-JET	SCLCR-12.7J-09-JET
	16 x 16	110	21	SCLCL-1616J-09-JET	SCLCR-1616J-09-JET
	20 x 20	110	21	SCLCL-2020J-09-JET	SCLCR-2020J-09-JET



Acier / Stahl / Steel										
Plaquettes WSP Inserts	D	D min	D1	C	H1	L	L1	H		
CC...-0602..	8	8	6	4	4	100	25	7	A0608H-SCLCL-06	A0608H-SCLCR-06
	10	12	8	6	5	110	32	9	A0810J-SCLCL-06	A0810J-SCLCR-06
	12	14	10	7	6	125	38	11	A1012K-SCLCL-06	A1012K-SCLCR-06

Pour barres d'alésage Für Borstange For boring bar	Pièces de rechange Ersatzteile Spare parts	Options
		
	Art. N°	Art. N°
A0608H_ / A0810J_	V-M2.5X4.8-T8	C-T8
A1012K_	V-M2.5X5.8-T8	

Porte-outils intérieurs

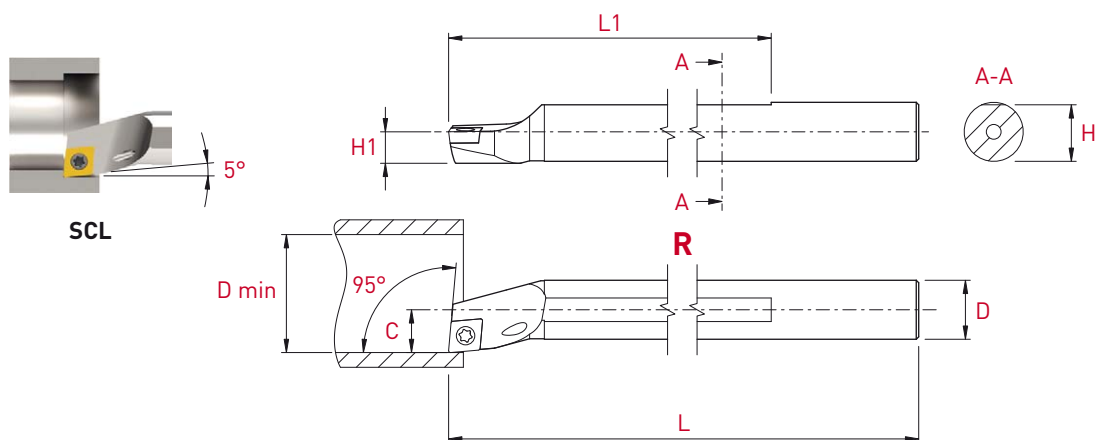
Innenhalter

Internal holders

80°

A-SCLCR/L

E-SCLCR/L



SCL

Acier / Stahl / Steel

L

R

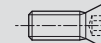
Plaquettes WSP Inserts	D	D min	C	H1	L	L1	H	Art. N°	Art. N°
CC...-0602	8	11	5	4	80	74	7.5	A08F-SCLCL-06	A08F-SCLCR-06
	10	13	7	5	100	85	9.5	A10H-SCLCL-06	A10H-SCLCR-06
	12	16	9	6	125	95	11.5	A12K-SCLCL-06	A12K-SCLCR-06
CC...-09T3	16	20	11	8	150	117	15.5	A16M-SCLCL-09	A16M-SCLCR-09

Carbure de tungstène / Hartmetall / Solid carbide

	D	D min	C	H1	L	L1	H	Art. N°	Art. N°
CC...-0602	8	9	5	4	125	-	7.5	E08K-SCLCL-06	E08K-SCLCR-06
	10	11	6	5	125	-	9.5	E10K-SCLCL-06	E10K-SCLCR-06
	12	13	8	6	150	-	11.5	E12M-SCLCL-06	E12M-SCLCR-06

Pièces de rechange
Ersatzteile
Spare parts

Options

Pour barres d'alésage
Für Borstange
For boring bar

Art. N°

Art. N°

A08F_ / E08K_

V-M2.5X4.8-T8

C-T8

A10H_ / E10H_

V-M2.5X5.8-T8

C-T8

A16M_

V-M3.5X7.2-T15-ISO

C-T15

CCGT
FN-X8

R	Art. N°	PVD			non revêtu unbeschichtet uncoated	
		TiAlN	TiN	HTA	K20	K10
0.05	CCGT-0602005-FN-X8	●	●	●	●	●
0.1	CCGT-060201-FN-X8	●	●	●	●	●
0.2	CCGT-060202-FN-X8	●	●	●	●	●
0.4	CCGT-060204-FN-X8	●	●	●	●	●
0.05	CCGT-09T3005-FN-X8	●	●	●	●	●
0.1	CCGT-09T301-FN-X8	●	●	●	●	●
0.2	CCGT-09T302-FN-X8	●	●	●	●	●
0.4	CCGT-09T304-FN-X8	●	●	●	●	●

CCGT
ENP-X8

R	Art. N°	PVD		non revêtu unbeschichtet uncoated
		TiAlN	TiN	K20
0.05	CCGT-0602005-ENP-X8	●	●	●
0.1	CCGT-060201-ENP-X8	●	●	●
0.2	CCGT-060202-ENP-X8	●	●	●
0.4	CCGT-060204-ENP-X8	●	●	●
0.05	CCGT-09T3005-ENP-X8	●	●	●
0.1	CCGT-09T301-ENP-X8	●	●	●
0.2	CCGT-09T302-ENP-X8	●	●	●
0.4	CCGT-09T304-ENP-X8	●	●	●

Plaquettes en métal dur

VHM-Wendeplatten

Solid carbide inserts

80°

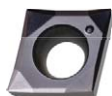
CCGT-X17

CCGT
FN-X17

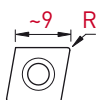
R	Art. N°	PVD					non revêtu unbeschichtet uncoated	
		ST	TiAlN	TiN	HST	HTA	K20	K10
	0.05	•	•	•	•	•	•	•
	0.1	•	•	•	•	•	•	•
	0.2	•	•	•	•	•	•	•
	0.4	•	•	•	•	•	•	•
	0.05	•	•	•	•	•	•	•
	0.1	•	•	•	•	•	•	•
	0.2	•	•	•	•	•	•	•
	0.4	•	•	•	•	•	•	•
	0.8	•	•	•	•	•	•	•

CCGT
ENP-X17

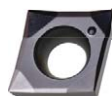
R	Art. N°	PVD			non revêtu unbeschichtet uncoated
		ST	TiAlN	TiN	
	0.05	•	•	•	•
	0.1	•	•	•	•
	0.2	•	•	•	•
	0.4	•	•	•	•
	0.05	•	•	•	•
	0.1	•	•	•	•
	0.2	•	•	•	•
	0.4	•	•	•	•
	0.8	•	•	•	•



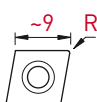
CCGT FN-X25



R	Art. N°	PVD			non revêtu unbeschichtet uncoated	
		TiAlN	TiN	HTA	K20	K10
0.05	CCGT-0602005-FN-X25	•	•	•	•	•
0.1	CCGT-060201-FN-X25	•	•	•	•	•
0.2	CCGT-060202-FN-X25	•	•	•	•	•
0.4	CCGT-060204-FN-X25	•	•	•	•	•
0.05	CCGT-09T3005-FN-X25	•	•	•	•	•
0.1	CCGT-09T301-FN-X25	•	•	•	•	•
0.2	CCGT-09T302-FN-X25	•	•	•	•	•
0.4	CCGT-09T304-FN-X25	•	•	•	•	•
0.8	CCGT-09T308-FN-X25	•	•	•	•	•



CCGT ENP-X25



R	Art. N°	PVD		non revêtu unbeschichtet uncoated
		TiAlN	TiN	
0.05	CCGT-0602005-ENP-X25	•	•	•
0.1	CCGT-060201-ENP-X25	•	•	•
0.2	CCGT-060202-ENP-X25	•	•	•
0.4	CCGT-060204-ENP-X25	•	•	•
0.05	CCGT-09T3005-ENP-X25	•	•	•
0.1	CCGT-09T301-ENP-X25	•	•	•
0.2	CCGT-09T302-ENP-X25	•	•	•
0.4	CCGT-09T304-ENP-X25	•	•	•
0.8	CCGT-09T308-ENP-X25	•	•	•

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

80°

CCGT-X20

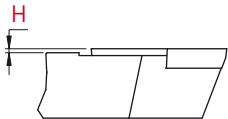


CCGT
ENP-X20

PVD	
☐	☐
☒ M	☒ M
☒ N	☒ N
☒ S	☒ S
ZTA	HTIX



R	H	Art. N°	ZTA	HTIX
0.1	0.2	CCGT-060201-ENP-X20	•	
0.2	0.2	CCGT-060202-ENP-X20	•	•
0.4	0.2	CCGT-060204-ENP-X20	•	•
0.1	0.25	CCGT-09T301-ENP-X20	•	
0.2	0.25	CCGT-09T302-ENP-X20	•	•
0.4	0.25	CCGT-09T304-ENP-X20	•	•
0.8	0.25	CCGT-09T308-ENP-X20	•	•



CCMT-XF3 / CCMT-XF2

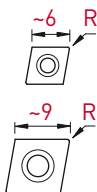
CCMT-MF2

80°

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts



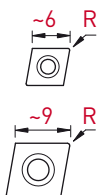
CCMT EN-XF3



R	Art. N°	PVD	
		TAC	HTAC
0.1	CCMT-060201-EN-XF3	●	●
0.2	CCMT-060202-EN-XF3	●	●
0.4	CCMT-060204-EN-XF3	●	●
0.1	CCMT-09T301-EN-XF3	●	●
0.2	CCMT-09T302-EN-XF3	●	●
0.4	CCMT-09T304-EN-XF3	●	●



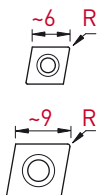
CCMT EN-XF2



R	Art. N°	PVD		CVD
		TAC	HTAC	HTi5
0.2	CCMT-060202-EN-XF2	●	●	●
0.4	CCMT-060204-EN-XF2	●	●	●
0.2	CCMT-09T302-EN-XF2	●	●	●
0.4	CCMT-09T304-EN-XF2	●	●	●



CCMT EN-MF2



R	Art. N°	PVD		CVD	
		TAC	HTAC	Ti5	HTi5
0.2	CCMT-060202-EN-MF2	●	●	●	●
0.4	CCMT-060204-EN-MF2	●	●	●	●
0.2	CCMT-09T302-EN-MF2	●	●	●	●
0.4	CCMT-09T304-EN-MF2	●	●	●	●
0.8	CCMT-09T308-EN-MF2	●	●	●	●

Plaquettes en métal dur

VHM-Wendeplatten

Solid carbide inserts

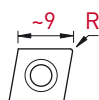
80°

CCMT-MF / CCMT-HF3

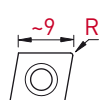
CCMT-HF

**CCMT
EN-MF**

R	Art. N°	PVD		CVD	
		☐ P ☐ M ☐	☐ P ☐ M ☐	☐ P ☐ M ☐ S	☐ P ☐ M ☐
		Tmax		Ti4	Ti7
0.2	CCMT-060202-EN-MF	•		•	•
0.4	CCMT-060204-EN-MF	•		•	•
0.2	CCMT-09T302-EN-MF	•		•	•
0.4	CCMT-09T304-EN-MF	•		•	•

**CCMT
EN-HF3**

R	Art. N°	PVD		CVD	
		☐ P ☐ M ☐	☐ P ☐ M ☐	☐ P ☐ M ☐ S	☐ P ☐ M ☐
		TiX	HTiX	Ti6	
0.2	CCMT-060202-EN-HF3	•	•	•	
0.4	CCMT-060204-EN-HF3	•	•	•	
0.2	CCMT-09T302-EN-HF3	•	•	•	
0.4	CCMT-09T304-EN-HF3	•	•	•	
0.8	CCMT-09T308-EN-HF3	•	•	•	

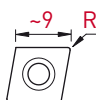
**CCMT
EN-HF**

R	Art. N°	PVD		CVD		
		☐ P ☐ M ☐	☐ P ☐ M ☐	☐ P ☐ M ☐	☐ P ☐ M ☐	☐ P ☐ M ☐
		Tmax	TAC	Ti4	Ti5	HTi5
0.2	CCMT-060202-EN-HF		•		•	•
0.4	CCMT-060204-EN-HF	•	•	•	•	•
0.8	CCMT-060208-EN-HF	•	•	•	•	•
0.2	CCMT-09T302-EN-HF		•		•	•
0.4	CCMT-09T304-EN-HF	•	•	•	•	•
0.8	CCMT-09T308-EN-HF	•	•	•	•	•

**CCGT
FN-X8**

CERMET			
PVD		non revêtu unbeschichtet uncoated	
☒ P	☒ M	☒ P	☐
☐	☐	☐	☐
CTA		CN6	
●		●	
●		●	
●		●	

R	Art. N°
0.05	CCGT-0602005-FN-X8
0.1	CCGT-060201-FN-X8
0.2	CCGT-060202-FN-X8
0.05	CCGT-09T3005-FN-X8
0.1	CCGT-09T301-FN-X8
0.2	CCGT-09T302-FN-X8
0.4	CCGT-09T304-FN-X8

**CCGT
ENP-KX**

CERMET			
PVD		non revêtu unbeschichtet uncoated	
☒ P	☒ M	☒ P	☐
☐	☐	☐	☐
CT7		CN6	
●		●	
●		●	
●		●	

R	Art. N°
0.1	CCGT-060201-ENP-KX
0.2	CCGT-060202-ENP-KX
0.4	CCGT-060204-ENP-KX
0.1	CCGT-09T301-ENP-KX
0.2	CCGT-09T302-ENP-KX
0.4	CCGT-09T304-ENP-KX



Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

80°

CCMT-KM



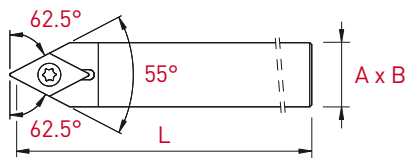
CCMT
EN-KM



R	Art. N°	CERMET		
		PVD		non revêtu unbeschichtet uncoated
		<div>P</div> <div>M</div> <div></div> <div></div>	<div>P</div> <div>M</div> <div></div> <div></div>	<div>P</div> <div></div> <div></div> <div></div>
		CT7	HCT7	CN6
0.2	CCMT-060202-EN-KM	•	•	•
0.4	CCMT-060204-EN-KM	•	•	•
0.2	CCMT-09T302-EN-KM	•	•	•
0.4	CCMT-09T304-EN-KM	•	•	•
0.8	CCMT-09T308-EN-KM	•	•	•



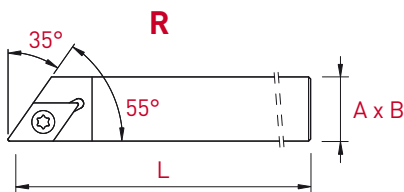
SDN

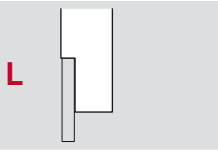
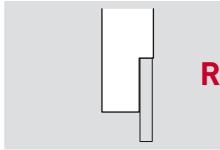


Plaquettes WSP Inserts	A x B	L	Art. N°
DC...-0702..	8 x 8	115	SDNCN-0808X-07
	10 x 10	115	SDNCN-1010X-07
	12 x 12	130	SDNCN-1212X-07
	12 x 12	90	SDNCN-1212G-07
	12.7 x 12.7	130	SDNCN-12.7X-07
	16 x 16	130	SDNCN-1616X-07
	16 x 16	75	SDNCN-1616F-07
DC...-11T3..	12 x 12	130	SDNCN-1212X-11
	12 x 12	90	SDNCN-1212G-11
	12.7 x 12.7	130	SDNCN-12.7X-11
	16 x 16	130	SDNCN-1616X-11
	16 x 16	75	SDNCN-1616F-11
	20 x 20	120	SDNCN-2020X-11



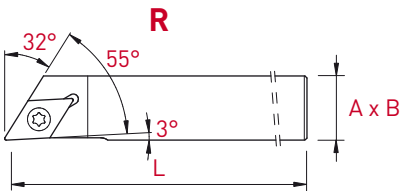
SDA



				
Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
DC...-0702..	8 x 8	115	SDACL-0808X-07	SDACR-0808X-07
	10 x 10	115	SDACL-1010X-07	SDACR-1010X-07
	12 x 12	130	SDACL-1212X-07	SDACR-1212X-07
	12 x 12	90	SDACL-1212G-07	SDACR-1212G-07
	12.7 x 12.7	130	SDACL-12.7X-07	SDACR-12.7X-07
	16 x 16	130	SDACL-1616X-07	SDACR-1616X-07
	16 x 16	75	SDACL-1616F-07	SDACR-1616F-07
DC...-11T3..	12 x 12	130	SDACL-1212X-11	SDACR-1212X-11
	12 x 12	90	SDACL-1212G-11	SDACR-1212G-11
	12.7 x 12.7	130	SDACL-12.7X-11	SDACR-12.7X-11
	16 x 16	130	SDACL-1616X-11	SDACR-1616X-11
	16 x 16	75	SDACL-1616F-11	SDACR-1616F-11
	20 x 20	120	SDACL-2020X-11	SDACR-2020X-11



SDJ



L

R

Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
DC...-0702..	8 x 8	115	SDJCL-0808X-07	SDJCR-0808X-07
	10 x 10	115	SDJCL-1010X-07	SDJCR-1010X-07
	12 x 12	130	SDJCL-1212X-07	SDJCR-1212X-07
	12 x 12	90	SDJCL-1212G-07	SDJCR-1212G-07
	12.7 x 12.7	130	SDJCL-12.7X-07	SDJCR-12.7X-07
	16 x 16	130	SDJCL-1616X-07	SDJCR-1616X-07
	16 x 16	75	SDJCL-1616F-07	SDJCR-1616F-07
	20 x 20	120	SDJCL-2020X-07	SDJCR-2020X-07
DC...-11T3..	12 x 12	130	SDJCL-1212X-11	SDJCR-1212X-11
	12 x 12	90	SDJCL-1212G-11	SDJCR-1212G-11
	12.7 x 12.7	130	SDJCL-12.7X-11	SDJCR-12.7X-11
	16 x 16	130	SDJCL-1616X-11	SDJCR-1616X-11
	16 x 16	75	SDJCL-1616F-11	SDJCR-1616F-11
	20 x 20	120	SDJCL-2020X-11	SDJCR-2020X-11

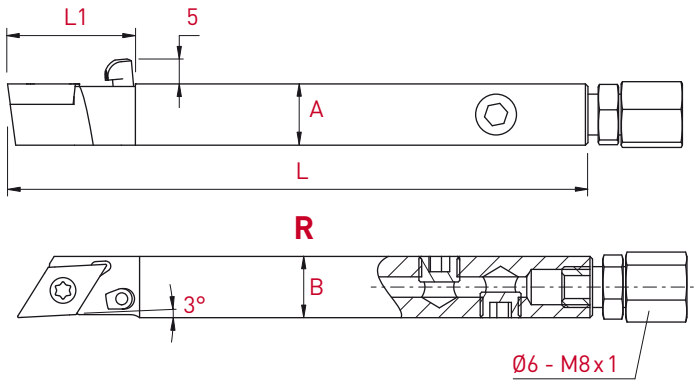
Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply

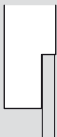
55°

SDJ-JET



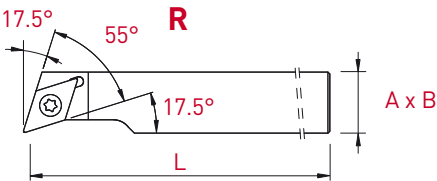
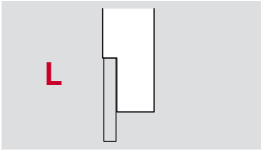
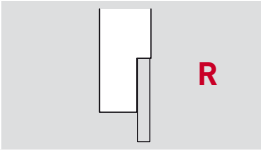
SDJ



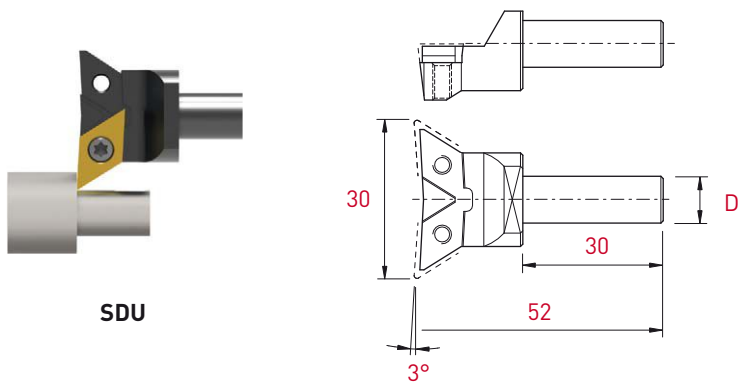
					
Plaquettes WSP Inserts	A x B	L	L1	Art. N°	Art. N°
DC...-0702..	10 x 10	110	20	SDJCL-1010J-07-JET	SDJCR-1010J-07-JET
	12 x 12	110	20	SDJCL-1212J-07-JET	SDJCR-1212J-07-JET
	12.7 x 12.7	110	20	SDJCL-12.7J-07-JET	SDJCR-12.7J-07-JET
	16 x 16	110	20	SDJCL-1616J-07-JET	SDJCR-1616J-07-JET
	20 x 20	110	20	SDJCL-2020J-07-JET	SDJCR-2020J-07-JET
DC...-11T3..	12 x 12	110	23	SDJCL-1212J-11-JET	SDJCR-1212J-11-JET
	12.7 x 12.7	110	23	SDJCL-12.7J-11-JET	SDJCR-12.7J-11-JET
	16 x 16	110	23	SDJCL-1616J-11-JET	SDJCR-1616J-11-JET
	20 x 20	110	23	SDJCL-2020J-11-JET	SDJCR-2020J-11-JET



SDH

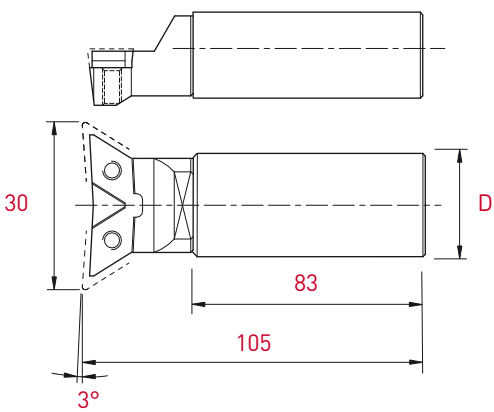


Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
DC...-0702..	10 x 10	115	SDHCL-1010X-07	SDHCR-1010X-07
	12 x 12	130	SDHCL-1212X-07	SDHCR-1212X-07
	12 x 12	90	SDHCL-1212G-07	SDHCR-1212G-07
	12.7 x 12.7	130	SDHCL-12.7X-07	SDHCR-12.7X-07
	16 x 16	130	SDHCL-1616X-07	SDHCR-1616X-07
	16 x 16	75	SDHCL-1616F-07	SDHCR-1616F-07
DC...-11T3..	16 x 16	130	SDHCL-1616X-11	SDHCR-1616X-11
	16 x 16	75	SDHCL-1616F-11	SDHCR-1616F-11
	20 x 20	120	SDHCL-2020X-11	SDHCR-2020X-11

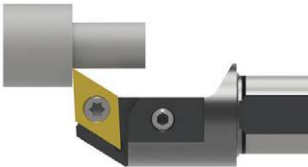


SDU

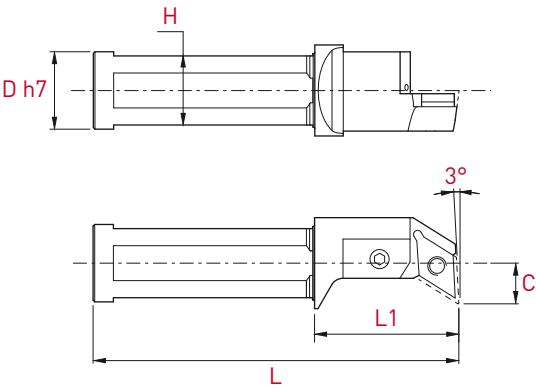
Plaquettes WSP Inserts	D	Art. N°
DC...-11T3..	10	SDUC-D10X-11



Plaquettes WSP Inserts	D	Art. N°
DC...-11T3..	20	SDUC-D20X-11
	25.4	SDUC-D25.4X-11



SDUCL



Plaquettes WSP Inserts	D	C	H	L	L1	Art. N°
DC...-11T3..	19.05	10	17	90	35.5	SDUCL-D19.05-90-11-JET
DC...-11T3..	20	10	17	90	35.5	SDUCL-D20-90-11-JET

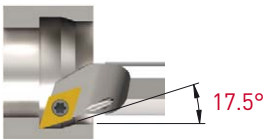
Pièces de rechange Ersatzteile Spare parts	
Art. N°	Art. N°
V-M4X9-T15	V-M5x5-BN24

Options	
Art. N°	Art. N°
C-T15	JS-M5-D4

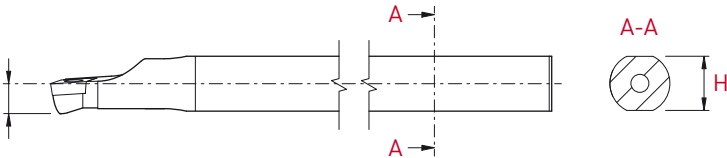
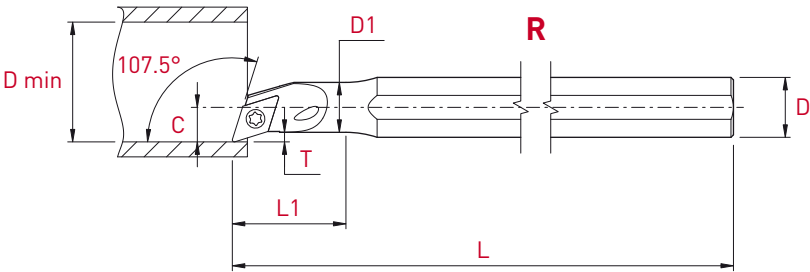
Porte-outils intérieurs amincis
Verjüngte Innenhalter
Thinned internal holders

55°

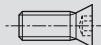
A-SDQCR/L

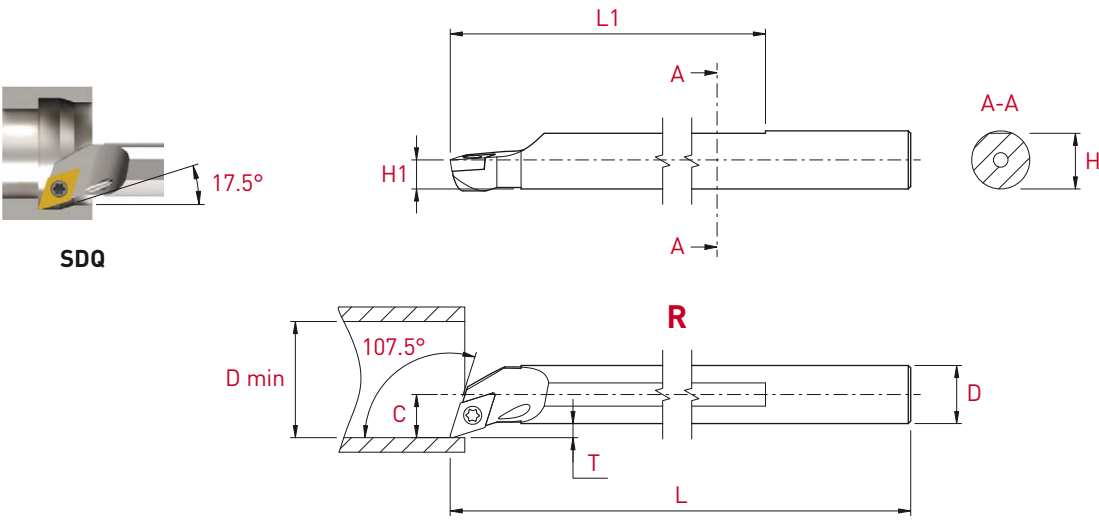


SDQ



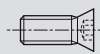
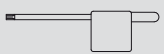
Acier / Stahl / Steel											
Plaquettes WSP Inserts	D	D min	D1	T	C	H1	L	L1	H	Art. N°	Art. N°
DC...-0702	10	12.5	8	2.4	7	5	100	22	9	A0810H-SDQCL-07	A0810H-SDQCR-07
	12	15.5	10	2.9	9	6	125	28	11	A1012K-SDQCL-07	A1012K-SDQCR-07

Pour barres d'alésage Für Borstange For boring bar	Pièces de rechange Ersatzteile Spare parts	Options
		
	Art. N°	Art. N°
A0810H_	V-M2.5X4.8-T8	C-T8
A1012K_	V-M2.5X5.8-T8	



Acier / Stahl / Steel										
Plaquettes WSP Inserts	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	14	2.4	7	4.5	100	85	9.5	A10H-SDQCL-07	A10H-SDQCR-07
	12	17	2.9	9	6	125	95	11.5	A12K-SDQCL-07	A12K-SDQCR-07
	16	21	2.9	11	8	150	117	15.5	A16M-SDQCL-07	A16M-SDQCR-07

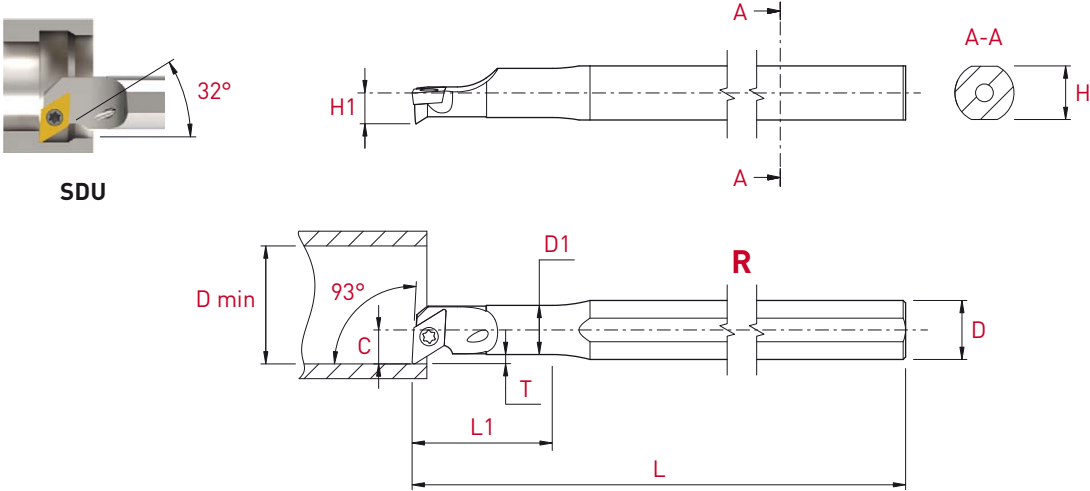
Carbure de tungstène / Hartmetall / Solid carbide										
	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	13	2.4	7.5	5	125	-	9.5	E10K-SDQCL-07	E10K-SDQCR-07
	12	17	2.9	9	6	150	-	11.5	E12M-SDQCL-07	E12M-SDQCR-07

Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	Art. N°
V-M2.5X5.8-T8	C-T8

Porte-outils intérieurs amincis
Verjüngte Innenhalter
Thinned internal holders

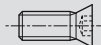
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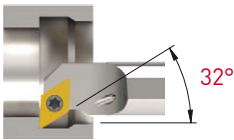
A-SDUCR/L



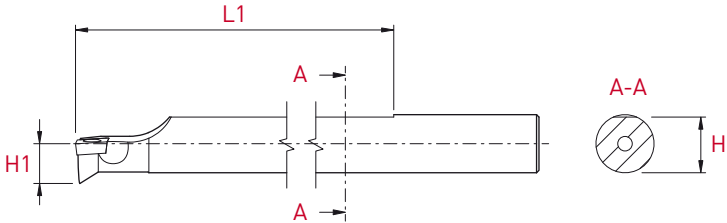
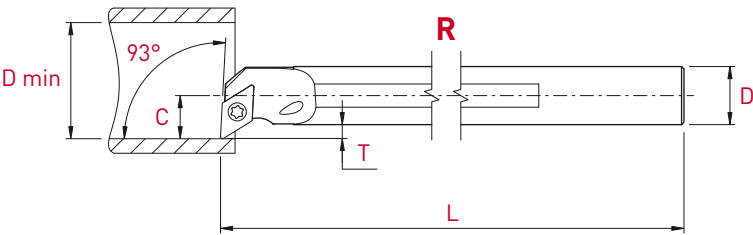
SDU

Acier / Stahl / Steel											
Plaquettes WSP Inserts	D	D min	D1	T	C	H1	L	L1	H	Art. N°	Art. N°
DC...-0702	10	12.5	8	1.9	7	5	100	22	9	A0810H-SDUCL-07	A0810H-SDUCR-07
	12	15.5	10	2.9	9	6	125	28	11	A1012K-SDUCL-07	A1012K-SDUCR-07

Pour barres d'alésage Für Borstange For boring bar	Pièces de rechange Ersatzteile Spare parts	Options
		
	Art. N°	Art. N°
A0810H_	V-M2.5X4.8-T8	C-T8
A1012K_	V-M2.5X5.8-T8	

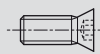
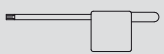


SDU



Acier / Stahl / Steel										
Plaquettes WSP Inserts	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	14	1.9	7	5	100	85	9.5	A10H-SDUCL-07	A10H-SDUCR-07
	12	17	2.9	9	6	125	95	11.5	A12K-SDUCL-07	A12K-SDUCR-07
	16	21	2.9	11	8	150	117	15.5	A16M-SDUCL-07	A16M-SDUCR-07

Carbure de tungstène / Hartmetall / Solid carbide										
	D	D min	T	C	H1	L	L1	H	Art. N°	Art. N°
DC..-0702	10	14	1.9	7	5	125	-	9.5	E10K-SDUCL-07	E10K-SDUCR-07
	12	17	2.9	9	6	150	-	11.5	E12M-SDUCL-07	E12M-SDUCR-07

Pièces de rechange Ersatzteile Spare parts	Options
	
Art. N°	Art. N°
V-M2.5X5.8-T8	C-T8

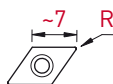
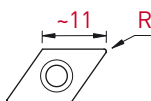
Plaquettes en métal dur

VHM-Wendeplatten

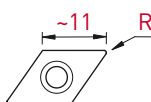
Solid carbide inserts

55°

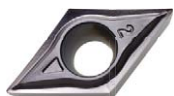
DCGT-X8

DCGT
FN-X8

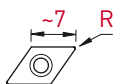
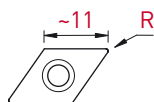
R	Art. N°	PVD					non revêtu unbeschichtet uncoated	
		P M N S TiAlN	P M N S TiAlX	P M N S TiN	P M N S HTA	P M N S HTAX	K20	K10
0.05	DCGT-0702005-FN-X8	•	•	•	•	•	•	•
0.08	DCGT-0702008-FN-X8	•	•		•	•	•	•
0.1	DCGT-070201-FN-X8	•	•	•	•	•	•	•
0.15	DCGT-0702015-FN-X8	•	•		•	•	•	•
0.2	DCGT-070202-FN-X8	•	•	•	•	•	•	•
0.4	DCGT-070204-FN-X8	•	•	•	•	•	•	•
0.05	DCGT-11T3005-FN-X8	•	•	•	•	•	•	•
0.08	DCGT-11T3008-FN-X8	•	•		•	•	•	•
0.1	DCGT-11T301-FN-X8	•	•	•	•	•	•	•
0.15	DCGT-11T3015-FN-X8	•	•		•	•	•	•
0.2	DCGT-11T302-FN-X8	•	•	•	•	•	•	•
0.4	DCGT-11T304-FN-X8	•	•	•	•	•	•	•

DCGT
ENP-X8

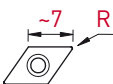
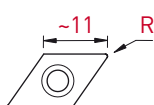
R	Art. N°	PVD		non revêtu unbeschichtet uncoated
		P M N S TiAlN	P M N S TiN	K20
0.05	DCGT-0702005-ENP-X8	•	•	•
0.08	DCGT-0702008-ENP-X8	•		•
0.1	DCGT-070201-ENP-X8	•	•	•
0.15	DCGT-0702015-ENP-X8	•		•
0.2	DCGT-070202-ENP-X8	•	•	•
0.4	DCGT-070204-ENP-X8	•	•	•
0.05	DCGT-11T3005-ENP-X8	•	•	•
0.08	DCGT-11T3008-ENP-X8	•		•
0.1	DCGT-11T301-ENP-X8	•	•	•
0.15	DCGT-11T3015-ENP-X8	•		•
0.2	DCGT-11T302-ENP-X8	•	•	•
0.4	DCGT-11T304-ENP-X8	•	•	•

DCGT
FN-X17

R	Art. N°	PVD							non revêtu unbeschichtet uncoated	
		ST	TiAlN	TiAlX	TiN	HfT	HTA	HTAX	K20	K10
0.05	DCGT-0702005-FN-X17	●	●	●	●	●	●	●	●	●
0.08	DCGT-0702008-FN-X17	●	●	●	●	●	●	●	●	●
0.1	DCGT-070201-FN-X17	●	●	●	●	●	●	●	●	●
0.15	DCGT-0702015-FN-X17	●	●	●	●	●	●	●	●	●
0.2	DCGT-070202-FN-X17	●	●	●	●	●	●	●	●	●
0.4	DCGT-070204-FN-X17	●	●	●	●	●	●	●	●	●
0.05	DCGT-11T3005-FN-X17	●	●	●	●	●	●	●	●	●
0.08	DCGT-11T3008-FN-X17	●	●	●	●	●	●	●	●	●
0.1	DCGT-11T301-FN-X17	●	●	●	●	●	●	●	●	●
0.15	DCGT-11T3015-FN-X17	●	●	●	●	●	●	●	●	●
0.2	DCGT-11T302-FN-X17	●	●	●	●	●	●	●	●	●
0.4	DCGT-11T304-FN-X17	●	●	●	●	●	●	●	●	●
0.8	DCGT-11T308-FN-X17	●	●	●	●	●	●	●	●	●

DCGT
ENP-X17

R	Art. N°	PVD			non revêtu unbeschichtet uncoated
		ST	TiAlN	TiN	
0.05	DCGT-0702005-ENP-X17	●	●	●	●
0.08	DCGT-0702008-ENP-X17	●	●	●	●
0.1	DCGT-070201-ENP-X17	●	●	●	●
0.15	DCGT-0702015-ENP-X17	●	●	●	●
0.2	DCGT-070202-ENP-X17	●	●	●	●
0.4	DCGT-070204-ENP-X17	●	●	●	●
0.05	DCGT-11T3005-ENP-X17	●	●	●	●
0.08	DCGT-11T3008-ENP-X17	●	●	●	●
0.1	DCGT-11T301-ENP-X17	●	●	●	●
0.15	DCGT-11T3015-ENP-X17	●	●	●	●
0.2	DCGT-11T302-ENP-X17	●	●	●	●
0.4	DCGT-11T304-ENP-X17	●	●	●	●
0.8	DCGT-11T308-ENP-X17	●	●	●	●



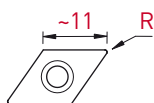
Plaquettes en métal dur

VHM-Wendeplatten

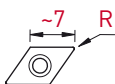
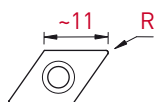
Solid carbide inserts

55°

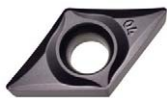
DCGT-X25

DCGT
FN-X25

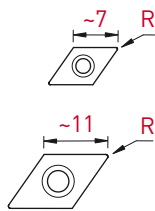
R	Art. N°	PVD			non revêtu unbeschichtet uncoated	
		<div>P</div> <div>M</div> <div>N</div> <div>S</div> <div>TiAlN</div>	<div>P</div> <div>M</div> <div>N</div> <div>S</div> <div>TiN</div>	<div>P</div> <div>M</div> <div>N</div> <div>S</div> <div>TiN</div>	<div></div> <div>N</div> <div>K20</div>	<div></div> <div>N</div> <div>K10</div>
0.05	DCGT-0702005-FN-X25	•	•	•	•	•
0.1	DCGT-070201-FN-X25	•	•	•	•	•
0.2	DCGT-070202-FN-X25	•	•	•	•	•
0.4	DCGT-070204-FN-X25	•	•	•	•	•
0.05	DCGT-11T3005-FN-X25	•	•	•	•	•
0.1	DCGT-11T301-FN-X25	•	•	•	•	•
0.2	DCGT-11T302-FN-X25	•	•	•	•	•
0.4	DCGT-11T304-FN-X25	•	•	•	•	•
0.8	DCGT-11T308-FN-X25	•	•	•	•	•

DCGT
ENP-X25

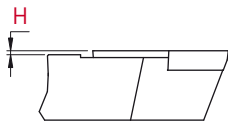
R	Art. N°	PVD			non revêtu unbeschichtet uncoated	
		<div>P</div> <div>M</div> <div>N</div> <div>S</div> <div>TiAlN</div>	<div>P</div> <div>M</div> <div>N</div> <div>S</div> <div>TiAlN</div>	<div>P</div> <div>M</div> <div>N</div> <div>S</div> <div>TiN</div>	<div></div> <div>N</div> <div>K20</div>	<div></div> <div>N</div> <div>K10</div>
0.05	DCGT-0702005-ENP-X25	•	•	•	•	•
0.1	DCGT-070201-ENP-X25	•	•	•	•	•
0.2	DCGT-070202-ENP-X25	•	•	•	•	•
0.4	DCGT-070204-ENP-X25	•	•	•	•	•
0.05	DCGT-11T3005-ENP-X25	•	•	•	•	•
0.1	DCGT-11T301-ENP-X25	•	•	•	•	•
0.2	DCGT-11T302-ENP-X25	•	•	•	•	•
0.4	DCGT-11T304-ENP-X25	•	•	•	•	•
0.8	DCGT-11T308-ENP-X25	•	•	•	•	•



DCGT
ENP-X20



			PVD	
			  	  
R	H	Art. N°	ZTA	HTX
0.1	0.2	DCGT-070201-ENP-X20	●	
0.2	0.2	DCGT-070202-ENP-X20	●	●
0.4	0.2	DCGT-070204-ENP-X20	●	●
0.1	0.25	DCGT-11T301-ENP-X20	●	
0.2	0.25	DCGT-11T302-ENP-X20	●	●
0.4	0.25	DCGT-11T304-ENP-X20	●	●
0.8	0.25	DCGT-11T308-ENP-X20	●	●



Plaquettes en métal dur

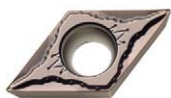
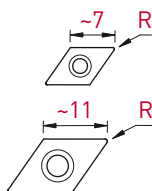
VHM-Wendeplatten

Solid carbide inserts

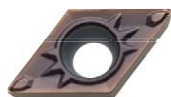
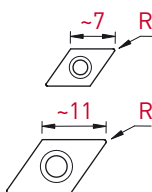
55°

DCMT-XF3 / DCMT-XF2

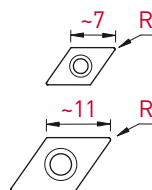
DCMT-MF2

DCMT
EN-XF3

R	Art. N°	PVD	
		TAC	HTAC
0.1	DCMT-070201-EN-XF3	●	●
0.2	DCMT-070202-EN-XF3	●	●
0.4	DCMT-070204-EN-XF3	●	●
0.1	DCMT-11T301-EN-XF3	●	●
0.2	DCMT-11T302-EN-XF3	●	●
0.4	DCMT-11T304-EN-XF3	●	●

DCMT
EN-XF2

R	Art. N°	PVD		CVD
		TAC	HTAC	HTi5
0.2	DCMT-070202-EN-XF2	●	●	●
0.4	DCMT-070204-EN-XF2	●	●	●
0.2	DCMT-11T302-EN-XF2	●	●	●
0.4	DCMT-11T304-EN-XF2	●	●	●

DCMT
EN-MF2

R	Art. N°	PVD		CVD	
		TAC	HTAC	Ti5	HTi5
0.2	DCMT-070202-EN-MF2	●	●	●	●
0.4	DCMT-070204-EN-MF2	●	●	●	●
0.2	DCMT-11T302-EN-MF2	●	●	●	●
0.4	DCMT-11T304-EN-MF2	●	●	●	●
0.8	DCMT-11T308-EN-MF2	●	●	●	●

DCMT-MF / DCMT-HF3

DCMT-HF

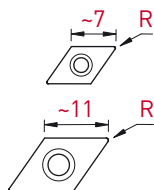
55°

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts



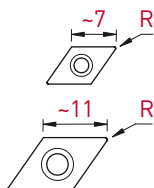
DCMT EN-MF

R	Art. N°	PVD		CVD	
		Tmax	Ti4	Ti7	
0.2	DCMT-070202-EN-MF	●	●	●	
0.4	DCMT-070204-EN-MF	●	●	●	
0.2	DCMT-11T302-EN-MF	●	●	●	
0.4	DCMT-11T304-EN-MF	●	●	●	



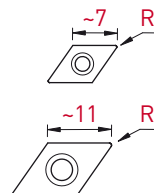
DCMT EN-HF3

R	Art. N°	PVD		CVD
		TiX	HTiX	Ti6
0.2	DCMT-070202-EN-HF3	●	●	●
0.4	DCMT-070204-EN-HF3	●	●	●
0.2	DCMT-11T302-EN-HF3	●	●	●
0.4	DCMT-11T304-EN-HF3	●	●	●
0.8	DCMT-11T308-EN-HF3	●	●	●



DCMT EN-HF

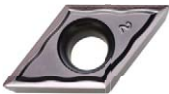
R	Art. N°	PVD		CVD		
		Tmax	TAC	Ti4	Ti5	HTi5
0.2	DCMT-070202-EN-HF	●	●	●	●	●
0.4	DCMT-070204-EN-HF	●	●	●	●	●
0.8	DCMT-070208-EN-HF	●	●	●	●	●
0.2	DCMT-11T302-EN-HF	●	●	●	●	●
0.4	DCMT-11T304-EN-HF	●	●	●	●	●
0.8	DCMT-11T308-EN-HF	●	●	●	●	●



Plaquettes CERMET
CERMET-Wendeplatten
CERMET inserts

55°

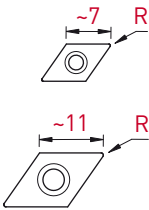
DCGT-X8
DCGT-KX



DCGT
FN-X8

CERMET	
PVD	non revêtu unbeschichtet uncoated
☒ P ☒ M ☐	☒ P ☐ ☐
CTA	CN6
☐	☐

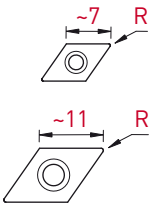
R	Art. N°
0.05	DCGT-0702005-FN-X8
0.1	DCGT-070201-FN-X8
0.2	DCGT-070202-FN-X8
0.05	DCGT-11T3005-FN-X8
0.1	DCGT-11T301-FN-X8
0.2	DCGT-11T302-FN-X8
0.4	DCGT-11T304-FN-X8

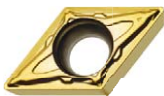


DCGT
ENP-KX

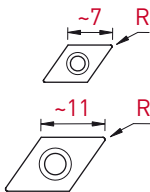
CERMET	
PVD	non revêtu unbeschichtet uncoated
☒ P ☒ M ☐	☒ P ☐ ☐
CT7	HCT7
☐	☐
CN6	☐

R	Art. N°
0.1	DCGT-070201-ENP-KX
0.2	DCGT-070202-ENP-KX
0.4	DCGT-070204-ENP-KX
0.1	DCGT-11T301-ENP-KX
0.2	DCGT-11T302-ENP-KX
0.4	DCGT-11T304-ENP-KX





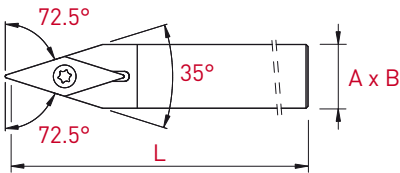
DCMT
EN-KM



R	Art. N°	CERMET		
		PVD		non revêtu unbeschichtet uncoated
		<div>P</div> <div>M</div> <div></div> <div></div>	<div>P</div> <div>M</div> <div></div> <div></div>	<div>P</div> <div></div> <div></div> <div></div>
		CT7	HCT7	CN6
0.2	DCMT-070202-EN-KM	•	•	•
0.4	DCMT-070204-EN-KM	•	•	•
0.2	DCMT-11T302-EN-KM	•	•	•
0.4	DCMT-11T304-EN-KM	•	•	•
0.8	DCMT-11T308-EN-KM	•	•	•



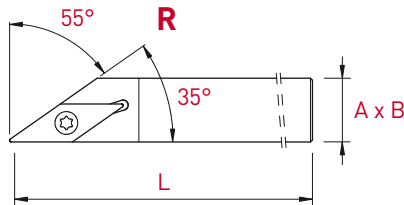
SVV

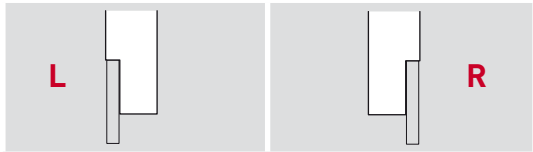


Plaquettes WSP Inserts	A x B	L	Art. N°
VC...-1103..	8 x 8	115	SVVCN-0808X-11
	10 x 10	115	SVVCN-1010X-11
	12 x 12	130	SVVCN-1212X-11
	12 x 12	90	SVVCN-1212G-11
	12.7 x 12.7	130	SVVCN-12.7X-11
	16 x 16	130	SVVCN-1616X-11
	16 x 16	75	SVVCN-1616F-11
	20 x 20	120	SVVCN-2020X-11
VC...-1303..	8 x 10	115	SVVCN-0810X-13
	10 x 10	115	SVVCN-1010X-13
	12 x 12	130	SVVCN-1212X-13
	12 x 12	90	SVVCN-1212G-13
	12.7 x 12.7	130	SVVCN-12.7X-13
	16 x 16	130	SVVCN-1616X-13
	16 x 16	75	SVVCN-1616F-13
	20 x 20	120	SVVCN-2020X-13
VC...-1604..	12 x 12	130	SVVCN-1212X-16
	12 x 12	90	SVVCN-1212G-16
	12.7 x 12.7	130	SVVCN-12.7X-16
	16 x 16	130	SVVCN-1616X-16
	16 x 16	75	SVVCN-1616F-16
	20 x 20	120	SVVCN-2020X-16



SVA



				
Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
VC...-1103..	8 x 8	115	SVACL-0808X-11	SVACR-0808X-11
	10 x 10	115	SVACL-1010X-11	SVACR-1010X-11
	12 x 12	130	SVACL-1212X-11	SVACR-1212X-11
	12 x 12	90	SVACL-1212G-11	SVACR-1212G-11
	12.7 x 12.7	130	SVACL-12.7X-11	SVACR-12.7X-11
	16 x 16	130	SVACL-1616X-11	SVACR-1616X-11
	16 x 16	75	SVACL-1616F-11	SVACR-1616F-11
	20 x 20	120	SVACL-2020X-11	SVACR-2020X-11
VC...-1604..	12 x 12	130	SVACL-1212X-16	SVACR-1212X-16
	12 x 12	90	SVACL-1212G-16	SVACR-1212G-16
	12.7 x 12.7	130	SVACL-12.7X-16	SVACR-12.7X-16
	16 x 16	130	SVACL-1616X-16	SVACR-1616X-16
	16 x 16	75	SVACL-1616F-16	SVACR-1616F-16
	20 x 20	120	SVACL-2020X-16	SVACR-2020X-16

Porte-outils

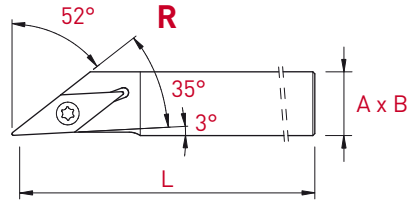
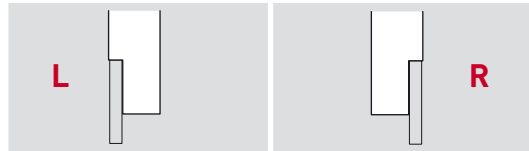
Halter
Holders

35°

SVJ



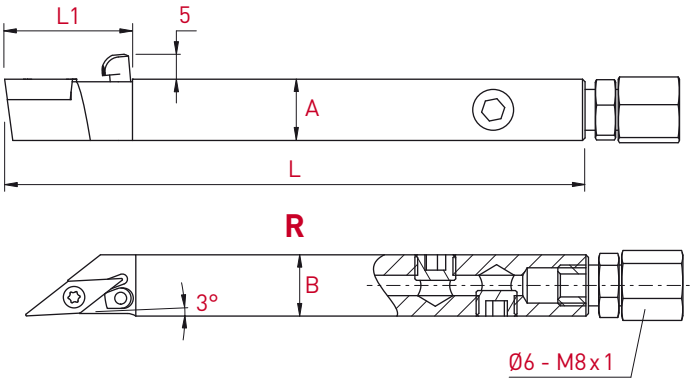
SVJ



Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
VC...-1103..	8 x 8	115	SVJCL-0808X-11	SVJCR-0808X-11
	10 x 10	115	SVJCL-1010X-11	SVJCR-1010X-11
	12 x 12	130	SVJCL-1212X-11	SVJCR-1212X-11
	12 x 12	90	SVJCL-1212G-11	SVJCR-1212G-11
	12.7 x 12.7	130	SVJCL-12.7X-11	SVJCR-12.7X-11
	16 x 16	130	SVJCL-1616X-11	SVJCR-1616X-11
	16 x 16	75	SVJCL-1616F-11	SVJCR-1616F-11
	20 x 20	120	SVJCL-2020X-11	SVJCR-2020X-11
VC...-1303..	8 x 10	115	SVJCL-0810X-13	SVJCR-0810X-13
	10 x 10	115	SVJCL-1010X-13	SVJCR-1010X-13
	12 x 12	130	SVJCL-1212X-13	SVJCR-1212X-13
	12 x 12	90	SVJCL-1212G-13	SVJCR-1212G-13
	12.7 x 12.7	130	SVJCL-12.7X-13	SVJCR-12.7X-13
	16 x 16	130	SVJCL-1616X-13	SVJCR-1616X-13
	16 x 16	75	SVJCL-1616F-13	SVJCR-1616F-13
	20 x 20	120	SVJCL-2020X-13	SVJCR-2020X-13
VC...-1604..	12 x 12	130	SVJCL-1212X-16	SVJCR-1212X-16
	12 x 12	90	SVJCL-1212G-16	SVJCR-1212G-16
	12.7 x 12.7	130	SVJCL-12.7X-16	SVJCR-12.7X-16
	16 x 16	130	SVJCL-1616X-16	SVJCR-1616X-16
	16 x 16	75	SVJCL-1616F-16	SVJCR-1616F-16
	20 x 20	120	SVJCL-2020X-16	SVJCR-2020X-16



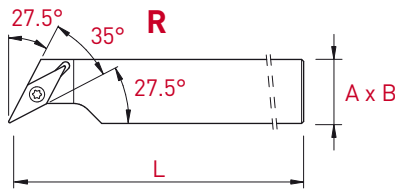
SVJ

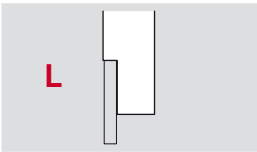
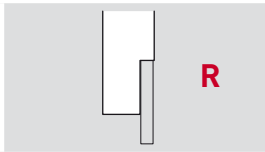


					
Plaquettes WSP Inserts	A x B	L	L1	Art. N°	Art. N°
VC..-1103..	10 x 10	110	21	SVJCL-1010J-11-JET	SVJCR-1010J-11-JET
	12 x 12	110	21	SVJCL-1212J-11-JET	SVJCR-1212J-11-JET
	12.7 x 12.7	110	21	SVJCL-12.7J-11-JET	SVJCR-12.7J-11-JET
	16 x 16	110	21	SVJCL-1616J-11-JET	SVJCR-1616J-11-JET
	20 x 20	110	21	SVJCL-2020J-11-JET	SVJCR-2020J-11-JET
VC..-1303..	10 x 10	110	26	SVJCL-1010J-13-JET	SVJCR-1010J-13-JET
	12 x 12	110	26	SVJCL-1212J-13-JET	SVJCR-1212J-13-JET
	12.7 x 12.7	110	26	SVJCL-12.7J-13-JET	SVJCR-12.7J-13-JET
	16 x 16	110	26	SVJCL-1616J-13-JET	SVJCR-1616J-13-JET
	20 x 20	110	26	SVJCL-2020J-13-JET	SVJCR-2020J-13-JET
VC..-1604..	12 x 12	110	30	SVJCL-1212J-16-JET	SVJCR-1212J-16-JET
	12.7 x 12.7	110	30	SVJCL-12.7J-16-JET	SVJCR-12.7J-16-JET
	16 x 16	110	30	SVJCL-1616J-16-JET	SVJCR-1616J-16-JET
	20 x 20	110	30	SVJCL-2020J-16-JET	SVJCR-2020J-16-JET



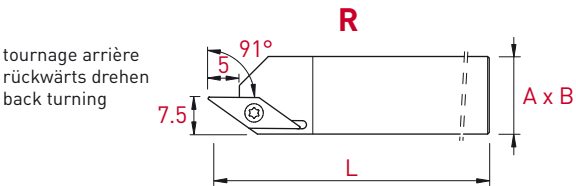
SVX



				
Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
VC...-1103..	16 x 16	130	SVXCL-1616X-11	SVXCR-1616X-11
	16 x 16	75	SVXCL-1616F-11	SVXCR-1616F-11
	20 x 20	120	SVXCL-2020X-11	SVXCR-2020X-11



SV-CL/R



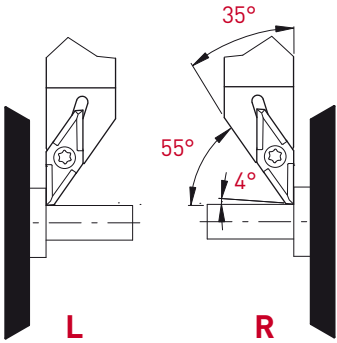
Plaquettes WSP Inserts	A x B	L	Art. N°	Art. N°
VCG...-1103..	12 x 12	130	SV-CL-1212X-11	SV-CR-1212X-11
	12 x 12	90	SV-CL-1212G-11	SV-CR-1212G-11
	12.7 x 12.7	130	SV-CL-12.7X-11	SV-CR-12.7X-11
	16 x 16	130	SV-CL-1616X-11	SV-CR-1616X-11
	16 x 16	75	SV-CL-1616F-11	SV-CR-1616F-11
	20 x 20	120	SV-CL-2020X-11	SV-CR-2020X-11

Porte-outils compatibles avec plaquettes VCGT ELP/ERP-FL/FR-X10°

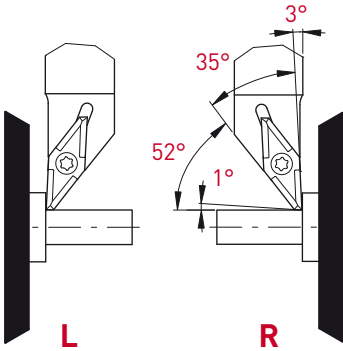
Passende Halter zu den Wendepplatten VCGT ELP/ERP-FL/FR-X10°

Holders compatible with inserts VCGT ELP/ERP-FL/FR-X10°

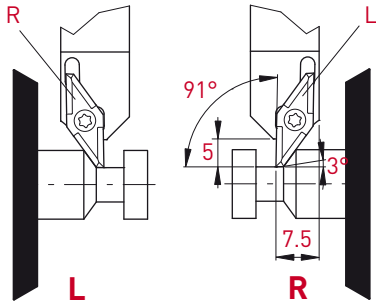
35°



	Art. N°
R	SVACR-...-11
L	SVACL-...-11



	Art. N°
R	SVJCR-...-11
L	SVJCL-...-11

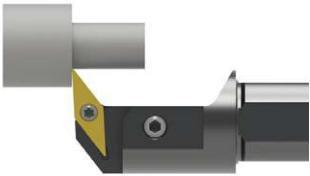


	Art. N°
R	SV-CR-...-11
L	SV-CL-...-11

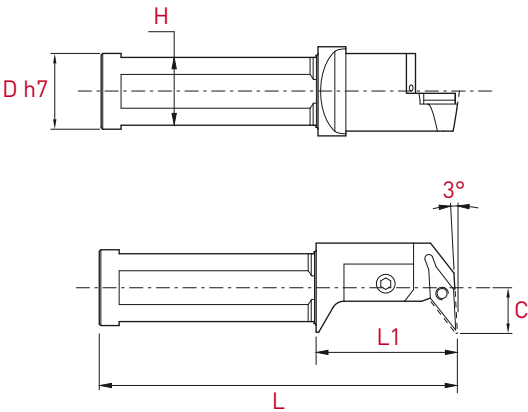
SVUCL-JET

35°

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply



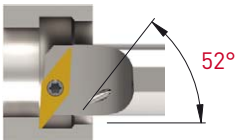
SVUCL



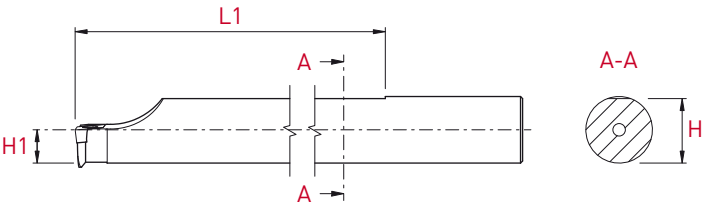
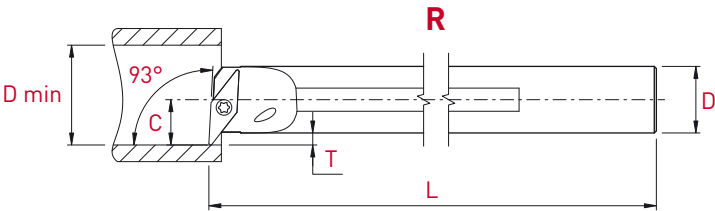
Plaquettes WSP Inserts	D	C	H	L	L1	Art. N°
VC...-1103..	19.05	10	17	90	35.5	SVUCL-D19.05-90-11-JET
VC...-1103..	20	10	17	90	35.5	SVUCL-D20-90-11-JET

Pièces de rechange Ersatzteile Spare parts	
Art. N°	Art. N°
V-M4X9-T15	V-M5x5-BN24

Options	
Art. N°	Art. N°
C-T15	JS-M5-D4



SVU



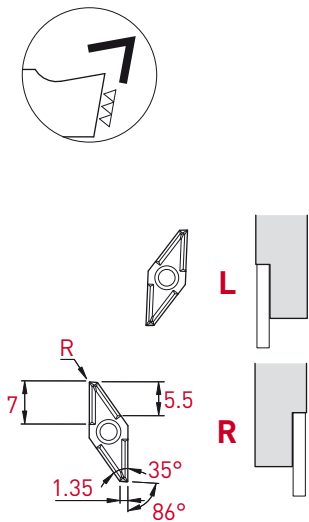
Acier / Stahl / Steel									L	R
Plaquettes WSP Inserts	D	Dmin	T	C	H1	L	L1	H	Art. N°	Art. N°
VC..-1103	16	21	3.1	11	8	150	118	15.5	A16M-SVUCL-11	A16M-SVUCR-11

Pièces de rechange Ersatzteile Spare parts	Options
Art. N°	Art. N°
V-M2.5X5.8-T8	C-T8

VCGT-L/R-X10

35°

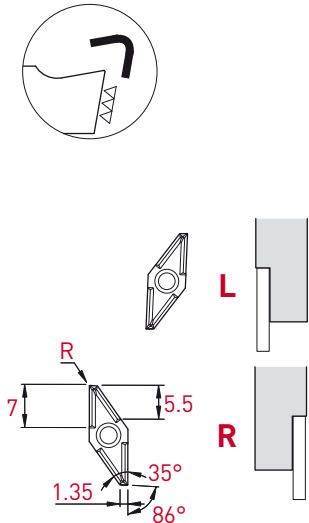
Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts



VCGT
FL / FR-X10

R	Art. N°
0.03	VCGT-1103003-FL-X10
0.08	VCGT-1103008-FL-X10
0.1	VCGT-110301-FL-X10
0.2	VCGT-110302-FL-X10
0.03	VCGT-1103003-FR-X10
0.08	VCGT-1103008-FR-X10
0.1	VCGT-110301-FR-X10
0.2	VCGT-110302-FR-X10

PVD								non revêtu unbeschichtet uncoated	
P	P	P	P	P	P	P	P		
M	M	M	M	M	M	M	M		
	N	N			N			N	N
S	S	S	S	S		S		S	S
ST	TiAlN	HTA	TiAlX	HTAX	TiN	HST		K10	K20
•	•	•			•	•		•	•
•	•	•			•	•		•	•
•	•	•			•	•		•	•
•	•	•			•	•		•	•
•	•	•	•	•	•	•		•	•
•	•	•	•	•	•	•		•	•
•	•	•	•	•	•	•		•	•
•	•	•	•	•	•	•		•	•



VCGT
ELP/ERP-X10

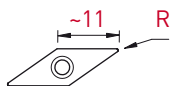
R	Art. N°
0.03	VCGT-1103003-ELP-X10
0.08	VCGT-1103008-ELP-X10
0.1	VCGT-110301-ELP-X10
0.2	VCGT-110302-ELP-X10
0.03	VCGT-1103003-ERP-X10
0.08	VCGT-1103008-ERP-X10
0.1	VCGT-110301-ERP-X10
0.2	VCGT-110302-ERP-X10

PVD							non revêtu unbeschichtet uncoated	
P	P	P	P	P	P	P		
M	M	M	M	M	M			
	N	N			N		N	N
S	S	S	S	S				
ST	TiAlN	HTA	TiAlX	HTAX	TiN		K10	K20
•	•	•			•		•	•
•	•	•			•		•	•
•	•	•			•		•	•
•	•	•			•		•	•
•	•	•	•	•	•		•	•
•	•	•	•	•	•		•	•
•	•	•	•	•	•		•	•
•	•	•	•	•	•		•	•

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

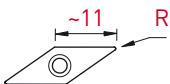
VC GT-K18
VC GW-0



VC GT
FN-K18

R	Art. N°	PVD		non revêtu unbeschichtet uncoated
		HTA	HTIN	K10
0.05	VCGT-1103005-FN-K18	●	●	●
0.1	VCGT-110301-FN-K18	●	●	●
0.2	VCGT-110302-FN-K18	●	●	●
0.4	VCGT-110304-FN-K18	●	●	●

PVD		non revêtu unbeschichtet uncoated
P	P	
M	M	
N	N	●
S		●
HTA	HTIN	K10



VC GW
FN-0

R	Art. N°	PVD		non revêtu unbeschichtet uncoated
		HTA	HTIN	K10
0.05	VCGW-1103005-FN-0	●	●	●
0.1	VCGW-110301-FN-0	●	●	●
0.2	VCGW-110302-FN-0	●	●	●
0.4	VCGW-110304-FN-0	●	●	●

PVD		non revêtu unbeschichtet uncoated
P	P	
N	N	●
HTA	HTIN	K10

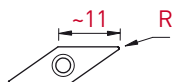
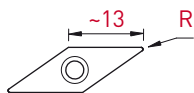
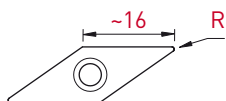
VCGT-X8

35°

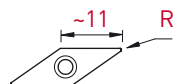
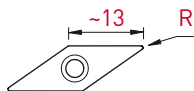
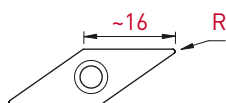
Plaquettes en métal dur

VHM-Wendeplatten

Solid carbide inserts

VCGT
FN-X8

R	Art. N°	PVD					non revêtu unbeschichtet uncoated	
		P M N S TiAlN	P M N S TiAlX	P M N S TiN	P M N S HTA	P M N S HTAX	K20	K10
0.05	VCGT-1103005-FN-X8	•	•	•	•	•	•	•
0.08	VCGT-1103008-FN-X8	•	•		•	•	•	•
0.1	VCGT-110301-FN-X8	•	•	•	•	•	•	•
0.15	VCGT-1103015-FN-X8	•	•		•	•	•	•
0.2	VCGT-110302-FN-X8	•	•	•	•	•	•	•
0.4	VCGT-110304-FN-X8	•	•	•	•	•	•	•
0.05	VCGT-1303005-FN-X8	•		•	•		•	•
0.1	VCGT-130301-FN-X8	•		•	•		•	•
0.2	VCGT-130302-FN-X8	•		•	•		•	•
0.4	VCGT-130304-FN-X8	•		•	•		•	•
0.05	VCGT-1604005-FN-X8	•		•	•		•	•
0.1	VCGT-160401-FN-X8	•		•	•		•	•
0.2	VCGT-160402-FN-X8	•		•	•		•	•
0.4	VCGT-160404-FN-X8	•		•	•		•	•

VCGT
ENP-X8

R	Art. N°	PVD		non revêtu unbeschichtet uncoated
		P M N S TiAlN	P M N S TiN	K20
0.05	VCGT-1103005-ENP-X8	•	•	•
0.08	VCGT-1103008-ENP-X8	•		•
0.1	VCGT-110301-ENP-X8	•	•	•
0.15	VCGT-1103015-ENP-X8	•		•
0.2	VCGT-110302-ENP-X8	•	•	•
0.4	VCGT-110304-ENP-X8	•	•	•
0.05	VCGT-1303005-ENP-X8	•		•
0.1	VCGT-130301-ENP-X8	•		•
0.2	VCGT-130302-ENP-X8	•		•
0.4	VCGT-130304-ENP-X8	•		•
0.05	VCGT-1604005-ENP-X8	•	•	•
0.1	VCGT-160401-ENP-X8	•	•	•
0.2	VCGT-160402-ENP-X8	•	•	•
0.4	VCGT-160404-ENP-X8	•	•	•

Plaquettes en métal dur

VHM-Wendepplatten

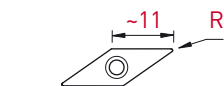
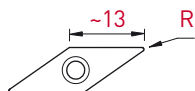
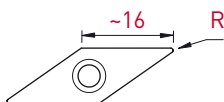
Solid carbide inserts

35°

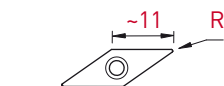
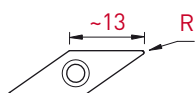
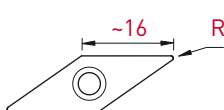
VCGT-X17

VCGT
FN-X17

R	Art. N°	PVD						non revêtu unbeschichtet uncoated	
		ST	TiAlN	TiN	HST	HTA	HTAX	K20	K10
0.05	VCGT-1103005-FN-X17	•	•	•	•	•	•	•	•
0.08	VCGT-1103008-FN-X17	•	•		•	•	•	•	•
0.1	VCGT-110301-FN-X17	•	•	•	•	•	•	•	•
0.15	VCGT-1103015-FN-X17	•	•		•	•	•	•	•
0.2	VCGT-110302-FN-X17	•	•		•	•	•	•	•
0.4	VCGT-110304-FN-X17	•	•	•	•	•	•	•	•
0.05	VCGT-1303005-FN-X17	•	•	•	•	•		•	•
0.1	VCGT-130301-FN-X17	•	•	•	•	•		•	•
0.2	VCGT-130302-FN-X17	•	•		•	•		•	•
0.4	VCGT-130304-FN-X17	•	•		•	•		•	•
0.05	VCGT-1604005-FN-X17	•	•	•	•	•		•	•
0.1	VCGT-160401-FN-X17	•	•	•	•	•		•	•
0.2	VCGT-160402-FN-X17	•	•	•	•	•		•	•
0.4	VCGT-160404-FN-X17	•	•	•	•	•		•	•
0.8	VCGT-160408-FN-X17	•	•	•	•	•		•	•

VCGT
ENP-X17

R	Art. N°	PVD			non revêtu unbeschichtet uncoated
		ST	TiAlN	TiN	
0.05	VCGT-1103005-ENP-X17	•	•	•	•
0.08	VCGT-1103008-ENP-X17	•	•		•
0.1	VCGT-110301-ENP-X17	•	•	•	•
0.15	VCGT-1103015-ENP-X17	•	•		•
0.2	VCGT-110302-ENP-X17	•	•	•	•
0.4	VCGT-110304-ENP-X17	•	•	•	•
0.05	VCGT-1303005-ENP-X17	•	•		•
0.1	VCGT-130301-ENP-X17	•	•		•
0.2	VCGT-130302-ENP-X17	•	•		•
0.4	VCGT-130304-ENP-X17	•	•		•
0.05	VCGT-1604005-ENP-X17	•	•	•	•
0.1	VCGT-160401-ENP-X17	•	•	•	•
0.2	VCGT-160402-ENP-X17	•	•	•	•
0.4	VCGT-160404-ENP-X17	•	•	•	•
0.8	VCGT-160408-ENP-X17	•	•	•	•



VCGT-X25

35°

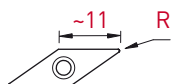
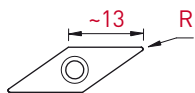
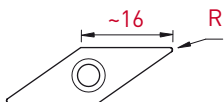
Plaquettes en métal dur

VHM-Wendeplatten

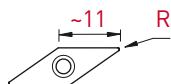
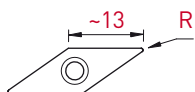
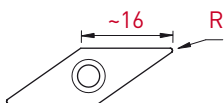
Solid carbide inserts

VCGT
FN-X25

R	Art. N°	PVD			non revêtu unbeschichtet uncoated	
		TiAlN	TiN	HTA	K20	K10
		P M N S	P M N	P M N S	☐ ☐ ☒ ☐	☐ ☐ ☒ ☐
0.05	VCGT-1103005-FN-X25	•	•	•	•	•
0.1	VCGT-110301-FN-X25	•	•	•	•	•
0.2	VCGT-110302-FN-X25	•	•	•	•	•
0.4	VCGT-110304-FN-X25	•	•	•	•	•
0.05	VCGT-1303005-FN-X25	•	•	•	•	•
0.1	VCGT-130301-FN-X25	•	•	•	•	•
0.2	VCGT-130302-FN-X25	•	•	•	•	•
0.4	VCGT-130304-FN-X25	•	•	•	•	•
0.8	VCGT-130308-FN-X25	•	•	•	•	•
0.05	VCGT-1604005-FN-X25	•	•	•	•	•
0.1	VCGT-160401-FN-X25	•	•	•	•	•
0.2	VCGT-160402-FN-X25	•	•	•	•	•
0.4	VCGT-160404-FN-X25	•	•	•	•	•
0.8	VCGT-160408-FN-X25	•	•	•	•	•

VCGT
ENP-X25

R	Art. N°	PVD			non revêtu unbeschichtet uncoated	
		TiAlN	TiAlX	TiN	K20	
		P M N S	P M N S	P M N	☐ ☐ ☒ ☐	☐ ☐ ☒ ☐
0.05	VCGT-1103005-ENP-X25	•	•	•	•	•
0.1	VCGT-110301-ENP-X25	•	•	•	•	•
0.2	VCGT-110302-ENP-X25	•	•	•	•	•
0.4	VCGT-110304-ENP-X25	•	•	•	•	•
0.05	VCGT-1303005-ENP-X25	•			•	•
0.1	VCGT-130301-ENP-X25	•			•	•
0.2	VCGT-130302-ENP-X25	•			•	•
0.4	VCGT-130304-ENP-X25	•			•	•
0.8	VCGT-130308-ENP-X25	•			•	•
0.05	VCGT-1604005-ENP-X25	•		•	•	•
0.1	VCGT-160401-ENP-X25	•		•	•	•
0.2	VCGT-160402-ENP-X25	•		•	•	•
0.4	VCGT-160404-ENP-X25	•		•	•	•
0.8	VCGT-160408-ENP-X25	•		•	•	•



Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

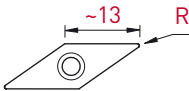
35°

VCGT-X20

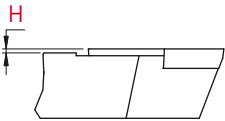


VCGT
ENP-X20

PVD	
☐	☐
☒ M	☒ M
☒ N	☒ N
☒ S	☒ S
ZTA	HTIX



R	H	Art. N°	ZTA	HTIX
0.2	0.25	VCGT-130302-ENP-X20	●	●
0.4	0.25	VCGT-130304-ENP-X20	●	●
0.8	0.25	VCGT-130308-ENP-X20	●	●



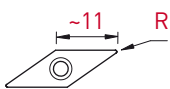
VCMT-XF3
VCMT-XF2

35°

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts



VCMT
EN-XF3

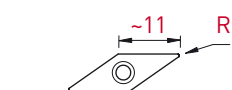
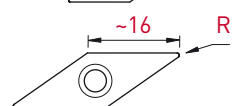


R	Art. N°	PVD	
		TAC	HTAC
0.1	VCMT-110301-EN-XF3	●	●
0.2	VCMT-110302-EN-XF3	●	●
0.4	VCMT-110304-EN-XF3	●	●

PVD	
P	P
M	M
N	N
S	S
TAC	HTAC



VCMT
EN-XF2



R	Art. N°	PVD		CVD
		TAC	HTAC	HTi5
0.2	VCMT-110302-EN-XF2	●	●	●
0.4	VCMT-110304-EN-XF2	●	●	●
0.4	VCMT-160404-EN-XF2	●	●	●

PVD		CVD
P	P	P
M	M	M
N	N	
S	S	
TAC	HTAC	HTi5

Plaquettes en métal dur
VHM-Wendeplatten
Solid carbide inserts

35°

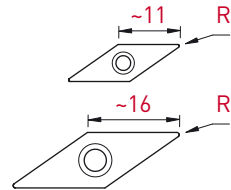
VCMT-MF
VCMT-HF



VCMT
EN-MF

PVD		CVD	
☒ P	☒ M	☒ P	☒ M
☐	☐	☐	☒ S
Tmax		Ti4	Ti7

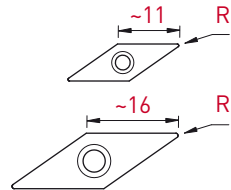
R	Art. N°
0.2	VCMT-110302-EN-MF
0.4	VCMT-110304-EN-MF
0.4	VCMT-160404-EN-MF



VCMT
EN-HF

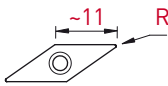
PVD		CVD	
☒ P	☒ M	☒ P	☒ M
☐	☐	☐	☐
Tmax		Ti4	

R	Art. N°
0.4	VCMT-110304-EN-HF
0.8	VCMT-110308-EN-HF
0.4	VCMT-160404-EN-HF
0.8	VCMT-160408-EN-HF





VCGT
FN-X8



R	Art. N°	CERMET	
		PVD	non revêtu unbeschichtet uncoated
		<div><div>P</div><div>M</div><div></div><div></div></div>	<div><div>P</div><div></div><div></div><div></div></div>
		CTA	CN6
0.05	VCGT-1103005-FN-X8	•	•
0.1	VCGT-110301-FN-X8	•	•
0.2	VCGT-110302-FN-X8	•	•
0.4	VCGT-110304-FN-X8	•	•

Pièces de rechange et accessoires

Ersatzteile und Zubehör

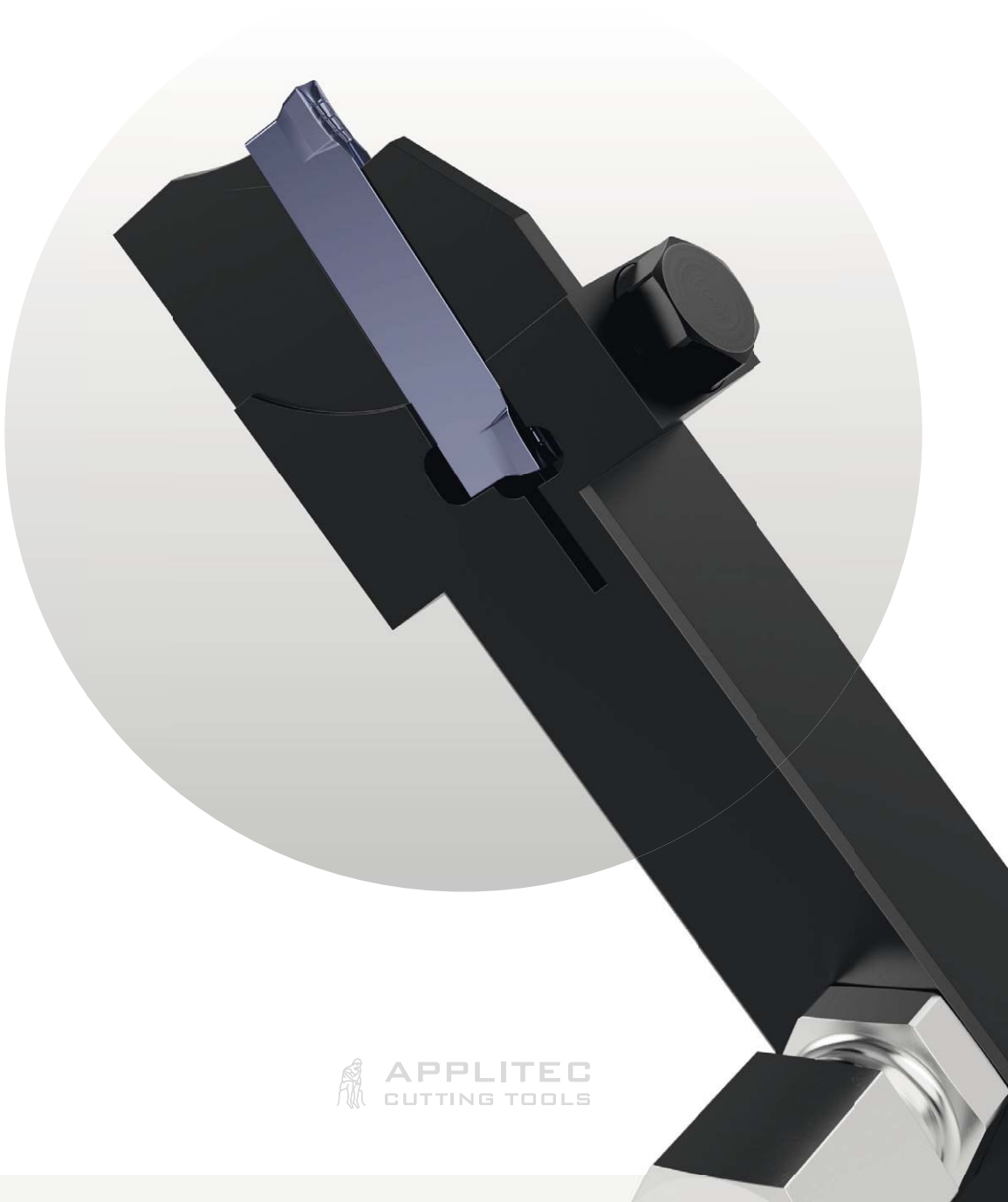
Spare parts and accessories

Vis de rechange Ersatzschrauben Spare screws			Options		
					
	Porte-outils Halter Holders	Vis Schrauben Screw	Clé Schlüssel Key	Clé dynamométrique Drehmomentschlüssel Torque wrench	Serrage Drehmoment Torque
	Series SC...-06 Series SD...-07 Series SV...-11	V-M2.5X7.8-T8 	C-T8 	SET-NM1.5-TX8	1.3 Nm
	Series SV...-13	V-M3X7.3-T8-ISO 			2.0 Nm
	Series SC...-09 Series SD...-11 Series SV...-16	V-M4X9-T15-ISO 	C-T15 	SET-NM3.0-TX15	3.0 Nm

Pièces de rechange JET Ersatzteile JET Spare parts JET	L Pour réf. Für Ref. For ref.	 *	 *	 *
		Art. N°	Art. N°	Art. N°
		S...L-10...-JET	JJL-4X12-D1.5	JB-M8X1
		S...L-12...-JET S...L-12.7...-JET	JJL-4X14-D1.5	
		S...L-16...-JET S...L-20...-JET	JJL-4X17-D1.5	
	R Pour réf. Für Ref. For ref.	 *	 *	 *
		Art. N°	Art. N°	Art. N°
		S...R-10...-JET	JJR-4X12-D1.5	JB-M8X1
		S...R-12...-JET S...R-12.7...-JET	JJR-4X14-D1.5	
		S...R-16...-JET S...R-20...-JET	JJR-4X17-D1.5	

* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

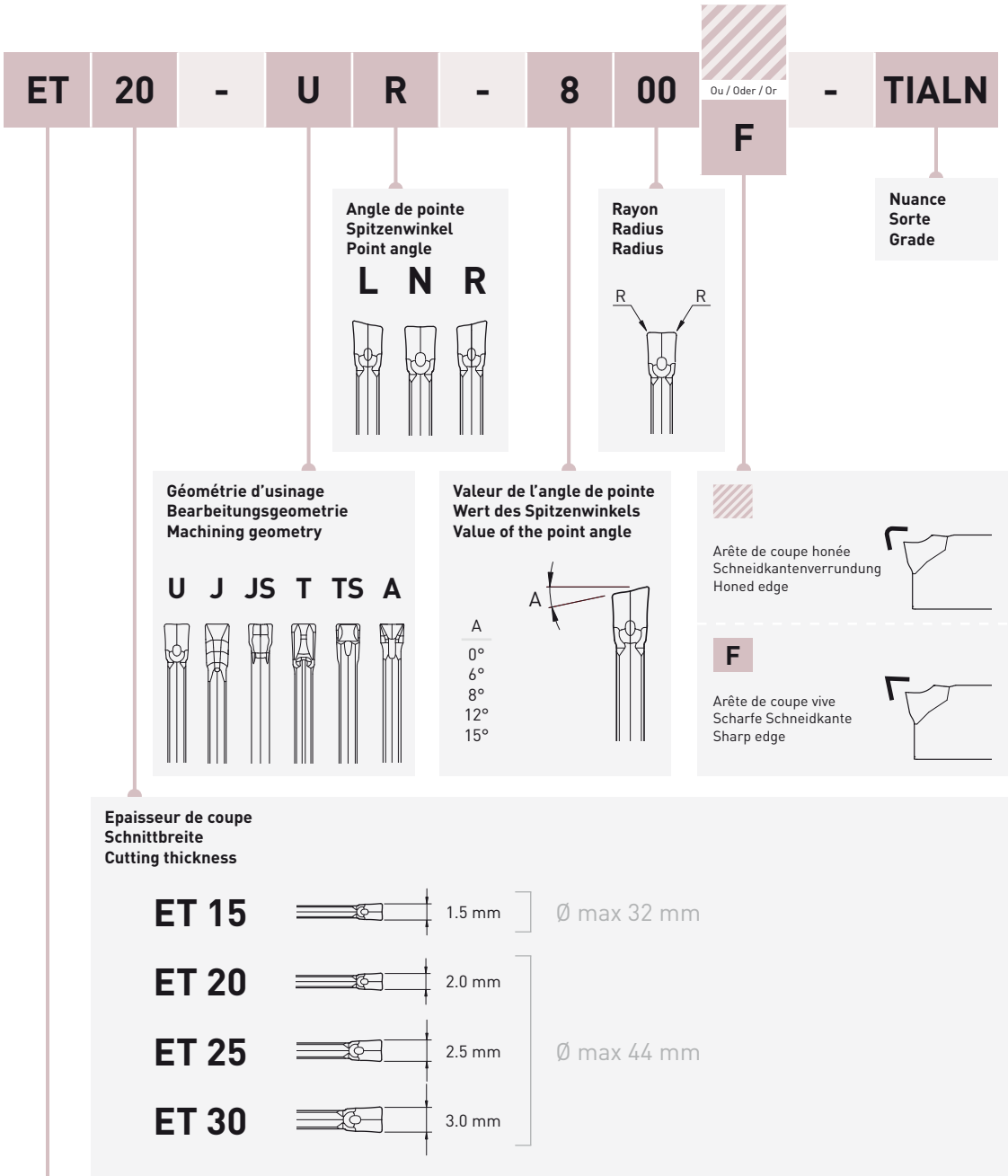
EVO CUT-Line



APPLITEC
CUTTING TOOLS

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Infos et avantages

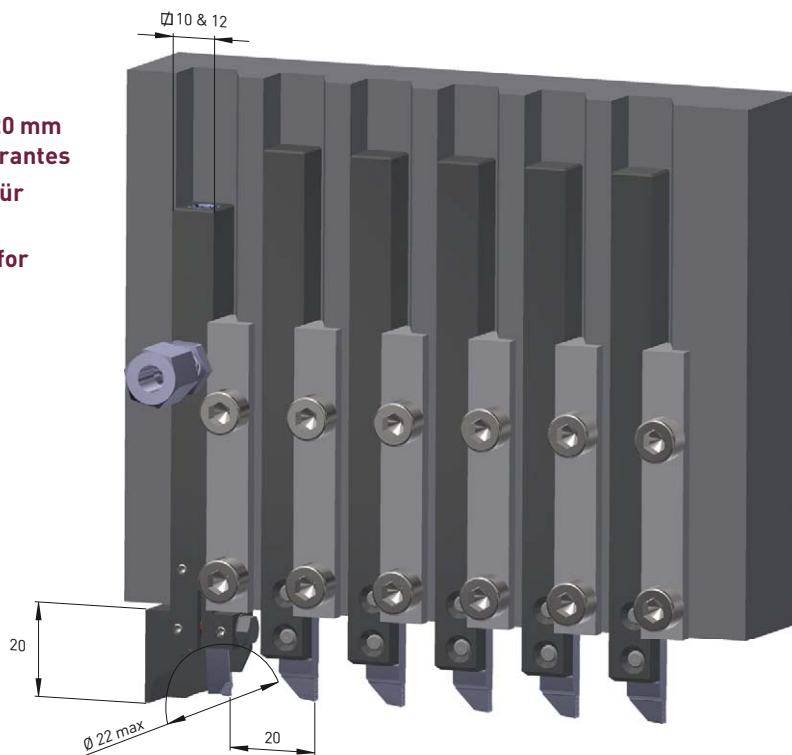
Infos und Vorteile

Infos and advantages

**Compact : seulement 20 mm
pour les machines courantes**

**Kompakt : nur 20 mm für
übliche Maschinen**

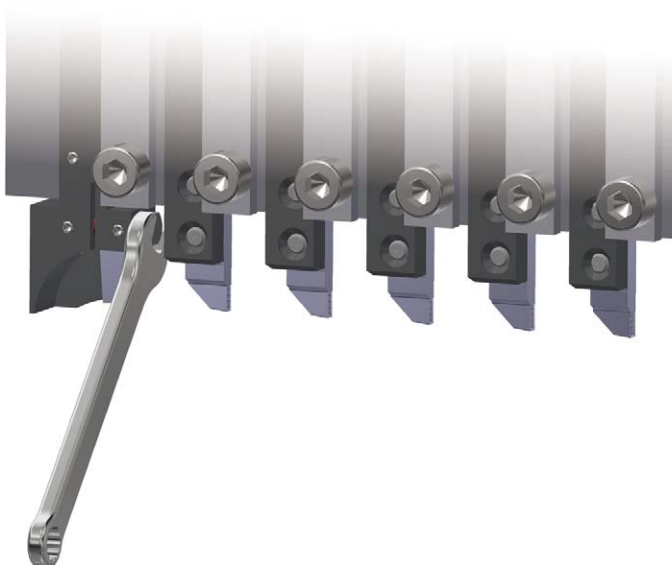
**Compact : only 20 mm for
current machines**



Facilité d'accès

Zugangsleichtigkeit

Excellent accessibility



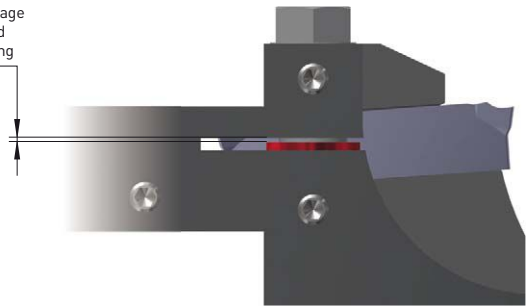
**Changement de la plaque
sans démontage**

**Veränderung der Platte
ohne Zerlegung**

**Change of insert
without disassembly**

Butée de serrage
Spannungs-Anschlag
Clamping stop

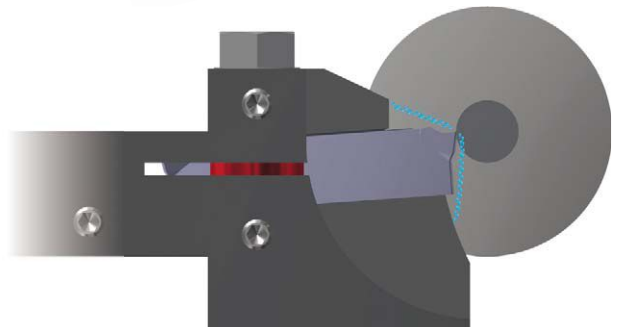
Distance de serrage
Anschlagabstand
Distance clamping



Recommandations de serrage :
n'utiliser que la clé fournie
Spannungsempfehlungen :
nur den gelieferten Schlüssel benutzen
Tightening recommendation :
only use the delivered key



Support JET à double lubrification
JET Halter mit doppeltem Schmierung
Jet holder with double lubrication



EVOCUT-Line

Infos et avantages

Infos und Vorteile

Infos and advantages

Porte-outils / Halter / Holders

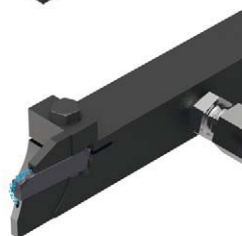
H

Système de serrage monobloc
Einteiliges Klemmsystem
Monobloc top clamp system



H JET

Porte-outils avec arrosage intégré
Halter mit integrierter Kühlmittelzufuhr
Holders with integrated coolant supply



**H-HM-JET
GWS-HM
MS-HM
HSK**

Porte-lames avec arrosage
Halter für Stechklinge mit Kühlung
Holder for parting-off blades with coolant



**HM
HK
HUK**

Lames
Stechklinge
Parting-off blades

Plaquettes / WSP / Inserts



U



J



JS



T



TS



A

UN

UL UR



- géométrie positive universelle, faibles efforts de coupe
- bonne maîtrise du copeau
- 1^{er} choix pour l'inox
- allgemeine Geometrie, geringe Schnittkräfte
- gute Spankontrolle
- 1. Wahl für rostfreiem Stahl
- all-round geometry, low cutting forces
- efficient chip control
- 1st choice for stainless steel

JN

JR



- géométrie universelle
- excellent rétrécissement du copeau pour un meilleur contrôle
- conseillé pour le tronçonnage de pièces à parois minces
- pour acier et inox
- allgemeine Geometrie
- ausgezeichnete Spanversmälnerung für eine bessere Spankontrolle
- für abstechen von dünnwandigen Teilen empfohlen
- für Stahl und rostfreiem Stahl
- all-round geometry
- very efficient arrow for a better chip control
- recommended for parting off of thin-walled parts
- for steel and stainless steel

JSN



- géométrie spéciale et étroite pour un meilleur contrôle du copeau
- recommandé pour l'acier avec faible taux de carbone, alliages Chrome nickel et acier 100Cr6
- spezielle und schmale Geometrie für eine bessere Spankontrolle
- empfohlen für Stahl mit niedrigem Kohlenstoffgehalt sowie Chrom-Nickel-Legierungen und 100Cr6-Stahl
- special and narrow geometry for better chip control
- recommended for low-carbon steel, chrome-nickel alloys and 100Cr6 steel

TN

TR



- géométrie négative
- utilisation dans des conditions de rigidité optimale
- pour les matières à haute ténacité
- universel pour les aciers et inox
- negative Geometrie
- bei stabilen Verhältnissen einsetzbar
- für hohe widerstandsfähige Rohstoffe
- allgemein für Stahl und rostfreiem Stahl
- negative geometry
- use in solid cutting conditions
- for high toughness material
- universal for steel and stainless steel

TSN



- géométrie négative similaire à TN pour avances modérées depuis 0.05mm/t
- conseillé pour les matières tenaces aciers et inox
- negative Geometrie ähnlich wie TN für moderate Vorschübe ab 0,05 mm/U
- Empfohlen für zähe Werkstoffe, Stahl und rostfreien Stahl
- negative geometry similar to TN for moderate feeds from 0.05 mm/rev
- recommended for tough materials, steel, and stainless steel

AN

AR



- géométrie fortement positive
- roule-copeaux poli avec arêtes de coupe vives
- 1^{er} choix pour aluminium et matériaux non ferreux
- stark positive Geometrie
- geschliffene Spanrolle mit scharfe Schneidkanten
- 1. Wahl für Aluminium und Nichteisenmetalle
- very positive geometry
- polished chip roller with sharp cutting edge
- 1st choice for aluminium and non-ferrous materials

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Nuances

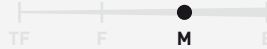
Sorten

Grades

TiAlN



Revêtement PVD
PVD Beschichtung
PVD coating



P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- pour l'usinage des aciers, aciers inoxydables et alliages de titane
- 1^{er} choix pour les avances faibles à modérées

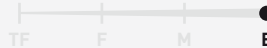
- für die Bearbeitung von Stahl, rostfreien Stahl und Titanlegierungen
- erste Wahl für niedrige bis mittlere Vorschübe

- for machining of steel, stainless steel and titanium alloys
- first choice for low to average cutting speed

Tmax



Revêtement PVD
PVD Beschichtung
PVD coating



P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- nuance pour usinage moyen à lourd des aciers, aciers alliés et inoxydables
- bonne résistance aux températures d'usinage élevées
- 1^{er} choix pour le tronçonnage des aciers au carbone et des aciers fortement alliés

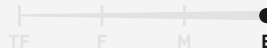
- Sorte für mittlere bis hohe Belastung in Stahl und legierter Stahlbearbeitung
- gute Bearbeitungswarmfestigkeit
- erste Wahl für die Bearbeitung von legiertem Kohlenstahl und hoch legiertem Stahl

- grade for medium to heavy machining of steel, stainless steel and alloyed steel
- high machining heat resistance
- first choice for the machining of carbon steel and high alloyed steel

Zmax



Revêtement PVD
PVD Beschichtung
PVD coating



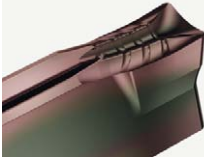
P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- pour l'usinage des aciers, aciers inoxydables et alliages de titane en conditions défavorables
- bonne résistance aux chocs à des vitesses de coupe moyennes à faibles
- 1^{er} choix pour le tronçonnage en coupe interrompue

- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen in schwierige Bearbeitungsfälle
- gute Bruchfestigkeit mit durchschnittliche bis niedrige Schnittgeschwindigkeit
- erste Wahl für die Bearbeitung in unterbrochenen Schnitte

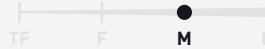
- for machining of steel, stainless steel and titanium alloys in unfavourable machining conditions
- good impact resistance with average to low cutting speed
- first choice for machining in interrupted cut

ZTi6



Revêtement CVD

CVD Beschichtung
CVD coating



- nuance très tenace
- grande résistance à la température
- 1^{er} choix pour les aciers « haute température »
- également recommandé pour les aciers inox

- sehr zähe Sorte
- hohe Bearbeitungswarmfestigkeit
- erste Wahl für „hohe Temperatur“ Stähle
- auch für rostfreie Stähle empfohlen

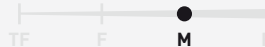
- very strong grade
- good wear resistance
- first choice for "high temperature" steels
- also recommended for stainless steels

AC



Revêtement PVD

PVD Beschichtung
PVD coating



- nuance pour métaux non ferreux
- très faible coefficient de frottement
- 1^{er} choix pour l'usinage des aluminiums, des cuivres et titanes faiblement alliés

- Sorte für Nichteisenmetalle
- sehr geringer Reibwert
- erste Wahl für die Bearbeitung von Aluminium, Kupfer und niedriglegiertem Titan

- grade for non-ferrous materials
- very low friction ratio
- first choice for Aluminium, copper and low alloyed titanium

N



Non revêtu
Unbeschichtet
Uncoated



- nuance non revêtue
- recommandé pour l'usinage des matières non ferreuses
- titane, laiton, cuivre, aluminium sans silicium, plastique

- unbeschichtete Sorte
- für die Bearbeitung von Nichteisenmetalle empfohlen
- Titan, Messing, Kupfer, Silicium freies Aluminium, Kunststoff

- uncoated grade
- recommended for machining of non-ferrous materials
- titanium, brass, bronze, aluminium without silicium, plastic

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Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

★★★★★

★★★★

★★★

						Acier Stahl Steel						Inox Rostfreistahl Stainless steel	
		ET15	ET20	ET25	ET30	Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Legierter Stahl High alloyed steel		Austénitique et martensitique Austenitic and martensitic Austenitic and martensitic	
		VC (m/min)		F (mm/U)		VC (m/min)		F (mm/U)		VC (m/min)		F (mm/U)	
Avance standard Standard Vorschub Standard feed rate	 UN	TiAlN	●	●	●	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	●	●	●	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	●	●	●	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
		ZTi6		●	●	110-200	0.04-0.08	80-160	0.04-0.08	70-140	0.04-0.08	70-160	0.04-0.08
	 UR	TiAlN	●	●	●	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	●	●	●	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	●	●	●	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
		ZTi6		●	●	110-200	0.04-0.08	80-160	0.04-0.08	70-140	0.04-0.08	70-160	0.04-0.08
	 JN	TiAlN	●	●	●	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	●	●	●	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	●	●	●	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
		ZTi6		●	●	110-200	0.04-0.08	80-160	0.04-0.08	70-140	0.04-0.08	70-160	0.04-0.08
	 JR	TiAlN	●	●	●	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
		Tmax	●	●	●	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		Zmax	●	●	●	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
	 JSN	Tmax		●		80-150	0.02-0.1	80-170	0.02-0.1	50-120	0.02-0.1	50-120	0.02-0.1
		Zmax		●		80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
	 TN	TiAlN		●	●	90-150	0.08-0.18	70-130	0.08-0.18	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax		●	●	100-170	0.08-0.18	70-150	0.08-0.18	60-120	0.08-0.15	60-150	0.08-0.20
		Zmax		●	●	80-130*	0.08-0.18	50-110*	0.08-0.18	50-90*	0.08-0.15	50-120*	0.08-0.20
		ZTi6		●	●	110-200	0.08-0.18	80-160	0.08-0.18	70-140	0.08-0.15	70-160	0.08-0.20
	 TR	TiAlN		●	●	90-150	0.08-0.18	70-130	0.08-0.18	50-100	0.08-0.15	50-120	0.08-0.20
		Tmax		●	●	100-170	0.08-0.18	70-150	0.08-0.18	60-120	0.08-0.15	60-150	0.08-0.20
		Zmax		●	●	80-130*	0.08-0.18	50-110*	0.08-0.18	50-90*	0.08-0.15	50-120*	0.08-0.20
		ZTi6			●	110-200	0.08-0.18	80-160	0.08-0.18	70-140	0.08-0.15	70-160	0.08-0.20
	 TSN	Tmax		●		80-150	0.05-0.15	80-170	0.05-0.15	50-120	0.05-0.15	50-120	0.05-0.15
		Zmax		●		80-130	0.05-0.15	80-150	0.05-0.15	50-100	0.05-0.15	50-100	0.05-0.15
Avance modérée Niedriger Vorschub Low feed rate	 UN-000F	TiAlN	●	●	●	80-120	0.02-0.05	50-100	0.02-0.05	40-80	0.02-0.05	40-100	0.02-0.05
		Zmax		●		80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
	 UR/ULF	TiAlN	●	●	●	80-120	0.02-0.05	50-100	0.02-0.05	40-80	0.02-0.05	40-100	0.02-0.05
		Zmax		●		80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.10	50-120*	0.04-0.10
	 ANF	N		●	●								
		TiAlN		●	●							40-80	0.02-0.05
		AC		●	●								
	 ARF	N		●	●								
		TiAlN		●	●							40-80	0.02-0.05
		AC		●	●								

* premier choix en cas de coupe interrompue

** arête de coupe vive

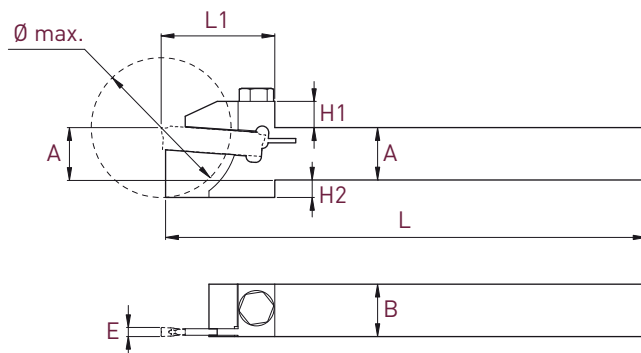
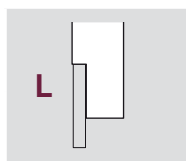
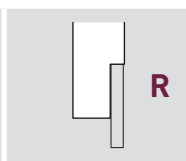
* erste Wahl für unterbrochener Schnitt

** scharfe Schneidkante

* first choice for interrupted cut

** sharp cutting edge

<div> <div>N</div> <div> Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys </div> </div>								<div> <div>S</div> <div> Titane Titan Titanium </div> </div>			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			50-100	0.04-0.08
100-300	0.02-0.1	100-300	0.02-0.1	100-300	0.02-0.1	100-300	0.02-0.1	50-120	0.02-0.1	30-50	0.02-0.1
						150-300	0.05-0.20				
						150-300	0.05-0.20				
						100-300	0.05-0.15				
100-300	0.02-0.06	100-200	0.01-0.05	100-250	0.01-0.05	100-300	0.02-0.06			50-100	0.01-0.06
100-300	0.02-0.06	100-200	0.01-0.05	100-250	0.01-0.05	100-300	0.02-0.06			50-100	0.01-0.06
80-200	0.02-0.06			80-200	0.01-0.05	80-200	0.02-0.06	50-100	0.01-0.06	50-100	0.01-0.06
100-250	0.02-0.06	80-150	0.01-0.05	100-200	0.01-0.05	80-200	0.02-0.06			30-80	0.01-0.06
100-300	0.02-0.06	100-200	0.01-0.05	100-250	0.01-0.05	100-300	0.02-0.06	50-120	0.01-0.06	50-120	0.01-0.06
80-200	0.02-0.06			80-200	0.01-0.05	80-200	0.02-0.06	50-100	0.01-0.06	50-100	0.01-0.06
100-250	0.02-0.06	80-150	0.01-0.05	100-200	0.01-0.05	80-200	0.02-0.06			30-80	0.01-0.06
100-300	0.02-0.06	100-200	0.01-0.05	100-250	0.01-0.05	100-300	0.02-0.06	50-120	0.01-0.06	50-120	0.01-0.06



Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories



Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H1	H2	Art. N°	Art. N°	Art. N°	Art. N°
E 1.5 Type ET15	10x12	110	22	20	5	6	ET15-H1012L-D22	ET15-H1012R-D22	V-M5X20-6P6	C-6PEX-6.0
	12x12	110	22	20	5	4	ET15-H1212L-D22	ET15-H1212R-D22		
	12.7x12.7	110	22	20	5	3	ET15-H12.7L-D22	ET15-H12.7R-D22		
	12x12	110	32	26	6	4	ET15-H1212L-D32	ET15-H1212R-D32	V-M5X21-6P7	C-6PEX-7.0
	12.7x12.7	110	32	26	6	3	ET15-H12.7L-D32	ET15-H12.7R-D32		
	16x16	110	32	26	6	-	ET15-H1616L-D32	ET15-H1616R-D32		
E 2.0 Type ET20	10x12	110	22	20	5	6	ET20-H1012L-D22	ET20-H1012R-D22	V-M5X20-6P6	C-6PEX-6.0
	12x12	110	22	20	5	4	ET20-H1212L-D22	ET20-H1212R-D22		
	12.7x12.7	110	22	20	5	3	ET20-H12.7L-D22	ET20-H12.7R-D22		
	12x12	110	32	26	6	4	ET20-H1212L-D32	ET20-H1212R-D32	V-M5X21-6P7	C-6PEX-7.0
	12.7x12.7	110	32	26	6	3	ET20-H12.7L-D32	ET20-H12.7R-D32		
	16x16	110	32	26	6	-	ET20-H1616L-D32	ET20-H1616R-D32		
	16x16	130	44	35	8	4	ET20-H1616L-D44	ET20-H1616R-D44	V-M5X27-6P7	C-6PEX-7.0
	20x20	130	44	35	8	-	ET20-H2020L-D44	ET20-H2020R-D44		
E 2.5 Type ET25	10x12	110	22	20	5	6	ET25-H1012L-D22	ET25-H1012R-D22	V-M5X20-6P6	C-6PEX-6.0
	12x12	110	22	20	5	4	ET25-H1212L-D22	ET25-H1212R-D22		
	12.7x12.7	110	22	20	5	3	ET25-H12.7L-D22	ET25-H12.7R-D22		
	12x12	110	32	26	6	4	ET25-H1212L-D32	ET25-H1212R-D32	V-M5X21-6P7	C-6PEX-7.0
	12.7x12.7	110	32	26	6	3	ET25-H12.7L-D32	ET25-H12.7R-D32		
	16x16	110	32	26	6	-	ET25-H1616L-D32	ET25-H1616R-D32		
	16x16	130	44	35	8	4	ET25-H1616L-D44	ET25-H1616R-D44	V-M5X27-6P7	C-6PEX-7.0
	20x20	130	44	35	8	-	ET25-H2020L-D44	ET25-H2020R-D44		
E 3.0 Type ET30	12.7x12.7	110	32	26	6	3	ET30-H12.7L-D32	ET30-H12.7R-D32	V-M5X21-6P7	C-6PEX-7.0
	16x16	110	32	26	6	-	ET30-H1616L-D32	ET30-H1616R-D32		
	16x16	130	44	35	8	4	ET30-H1616L-D44	ET30-H1616R-D44	V-M5X27-6P7	C-6PEX-7.0
	20x20	130	44	35	8	-	ET30-H2020L-D44	ET30-H2020R-D44		
	25x25	140	44	35	8	-	ET30-H2525L-D44	ET30-H2525R-D44		

* livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

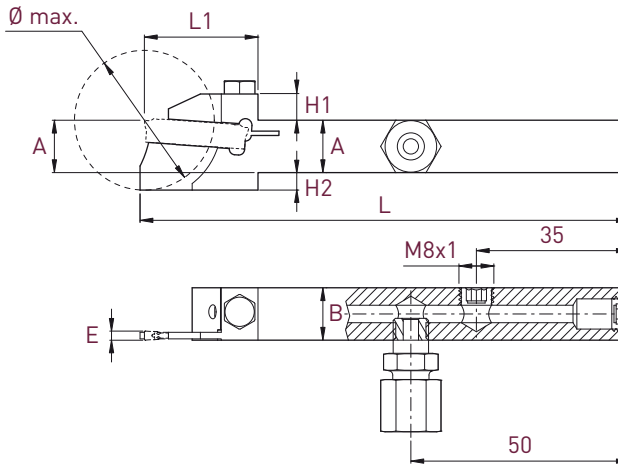
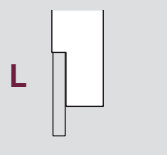
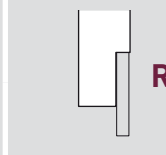
Porte-outils avec arrosage intégré

Halter mit integrierter Kühlmittelzufuhr

Holders with integrated coolant supply

Ø max 44 mm

H JET



Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories



Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H1	H2	Art. N°	Art. N°
E 2.0 Type ET20	10x12	110	22	20	5	6	ET20-H1012L-JET22	ET20-H1012R-JET22
	12x12	110	22	20	5	4	ET20-H1212L-JET22	ET20-H1212R-JET22
	12.7x12.7	110	22	20	5	3	ET20-H12.7L-JET22	ET20-H12.7R-JET22
	12x12	110	32	26	6	4	ET20-H1212L-JET32	ET20-H1212R-JET32
	12.7x12.7	110	32	26	6	3	ET20-H12.7L-JET32	ET20-H12.7R-JET32
	16x16	110	32	26	6	-	ET20-H1616L-JET32	ET20-H1616R-JET32
	16x16	130	44	35	8	4	ET20-H1616L-JET44	ET20-H1616R-JET44
E 2.5 Type ET25	10x12	110	22	20	5	6	ET25-H1012L-JET22	ET25-H1012R-JET22
	12x12	110	22	20	5	4	ET25-H1212L-JET22	ET25-H1212R-JET22
	12.7x12.7	110	22	20	5	3	ET25-H12.7L-JET22	ET25-H12.7R-JET22
	12x12	110	32	26	6	4	ET25-H1212L-JET32	ET25-H1212R-JET32
	12.7x12.7	110	32	26	6	3	ET25-H12.7L-JET32	ET25-H12.7R-JET32
	16x16	110	32	26	6	-	ET25-H1616L-JET32	ET25-H1616R-JET32
	16x16	130	44	35	8	4	ET25-H1616L-JET44	ET25-H1616R-JET44
E 3.0 Type ET30	12.7x12.7	110	32	26	6	3	ET30-H12.7L-JET32	ET30-H12.7R-JET32
	16x16	110	32	26	6	-	ET30-H1616L-JET32	ET30-H1616R-JET32
	16x16	130	44	35	8	4	ET30-H1616L-JET44	ET30-H1616R-JET44
	20x20	130	44	35	8	-	ET30-H2020L-JET44	ET30-H2020R-JET44
	25x25	140	44	35	8	-	ET30-H2525L-JET44	ET30-H2525R-JET44

Art. N°	Art. N°
V-M5X20-6P6-J	C-6PEX-6.0
V-M5X21-6P7-J	C-6PEX-7.0
V-M5X27-6P7-J	C-6PEX-7.0
V-M5X20-6P6-J	C-6PEX-6.0
V-M5X21-6P7-J	C-6PEX-7.0
V-M5X27-6P7-J	C-6PEX-7.0
V-M5X21-6P7-J	C-6PEX-7.0
V-M5X27-6P7-J	C-6PEX-7.0

Pièces de rechange
Ersatzteile
Spare parts



Art. N°

Art. N°

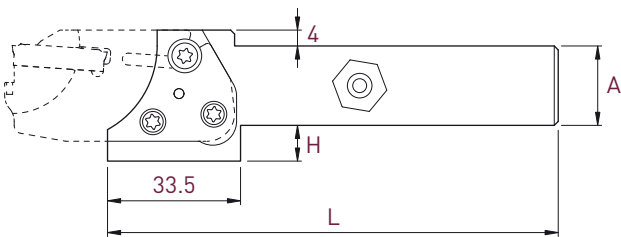
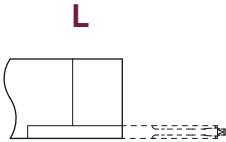
J-M8X1-D6

JB-M8X1

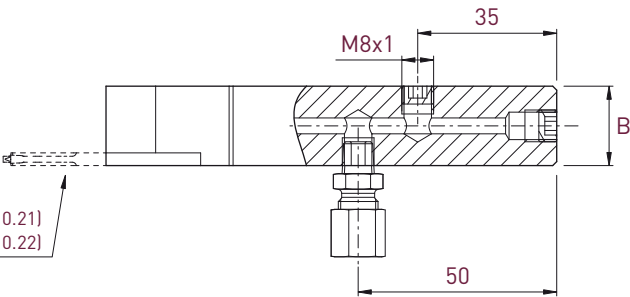
* Livré avec chaque porte-outil
mit jedem Halter geliefert
delivered with each holder

H-HM-JET

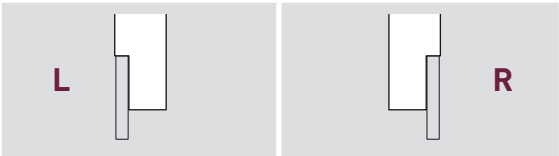
Porte-lames avec arrosage intégré
Halter für Stechklinge mit Kühlmittelzufuhr
Holder for parting-off blades with integrated coolant supply



HM-IN (p. 10.21)
HM-IL-JET (p. 10.22)

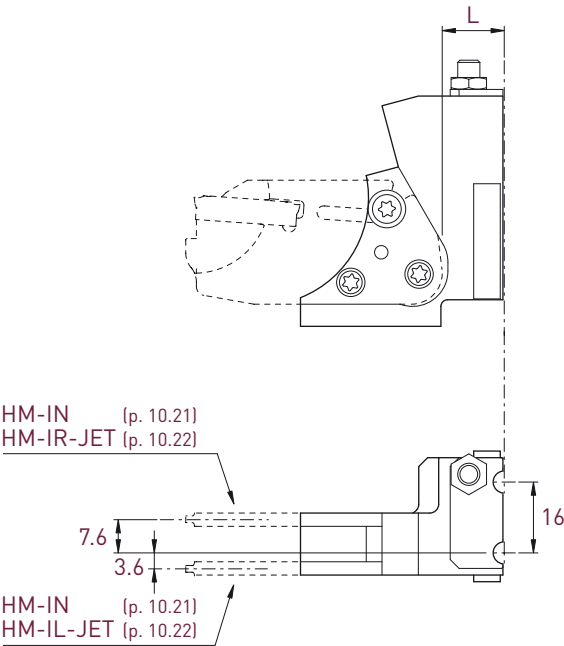


HM-IN (p. 10.21)
HM-IR-JET (p. 10.22)

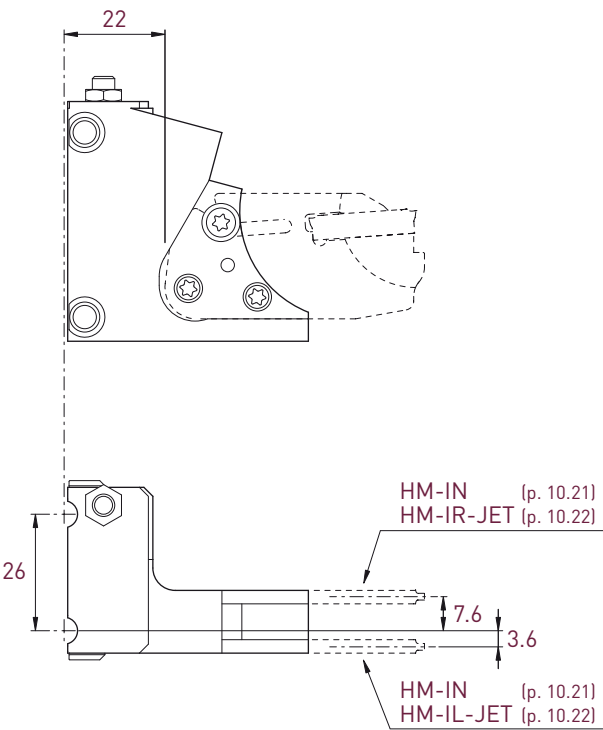


A x B	L	H	Art. N°	Art. N°
16x16	113.5	13	H1616L-HM-JET	H1616R-HM-JET
20x20	113.5	9	H2020L-HM-JET	H2020R-HM-JET
25x25	138.5	4	H2525L-HM-JET	H2525R-HM-JET

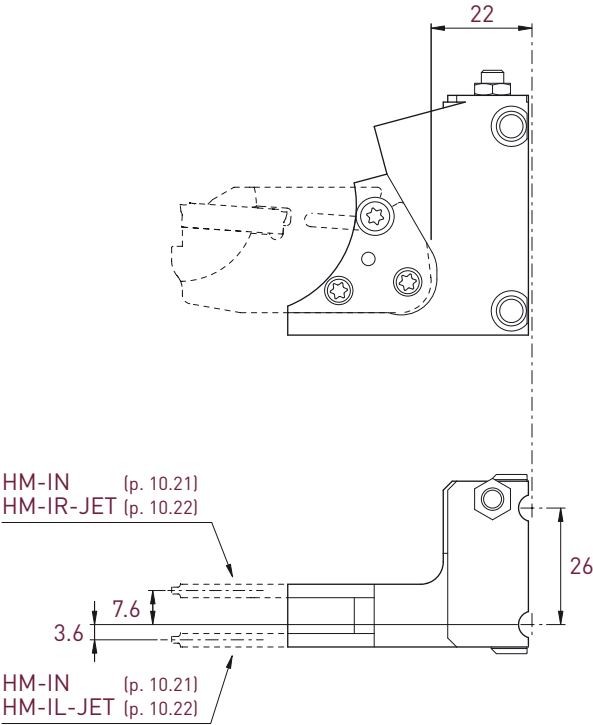
Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories				Options
Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
V-M5X10-T20IP	V-M6X10-T20IP	J-M8X1-D6	JB-M8X1	C-T20IP



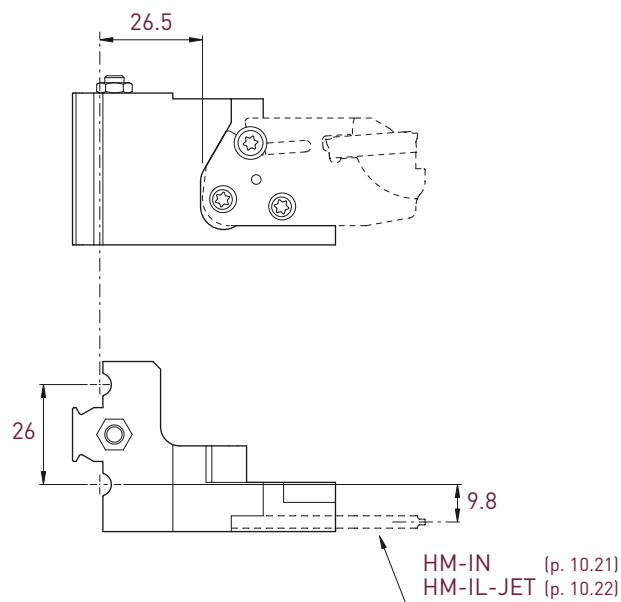
			 R	Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories			Options
Interface	Machine compatibility	L					
GWS02	AS14	14	GWS02R-02001-HM-JET	V-M5X10-T20IP	V-M6X10-T20IP	C-T20IP	
	SAS16						
	SBS20						
	Others	22	GWS02R-02002-HM-JET				

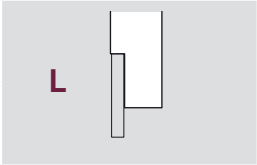


			Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories		Options
Interface	Machine compatibility	Art. N°			
GWS41	MultiSwiss 6X16	GWS41L-41001-HM-JET	V-M5X10-T20IP	V-M6X10-T20IP	C-T20IP
	MultiDeco 20X6				
	MultiDeco 20X8				
	MultiDeco 26X6				
	MultiDeco 32X6				
	MultiAlpha 20X8				
	MultiSigma 24X8				



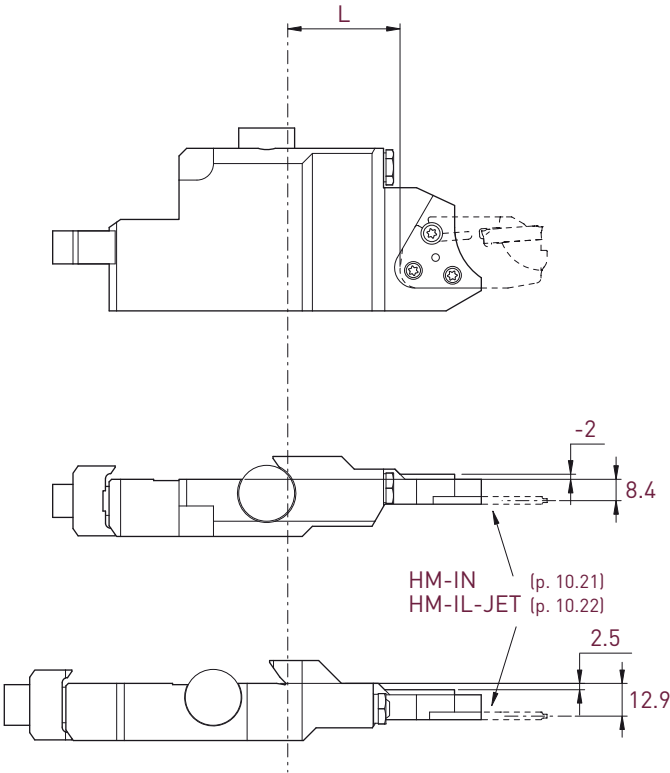
Interface	Machine compatibility	 R Art. N°	Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories		Options
			 Art. N°	 Art. N°	 Art. N°
GWS41	MultiSwiss 6X16	GWS41R-41002-HM-JET	V-M5X10-T20IP	V-M6X10-T20IP	C-T20IP
	MultiDeco 20X6				
	MultiDeco 20X8				
	MultiDeco 26X6				
	MultiDeco 32X6				
	MultiAlpha 20X8				
	MultiSigma 24X8				



			Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories		Options
Interface	Machine compatibility				
		Art. N°	Art. N°	Art. N°	Art. N°
GWS202	MultiSwiss 6X32 MultiSwiss 8X26	GWS202L-202001-HM-JET	V-M5X10-T20IP	V-M6X10-T20IP	C-T20IP

MS22

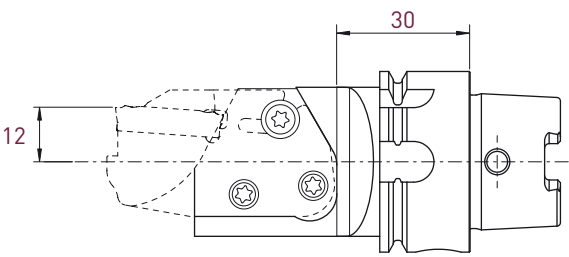
MS32-40



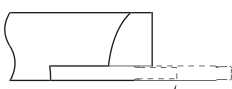
Machine compatibility	L	Art. N°	Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories		Options
			Art. N°	Art. N°	Art. N°
MS22	44.2	MS22-W5190231-HM-JET	V-M5X10-T20IP	V-M6X10-T20IP	C-T20IP
MS32-40	45.5	MS32-40-W5190233-HM-JET			

HSK-JET

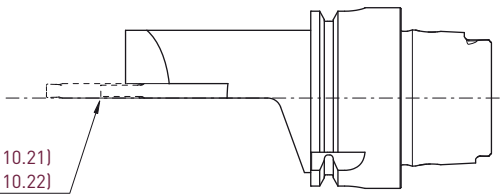
Porte-outils HSK pour porte-lames avec arrosage intégré
HSK Halter Stechklingen mit integrierter Kühlmittelzufuhr
HSK holder for parting-off blades with integrated coolant supply



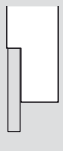
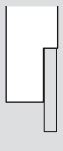
L



HM-IN (p. 10.21)
HM-IL-JET (p. 10.22)

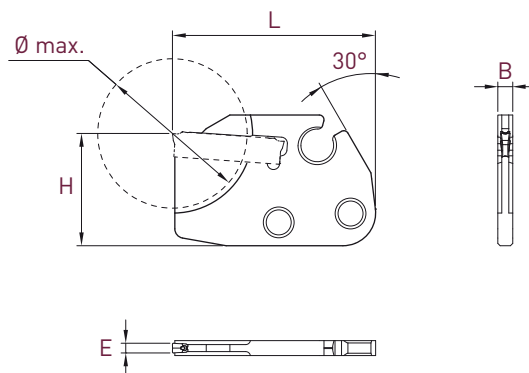


HM-IN (p. 10.21)
HM-IR-JET (p. 10.22)

				Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories		Options
Art. N°		Art. N°				
HSK-T40-L-HM-JET		HSK-T40-R-HM-JET		V-M5X10-T20IP	V-M6X10-T20IP	C-T20IP

Lames pour système modulaire
 Stechklinge für modulares System
 Parting-off blades for modular system

HM

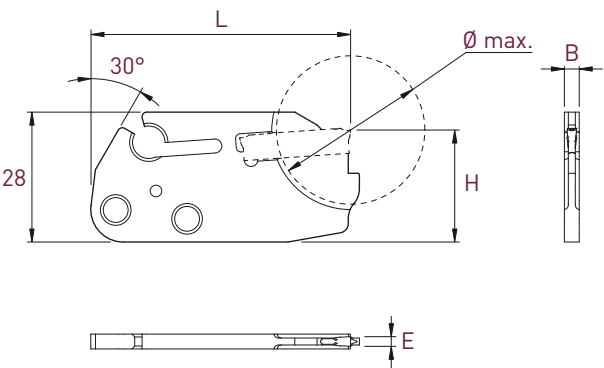


N

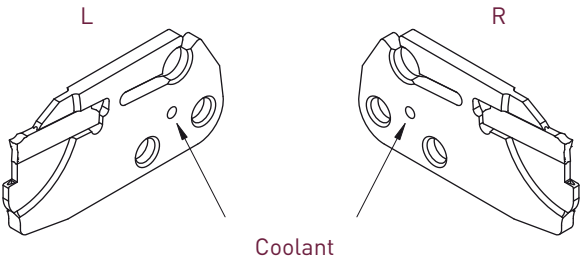
Plaquettes WSP Inserts	Ø max.	B	L	H	Art. N°
E 1.5	20	3.2	43.5	24	ET15-HM-IN-43-D20
Type ET15	32	3.2	43.5	24	ET15-HM-IN-43-D32
E 2.0	20	3.2	43.5	24	ET20-HM-IN-43-D20
	26	3.2	43.5	24	ET20-HM-IN-43-D26
Type ET20	26	3.2	54	24	ET20-HM-IN-54-D26
	32	3.2	43.5	24	ET20-HM-IN-43-D32
E 3.0	32	3.2	43.5	24	ET30-HM-IN-43-D32
Type ET30					

HM-JET

Lames avec arrosage intégré
Steckklinge mit integrierter Kühlmittelzufuhr
Parting-off blades with integrated coolant supply



					<div> <div>L</div> <div>R</div> </div>	
Plaquettes WSP Inserts	Ø max.	B	L	H	Art. N°	Art. N°
E 2.0 Type ET20	20	3.2	48.5	24	ET20-HM-IL-48.5-JET20	ET20-HM-IR-48.5-JET20
	24		48.5		ET20-HM-IL-48.5-JET24	ET20-HM-IR-48.5-JET24
	32		45.5		ET20-HM-IL-45.5-JET32	ET20-HM-IR-45.5-JET32
	32		56		ET20-HM-IL-56-JET32	ET20-HM-IR-56-JET32
	42		48.5		ET20-HM-IL-48.5-JET42	ET20-HM-IR-48.5-JET42
E 3.0 Type ET30	32	3.2	45.5	24	ET30-HM-IL-45.5-JET32	ET30-HM-IR-45.5-JET32
	44		48.5		ET30-HM-IL-48.5-JET42	ET30-HM-IR-48.5-JET42

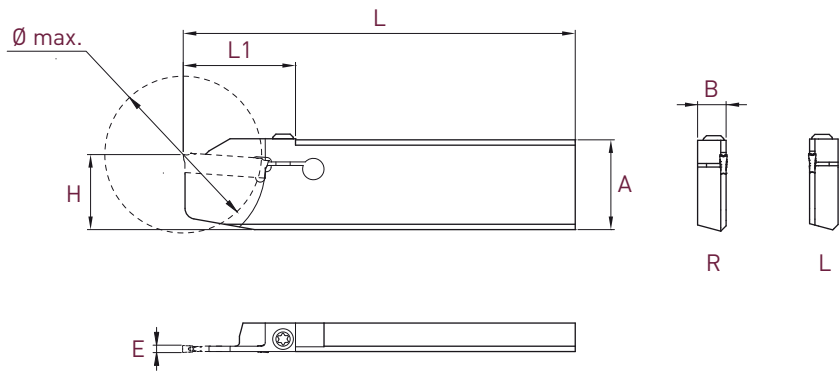


Lames de tronçonnage

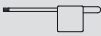
Stechklinge

Parting-off blades

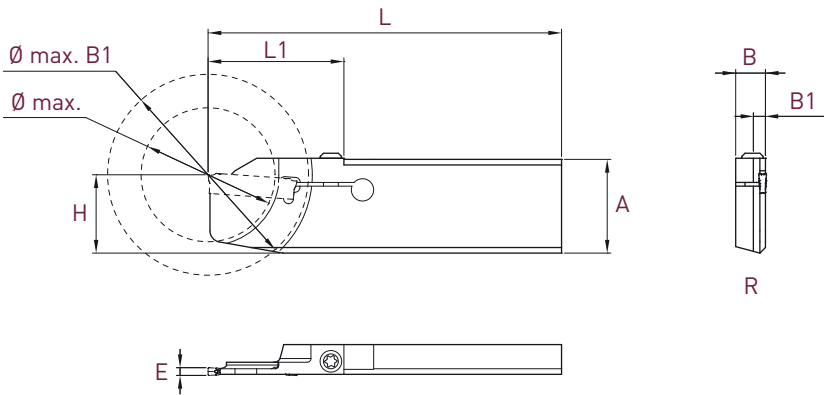
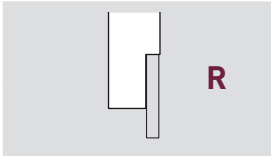
HK



						<div> <div>L</div> <div>R</div> </div>	
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	Art. N°	Art. N°
E 1.5 Type ET15	26x8	110	20	19.5	21	ET15-HK-2608L-110-D20	ET15-HK-2608R-110-D20
	26x8	110	32	25.5	21	ET15-HK-2608L-110-D32	ET15-HK-2608R-110-D32
E 2.0 Type ET20	26x8	110	32	25.5	21	ET20-HK-2608L-110-D32	ET20-HK-2608R-110-D32
	26x8	110	44	31.5	21	ET20-HK-2608L-110-D44	ET20-HK-2608R-110-D44

Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories	Options
	
Art. N°	Art. N°
V-M4X14.5-T15-EVOCUT	C-T15

* livré avec chaque lame
mit jedem Stechkling geliefert
delivered with each blade



Plaquettes WSP Inserts	A x B	L	Ø max.	Ø max. B1	B1	L1	H	Art. N°
E 1.5 Type ET15	26x8	95	36	54	3.25	36.5	21	ET15-HK-2608RS-95-D36
E 2.0 Type ET20	26x8	95	36	54	3.25	36.5	21	ET20-HK-2608RS-95-D36

Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories	Options
 *	
Art. N°	Art. N°
V-M4X14.5-T15-EVOCUT	C-T15

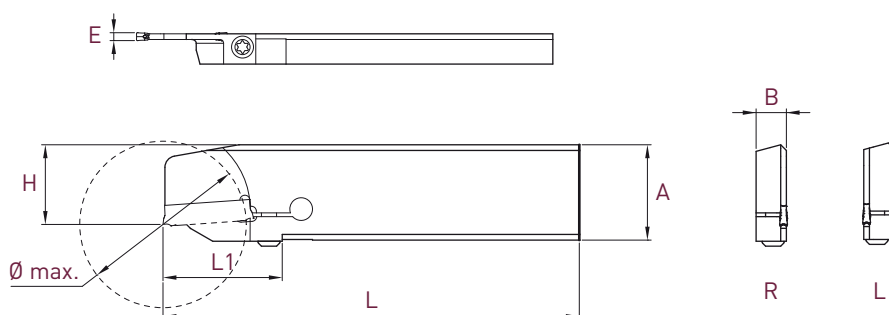
* livré avec chaque lame
mit jedem Stechkling geliefert
delivered with each blade

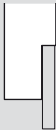
Lames de tronçonnage inversées

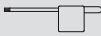
Überkopf Stechklinge

Upside down parting-off blades

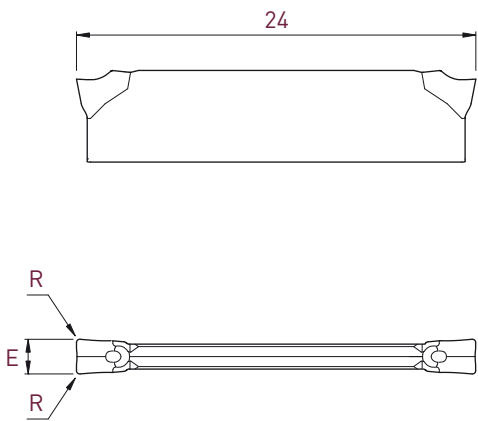
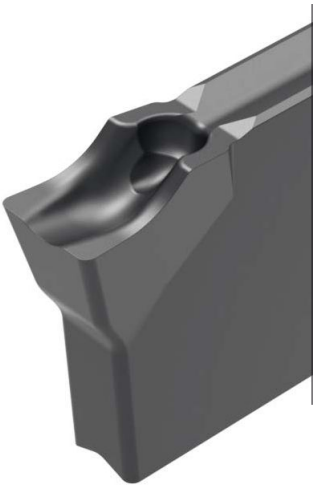
HUK



							
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	Art. N°	Art. N°
E 1.5 Type ET15	26x8	110	20	19.5	21	ET15-HUK-2608L-110-D20	ET15-HUK-2608R-110-D20
	26x8	110	32	25.5	21	ET15-HUK-2608L-110-D32	ET15-HUK-2608R-110-D32
E 2.0 Type ET20	26x8	110	32	25.5	21	ET20-HUK-2608L-110-D32	ET20-HUK-2608R-110-D32
	26x8	110	44	31.5	21	ET20-HUK-2608L-110-D44	ET20-HUK-2608R-110-D44

Pièces de rechange et accessoires Ersatzteile und Zubehör Spare parts and accessories	Options
 *	
Art. N°	Art. N°
V-M4X14.5-T15-EVOCUT	C-T15

* livré avec chaque lame
mit jedem Steckling geliefert
delivered with each blade



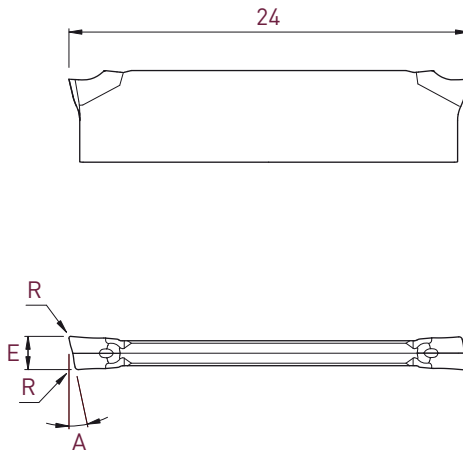
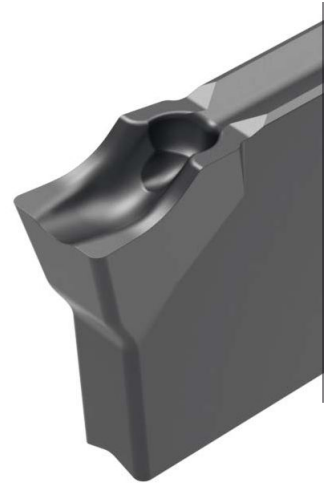
UN							
Type	E ±0.05	R	Art. N°	TiAlN S	Tmax M	Zmax M	ZTi6 M
ET15	1.35	0	ET15-UN-000F	•			
	1.5	0.2	ET15-UN-002	•	•	•	
ET20	1.85	0	ET20-UN-000F	•			
	2.0	0.2	ET20-UN-002	•	•	•	•
ET25	2.35	0	ET25-UN-000F	•			
	2.5	0.3	ET25-UN-003	•	•	•	•
ET30	2.85	0	ET30-UN-000F	•			
	3.0	0.3	ET30-UN-003	•	•	•	•

Plaquettes de tronçonnage

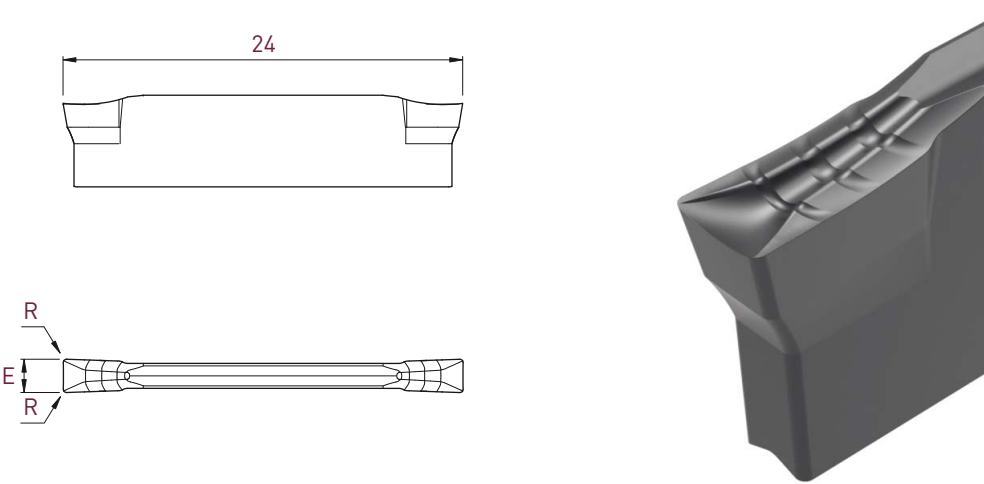
Abstechwendeplatten

Cut off inserts

UL-UR



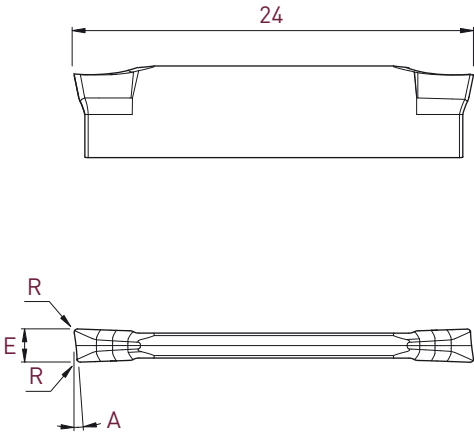
				UL				UR			
Type	E ±0.05	A	R	Art. N°	P M N S	P M	P M	Art. N°	P M N S	P M	P M
ET15	1.5	6°	0.2	-				ET15-UR-602	•	•	•
	1.35	8°	0	-				ET15-UR-800F	•		
	1.5	12°	0.1	-				ET15-UR-1201	•	•	•
	1.35	15°	0	ET15-UL-1500F	•			ET15-UR-1500F	•		
ET20	2.0	6°	0.2	-				ET20-UR-602	•	•	•
	1.85	8°	0	-				ET20-UR-800F	•		
	2.0	12°	0.1	-				ET20-UR-1201	•	•	•
	1.85	15°	0	ET20-UL-1500F	•			ET20-UR-1500F	•		
ET25	2.5	6°	0.2	-				ET25-UR-602	•	•	•
	2.35	8°	0	-				ET25-UR-800F	•		
	2.5	12°	0.1	-				ET25-UR-1201	•	•	•
	2.35	15°	0	ET25-UL-1500F	•			ET25-UR-1500F	•		
ET30	3.0	6°	0.3	-				ET30-UR-603	•	•	•
	2.85	8°	0	-				ET30-UR-800F	•		
	3.0	12°	0.2	-				ET30-UR-1202	•	•	•
	2.85	15°	0	ET30-UL-1500F	•			ET30-UR-1500F	•		



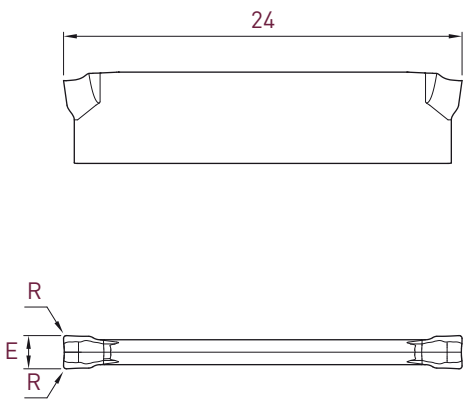
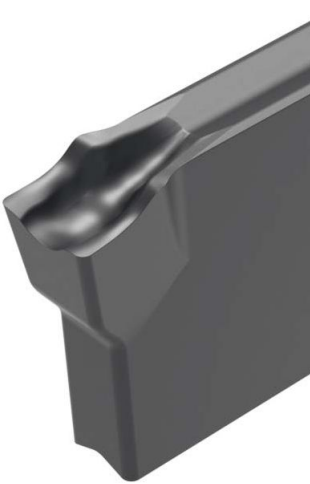
JN							
Type	E ±0.05	R	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> TiAlN	<div> <div>P</div> <div>M</div> <div></div> <div></div> </div> Tmax	<div> <div>P</div> <div>M</div> <div></div> <div></div> </div> Zmax	<div> <div>P</div> <div>M</div> <div></div> <div></div> </div> ZTi6
ET15	1.5	0.2	ET15-JN-002	•	•	•	
ET20	2.0	0.2	ET20-JN-002	•	•	•	•
ET25	2.5	0.3	ET25-JN-003	•	•	•	•
ET30	3.0	0.3	ET30-JN-003	•	•	•	•

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

JR



				JR			
Type	E ±0.05	A	R	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> TiAlN	<div> <div>P</div> <div>M</div> <div></div> </div> Tmax	<div> <div>P</div> <div>M</div> <div></div> </div> Zmax
ET15	1.5	6°	0.2	ET15-JR-602	•	•	•
ET20	2.0	6°	0.2	ET20-JR-602	•	•	•
ET25	2.5	6°	0.2	ET25-JR-602	•	•	•
ET30	3.0	6°	0.3	ET30-JR-603	•	•	•



JSN				
Type	E ± 0.05	R	Art. N°	
ET20	2.0	0.2	ET20-JSN-002	<div><div>P</div><div>M</div><div></div><div></div><div>Tmax</div></div>
				•

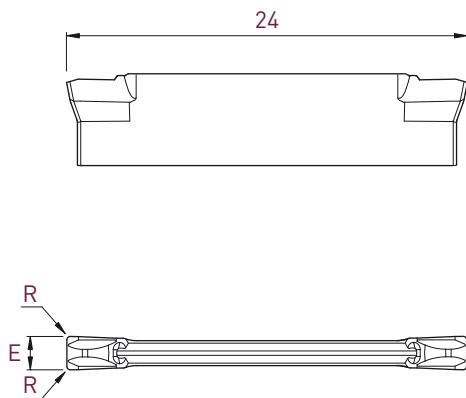
Plaquettes de tronçonnage

Abstechwendeplatten

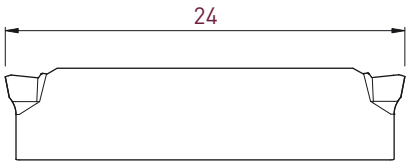
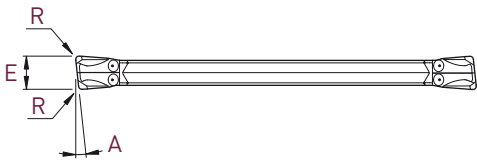
Cut off inserts

Negative geometry

TN



			TN				
Type	E ±0.05	R	Art. N°				
							
							
				TiAlN	Tmax	Zmax	ZTi6
ET20	2.0	0.2	ET20-TN-002	●	●	●	●
ET25	2.5	0.3	ET25-TN-003	●	●	●	●
ET30	3.0	0.3	ET30-TN-003	●	●	●	●

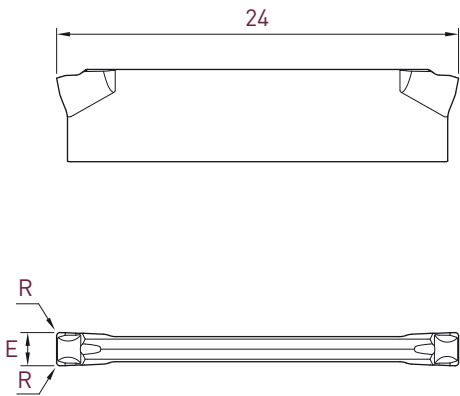


TR								
Type	E ±0.05	A	R	Art. N°	  	  	  	  
ET20	2.0	6°	0.2	ET20-TR-602	•	•	•	
ET25	2.5	6°	0.2	ET25-TR-602	•	•	•	
ET30	3.0	6°	0.3	ET30-TR-603	•	•	•	•

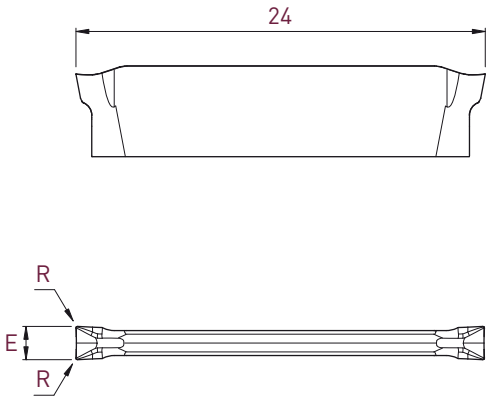
Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

Negative geometry

TSN



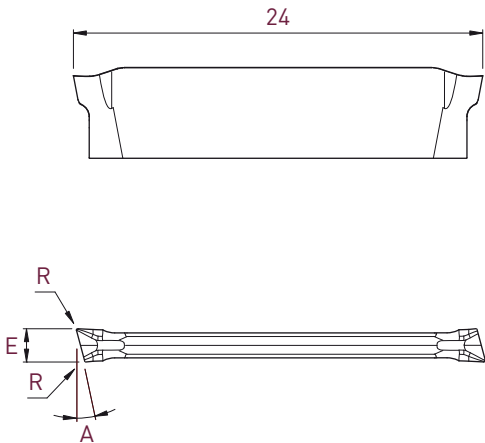
TSN					
Type	E ± 0.05	R	Art. N°	Tmax	Zmax
ET20	2.0	0.2	ET20-TSN-002	<div><div>P</div><div>M</div><div></div></div>	<div><div>P</div><div>M</div><div></div></div>



			AN			
Type	E ±0.05	R	Art. N°	TiAlN	AC	N
ET20	2.0	0.2	ET20-AN-002F	<div><div>M</div><div>N</div><div>S</div></div>	<div><div></div><div>N</div><div>S</div></div>	<div><div></div><div>N</div><div>S</div></div>
ET30	3.0	0.3	ET30-AN-003F	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>

Plaquettes de tronçonnage
Abstechwendeplatten
Cut off inserts

AR



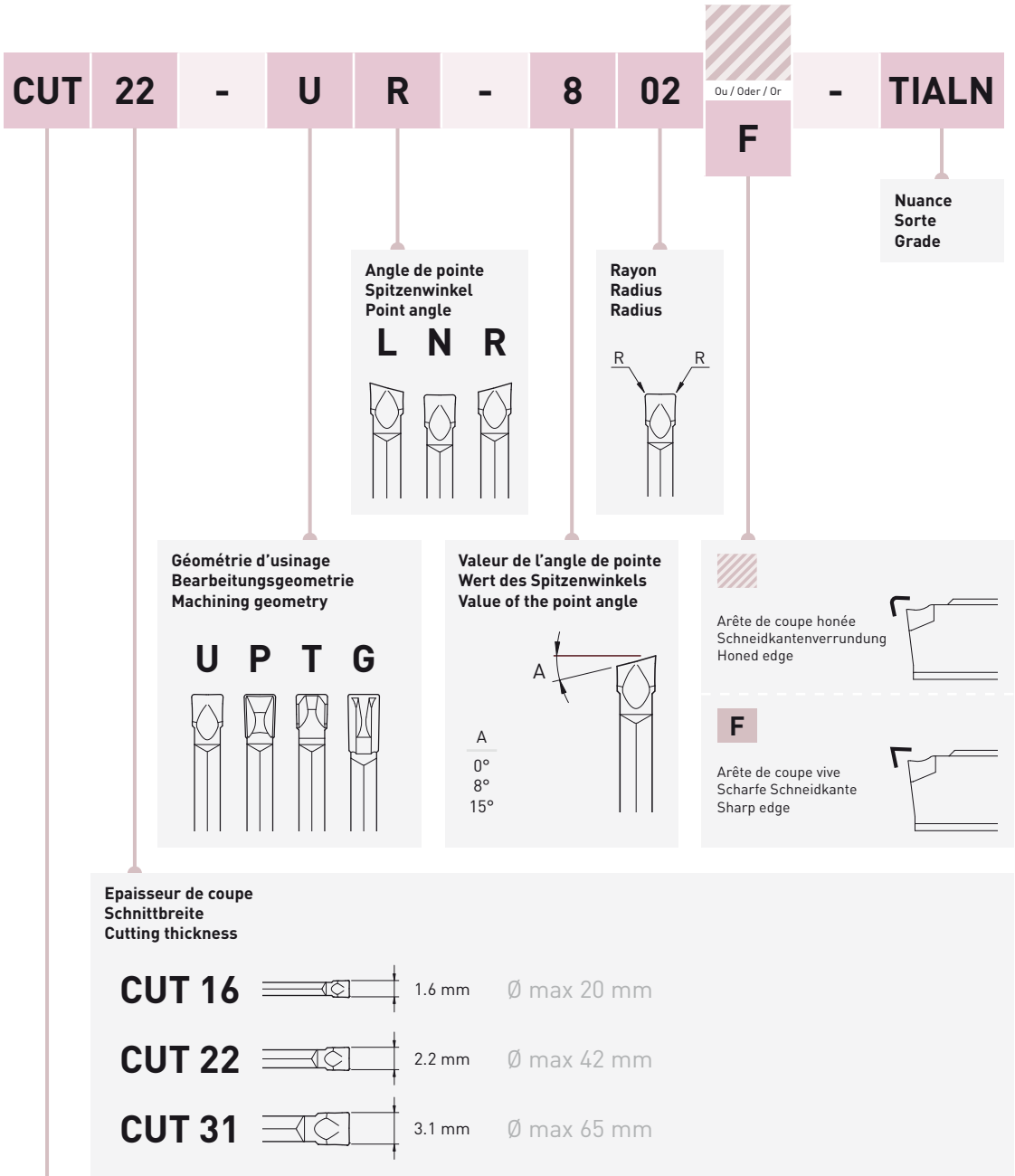
					AR		
Type	E ±0.05	A	R	Art. N°	TiAlN	AC	Z
ET20	2.0	15°	0.1	ET20-AR-1501F	●	●	●
ET30	3.0	15°	0.2	ET30-AR-1502F	●	●	●

CUT-Line



APPLITEC
CUTTING TOOLS

Codification Kodifizierung Coding guide		> 11.03
Infos et avantages, géométries de coupe Infos und Vorteile, Spanformgeometrie Infos and advantages, cutting geometries		> 11.04
Nuances Sorten Grades		> 11.06
	CUT 16 Ø max 20 mm	> 11.08
Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data	CUT 22 Ø max 42 mm	> 11.10
	CUT 31 Ø max 65 mm	> 11.12
	H	> 11.14
Porte-outils Halter Holders	HX	> 11.15
	HZ	> 11.16
Porte-outils avec arrosage intégré Halter mit integrierter Kühlmittelzufuhr Holders with integrated coolant supply	HZ-JET	> 11.17
	U	> 11.18
Plaquettes de tronçonnage Abstechwendeplatten Cut off inserts	P	> 11.20
	T	> 11.24
Plaquettes de fonçage, tournage et tronçonnage WSP zum einstecken, drehen und abstechen Inserts for grooving, turning and cut off	G	> 11.25



CUT-Line

Infos et avantages

Infos und Vorteile

Infos and advantages

Porte-outils / Halter / Holders

H

Système de serrage à bride, version courte
Spann-Klemmsystem, kurze Ausführung
Independent top clamp system, short version

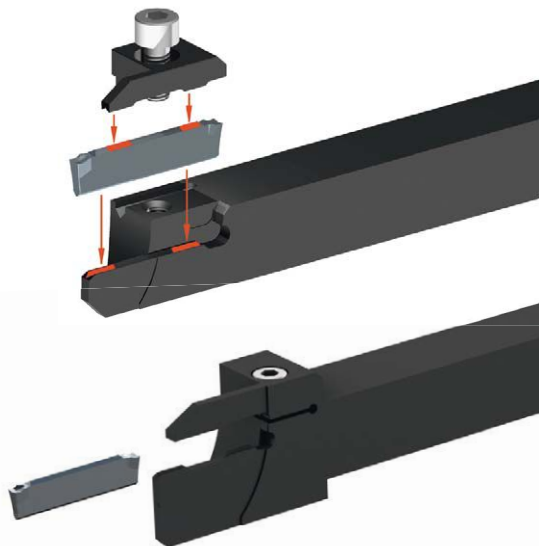
HX

Système de serrage à bride, version longue
Spann-Klemmsystem, lange Ausführung
Independent top clamp system, long version

HZ

Porte-outils de grande capacité
Klemmhalter mit grosser Kapazität
High capacity tool holders

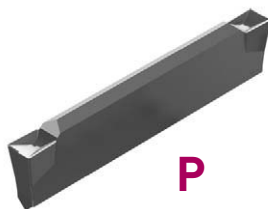
Very rigid clamping system



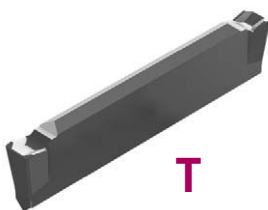
Plaquettes / WSP / Inserts



U



P



T

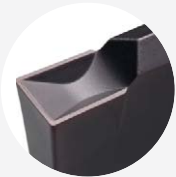
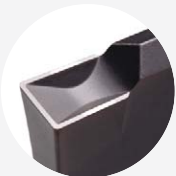


G

Toutes les géométries des plaquettes sont conçues pour être entièrement compatibles avec les porte-outils.

Alle Geometrien der Wendschneidplatten sind so gestaltet, dass sie vollständig mit den Haltern kompatibel sind.

All the geometries of the inserts are designed to be fully compatible with the holders.

UN	 <ul style="list-style-type: none"> • géométrie positive universelle, bonne maîtrise du copeau • Universalgeometrie positive gute Beherrschung der Späne • all-round insert with efficient chip control 	
UR UL		
PN	 <ul style="list-style-type: none"> • géométrie légèrement positive pour les aciers, aciers au carbone, aciers alliés • leicht positive Geometrie für Stahl, Kohlenstoffstahl, legiertem Stahl • slightly positive geometry for steel, carbon steel, alloyed steel 	
PR		
PNW PRW	 <ul style="list-style-type: none"> • géométrie neutre pour les laitons • neutrale Geometrie für Messing • neutral geometry for brasses 	
TN	 <ul style="list-style-type: none"> • géométrie négative pour de fortes avances dans des conditions de rigidité favorables • negative Geometrie für hohe Vorschübe in guten Stabilitätsfällen • negative geometry for high feed rate in case of good stability 	
GN	 <ul style="list-style-type: none"> • géométrie universelle pour fonçage-tournage, peut également être utilisée en tronçonnage • Universalgeometrie zum einstecken-langdrehen, kann auch zum abstechen verwendet werden • all-round insert for grooving and turning, can also be used for parting off 	

Nuances

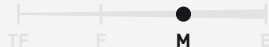
Sorten

Grades

TiAlN



Revêtement PVD
PVD Beschichtung
PVD coating



- pour l'usinage des aciers, aciers inoxydables et alliages de titane
- 1^{er} choix pour les avances faibles à modérées

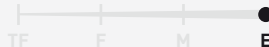
- für die Bearbeitung von Stahl, rostfreien Stahl und Titanlegierungen
- erste Wahl für niedrige bis mittlere Vorschübe

- for machining of steel, stainless steel and titanium alloys
- first choice for low to average cutting speed

Tmax



Revêtement PVD
PVD Beschichtung
PVD coating



- nuance pour usinage moyen à lourd des aciers, aciers alliés et inoxydables
- bonne résistance aux températures d'usinage élevées
- 1^{er} choix pour le tronçonnage des aciers au carbone et des aciers fortement alliés

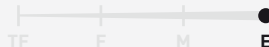
- Sorte für mittlere bis hohe Belastung in Stahl und legierter Stahlbearbeitung
- gute Bearbeitungs-warmfestigkeit
- erste Wahl für die Bearbeitung von legiertem Kohlenstahl und hoch legiertem Stahl

- grade for medium to heavy machining of steel, stainless steel and alloyed steel
- high machining heat resistance
- first choice for the machining of carbon steel and high alloyed steel

Zmax



Revêtement PVD
PVD Beschichtung
PVD coating



- pour l'usinage des aciers, aciers inoxydables et alliages de titane en conditions défavorables
- bonne résistance aux chocs à des vitesses de coupe moyennes à faibles
- 1^{er} choix pour le tronçonnage en coupe interrompue

- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen in schwierige Bearbeitungsfälle
- gute Bruchfestigkeit mit durchschnittliche bis niedrige Schnittgeschwindigkeit
- erste Wahl für die Bearbeitung in unterbrochenen Schnitte

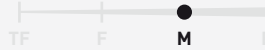
- for machining of steel, stainless steel and titanium alloys in unfavourable machining conditions
- good impact resistance with average to low cutting speed
- first choice for machining in interrupted cut

HTA



Revêtement PVD

PVD Beschichtung
PVD coating



P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- très bonne résistance à l'usure
- pour le tronçonnage des aciers, aciers inoxydables et alliages de titane
- déconseillé en coupe interrompue

- sehr gute Verschleissfestigkeit
- für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierung
- für unterbrochene Schnitte ungeeignet

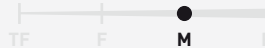
- very good wear resistance
- for steel, stainless steel and titanium alloys machining
- not suitable for interrupted cut

HAC



Revêtement PVD

PVD Beschichtung
PVD coating



P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- nuance pour métaux non ferreux
- très faible coefficient de frottement
- 1^{er} choix pour l'usinage des aluminiums, des cuivres et titanes faiblement alliés

- Sorte für Nichteisenmetalle
- sehr geringer Reibwert
- erste Wahl für die Bearbeitung von Aluminium, Kupfer und niedriglegiertem Titan

- grade for non-ferrous materials
- very low friction ratio
- first choice for Aluminium, copper and low alloyed titanium

N



Non revêtu

Unbeschichtet
Uncoated

P	★☆☆☆☆
M	★☆☆☆☆
N	★★★★★
S	★★★★★

- idéal pour l'usinage du laiton, uniquement disponible en géométries PNW / PRW

- Ideal für die Bearbeitung von Messing, nur in den Geometrien PNW / PRW erhältlich

- ideal for machining brass, only available in PNW / PRW geometries

CUT-Line

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

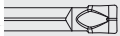
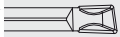
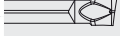
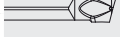
Standard machining data

★★★★★

★★★★

★★★

CUT 16

			Acier Stahl Steel						Inox Rostfreistahl Stainless steel	
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Legierter Stahl High alloyed steel		Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic	
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
Avance standard Standard Vorschub Standard feed rate	CUT16-UN-001 	TiAlN	90-140	0.03-0.07	60-120	0.03-0.07	50-100	0.04-0.08	50-120	0.03-0.07
		Tmax	100-170	0.03-0.07	70-150	0.03-0.07	60-120	0.04-0.08	60-150	0.03-0.07
		Zmax	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.08	50-120*	0.04-0.10
		HTA	70-120	0.03-0.05	60-100	0.03-0.05	50-90	0.03-0.05	50-100	0.03-0.06
		HAC								
	CUT16-PR-801 	TiAlN	90-140	0.03-0.07	60-120	0.03-0.07	50-100	0.03-0.07	50-120	0.03-0.07
		Tmax	100-170	0.03-0.07	70-150	0.03-0.07	60-120	0.03-0.07	60-150	0.03-0.07
	CUT16-PRW-801 	N								
Avance modérée Niedriger Vorschub Low feed rate	CUT16-UN-000F 	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		HAC								
	CUT16-UL/R-800F 	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		HAC								
	CUT16-UL/R-1500F 	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
		HAC								

* premier choix en cas
de coupe interrompue

** arête de coupe vive

* erste Wahl für
unterbrochener Schnitt

** scharfe Schneidkante

* first choice
for interrupted cut

** sharp cutting edge

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

[N] Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								[S] Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			30-60	0.04-0.08
100-300	0.04-0.10	100-250	0.04-0.10	100-300	0.03-0.08	150-300	0.03-0.08			30-60	0.04-0.08
150-300	0.04-0.15	100-300	0.04-0.10	100-300	0.04-0.10	150-300	0.02-0.08	30-60	0.04-0.08	30-60	0.04-0.08
						150-300	0.03-0.10				
						100-500	0.02-0.10				
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06

CUT-Line

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

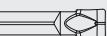
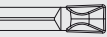
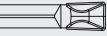
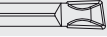
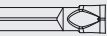
Standard machining data

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CUT 22

			<div>P</div> <div>Acier Stahl Steel</div>						<div>M</div> <div>Inox Rostfreistahl Stainless steel</div>		
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Legierter Stahl High alloyed steel		Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic		
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	
<div>Avance standard Standard Vorschub Standard feed rate</div>	<div>CUT22-UN-002 CUT22-UR-802</div> 	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08	
		Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08	
		Zmax	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.08	50-120*	0.04-0.10	
		HTA	70-120	0.04-0.06	60-100	0.04-0.06	50-90	0.04-0.06	50-100	0.04-0.06	
		HAC									
	<div>CUT22-PN-002</div> 	TiAlN	90-140	0.04-0.10	60-120	0.04-0.08	50-100	0.04-0.08			
		Tmax	100-170	0.04-0.10	70-150	0.04-0.10	60-120	0.04-0.10			
	<div>CUT22-PNW-002</div> 	N									
	<div>CUT22-PR-002</div> 	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08	
		Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08	
	<div>CUT22-PRW-002</div> 	N									
	<div>CUT22-TN-002</div> 	TiAlN	90-140	0.08-0.18	60-120	0.08-0.18	50-100	0.08-0.15	50-120	0.08-0.20	
		Tmax	100-170	0.08-0.18	70-150	0.08-0.18	60-120	0.08-0.15	60-150	0.08-0.20	
		Zmax	80-130*	0.08-0.18	50-110*	0.08-0.18	50-90*	0.08-0.15			
	<div>CUT22-GN-002</div> <div>***</div> 	TiAlN	90-140	0.03-0.12	60-120	0.03-0.12	50-100	0.03-0.10	50-120	0.03-0.08	
		Tmax	100-170	0.03-0.12	70-150	0.03-0.12	60-120	0.03-0.10	70-120	0.03-0.08	
		HAC									
<div>Avance modérée Niedriger Vorschub Low feed rate</div>	<div>CUT22-UN-000F</div> 	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05	
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05	
		HAC									
	<div>CUT22-UL/R-800F</div> 	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05	
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05	
		HAC									
	<div>CUT22-UL/R-802F</div> 	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05	
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05	
		HAC									
	<div>CUT22-UL/R-1500F</div> 	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05	
		HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05	
		HAC									

* premier choix en cas de coupe interrompue

** arête de coupe vive

*** Pour opérations de fonçage-tournage (évent. tronçonnage)

* erste Wahl für unterbrochener Schnitt

** scharfe Schneidkante

*** Für Stech- und Drehoperationen (event. abstechen)

* first choice for interrupted cut

** sharp cutting edge

*** For grooving and turning operations (event. parting off)

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

[N] Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								[S] Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			30-60	0.04-0.08
100-300	0.04-0.10	100-250	0.04-0.10	100-300	0.03-0.08	150-300	0.03-0.08			30-60	0.04-0.08
150-300	0.04-0.15	100-300	0.04-0.10	100-300	0.04-0.10	150-300	0.02-0.08	30-60	0.04-0.08	30-60	0.04-0.08
						150-300	0.03-0.10				
						100-500	0.02-0.10				
						150-300	0.03-0.10				
						100-500	0.02-0.10				
						150-300	0.05-0.20				
100-300	0.03-0.12	100-200	0.03-0.10	100-200	0.03-0.10	100-300	0.03-0.12			30-60	0.04-0.08
						100-300	0.03-0.12				
100-300	0.03-0.12	100-200	0.03-0.10	100-200	0.03-0.10	100-300	0.03-0.12	30-60	0.04-0.08	30-60	0.04-0.08
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06

CUT-Line

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

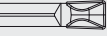
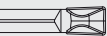
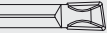
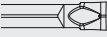
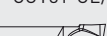
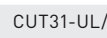
Standard machining data

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CUT 31

CUT 31			P						M		
			Acier Stahl Steel						Inox Rostfreistahl Stainless steel		
			Acier de décolletage Automatenstahl Free-cutting steel		Acier faiblement allié Leicht legierter Stahl Low alloyed steel		Acier fortement allié Legierter Stahl High alloyed steel		Austénitique et martensitique Austenitisch und martensitisch Austenitic and martensitic		
			VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	
Avance standard Standard Vorschub Standard feed rate		CUT31-UN-002	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.10
			Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.10
			Zmax	80-130*	0.04-0.10	50-110*	0.04-0.10	50-90*	0.04-0.08	50-120*	0.04-0.10
			HTA	70-120	0.04-0.06	60-100	0.04-0.06	50-90	0.04-0.06	50-100	0.04-0.06
			HAC								
		CUT31-PN-002	TiAlN	90-140	0.04-0.10	60-120	0.04-0.08	50-100	0.04-0.08		
			Tmax	100-170	0.04-0.10	70-150	0.04-0.10	60-120	0.04-0.10		
		CUT31-PNW-002	N								
		CUT31-PR-802	TiAlN	90-140	0.04-0.08	60-120	0.04-0.08	50-100	0.04-0.08	50-120	0.04-0.08
			Tmax	100-170	0.04-0.08	70-150	0.04-0.08	60-120	0.04-0.08	60-150	0.04-0.08
		CUT31-PRW-802	N								
		CUT31-TN-002	TiAlN	90-140	0.08-0.20	60-120	0.08-0.20	50-100	0.08-0.15	50-120	0.08-0.20
			Tmax	100-170	0.08-0.20	70-150	0.08-0.20	60-120	0.08-0.15	60-150	0.08-0.20
			Zmax	80-130*	0.08-0.20	50-110*	0.08-0.20	50-90*	0.08-0.15		
		CUT31-GN-002 ***	TiAlN	90-140	0.04-0.15	60-120	0.04-0.15	50-100	0.04-0.10	50-120	0.04-0.10
			Tmax	100-170	0.04-0.15	70-150	0.04-0.15	60-120	0.04-0.10	70-120	0.04-0.10
			HAC								
Avance modérée Niedriger Vorschub Low feed rate		CUT31-UN-000F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
			HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
			HAC								
		CUT31-UL/R-800F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
			HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
			HAC								
		CUT31-UL/R-802F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
			HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
			HAC								
		CUT31-UL/R-1500F	TiAlN	80-130	0.02-0.05	50-110	0.02-0.05	50-90	0.02-0.05	50-80	0.02-0.05
			HTA	60-100	0.01-0.04	50-90	0.01-0.04	50-80	0.02-0.05	50-80	0.02-0.05
			HAC								

* premier choix en cas de coupe interrompue

** arête de coupe vive

*** Pour opérations de fonçage-tournage (évent. tronçonnage)

* erste Wahl für unterbrochener Schnitt

** scharfe Schneidkante

*** Für Stech- und Drehoperationen (event. abstechen)

* first choice for interrupted cut

** sharp cutting edge

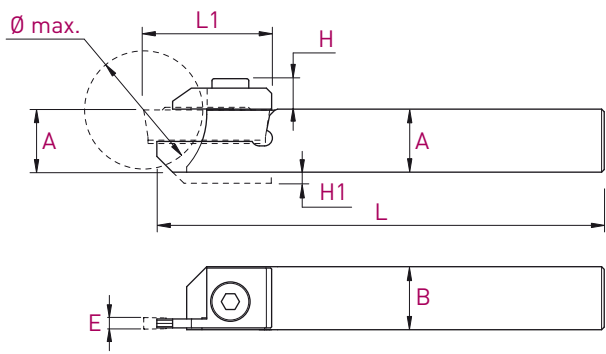
*** For grooving and turning operations (event. parting off)

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

[N] Alliages d'aluminium et non ferreux Aluminium- und Nichteisenlegierungen Aluminium and non-ferrous alloys								[S] Titane Titan Titanium			
Aluminium		Alu silicium max. 5% Aluminiumsilicium max. 5% Aluminium silicon max. 5%		Cuivre Kupfer Copper		Laiton & bronze Messing & Bronze Brass & bronze		Gr. 1 - 3		Gr. 4 - 5	
VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)	VC (m/min)	F (mm/U)
100-250	0.03-0.10	100-250	0.03-0.10	100-300	0.03-0.10	100-300	0.03-0.10			30-60	0.04-0.08
100-300	0.04-0.10	100-250	0.04-0.10	100-300	0.03-0.08	150-300	0.03-0.08			30-60	0.04-0.08
150-300	0.04-0.15	100-300	0.04-0.10	100-300	0.04-0.10	150-300	0.02-0.08	30-60	0.04-0.08	30-60	0.04-0.08
						150-300	0.03-0.10				
						100-500	0.02-0.15				
						150-300	0.03-0.10				
						100-500	0.02-0.15				
						150-300	0.05-0.20				
100-300	0.04-0.15	100-200	0.04-0.10	100-200	0.04-0.10	100-300	0.04-0.15			30-60	0.04-0.08
						100-300	0.04-0.15				
100-300	0.04-0.15	100-200	0.04-0.10	100-200	0.04-0.10	100-300	0.04-0.15	30-60	0.04-0.08	30-60	0.04-0.08
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.01-0.04	100-250	0.01-0.04	100-300	0.02-0.05			30-60	0.01-0.04
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05			30-60	0.02-0.06
100-300	0.02-0.05	100-250	0.02-0.05	100-250	0.02-0.05	100-300	0.02-0.05	30-60	0.02-0.06	30-60	0.02-0.06



								
Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	Art. N°	Art. N°
E 1.6 mm Type CUT16	8 x 10	115	16	19.5	6.2	2	CUT16-H0810L	CUT16-H0810R
	10 x 10	115	16	19.5	6.2	-	CUT16-H1010L	CUT16-H1010R
	12 x 12	130	16	19.5	6.2	-	CUT16-H1212L	CUT16-H1212R
	12 x 12	90	16	19.5	6.2	-	CUT16-H1212L-90	CUT16-H1212R-90
	12.7 x 12.7	130	16	19.5	6.2	-	CUT16-H127127L	CUT16-H127127R
	16 x 16	130	16	19.5	6.2	-	CUT16-H1616L	CUT16-H1616R
E 2.2 mm Type CUT22	10 x 12	115	20	24	6.4	-	CUT22-H1012L	CUT22-H1012R
	12 x 12	130	20	24	6.4	-	CUT22-H1212L	CUT22-H1212R
	12 x 12	90	20	24	6.4	-	CUT22-H1212L-90	CUT22-H1212R-90
	12.7 x 12.7	130	20	24	6.4	-	CUT22-H127127L	CUT22-H127127R
	16 x 16	130	20	24	6.4	-	CUT22-H1616L	CUT22-H1616R
	20 x 20	120	20	24	6.4	-	CUT22-H2020L	CUT22-H2020R
E 3.1 mm Type CUT31	16 x 16	130	34	35	7.8	-	CUT31-H1616L	CUT31-H1616R
	20 x 20	120	34	35	7.8	-	CUT31-H2020L	CUT31-H2020R
	25 x 25	140	34	35	7.8	-	CUT31-H2525L	CUT31-H2525R

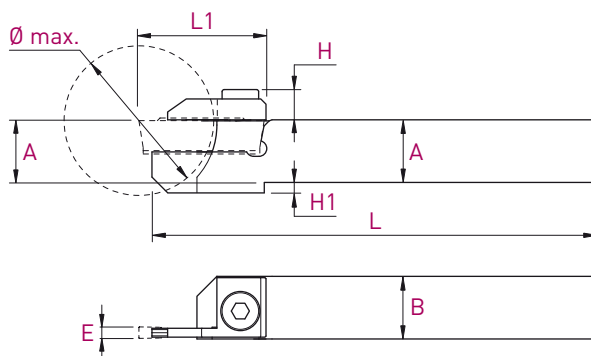
Pièces de rechange Ersatzteile Spare parts				Serrage Anzug Torque
	Art. N°	Art. N°	Art. N°	
CUT 16	CUT16L-SET	CUT16R-SET	V-M4X10-BN7	3.5 Nm
CUT 22	CUT22L-SET	CUT22R-SET	V-M4X10-BN7	3.5 Nm
CUT 31	CUT31L-SET	CUT31R-SET	V-M5X10-BN7	4.5 Nm

Porte-outils

Halter
Holders

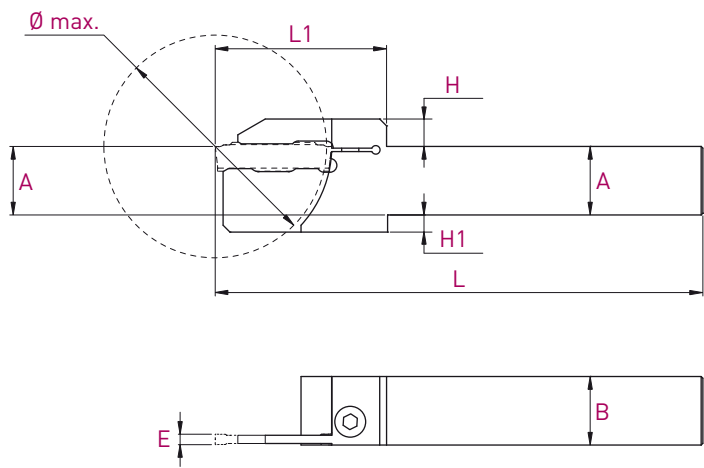
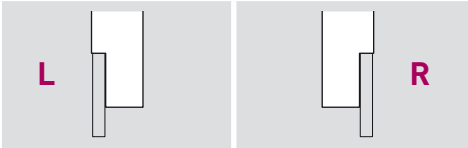
Ø max 42 mm

HX



Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	Art. N°	Art. N°
E 1.6 mm Type CUT16	10 x 12	115	20	21	6.2	2	CUT16-H1012LX	CUT16-H1012RX
	12 x 12	130	20	21	6.2	-	CUT16-H1212LX	CUT16-H1212RX
	12 x 12	90	20	21	6.2	-	CUT16-H1212LX-90	CUT16-H1212RX-90
	12.7 x 12.7	130	20	21	6.2	-	CUT16-H127127LX	CUT16-H127127RX
	16 x 16	130	20	21	6.2	-	CUT16-H1616LX	CUT16-H1616RX
	20 x 20	120	20	21	6.2	-	CUT16-H2020LX	CUT16-H2020RX
E 2.2 mm Type CUT22	10 x 12	115	26	25	6.4	4	CUT22-H1012LX	CUT22-H1012RX
	12 x 12	130	26	25	6.4	2	CUT22-H1212LX	CUT22-H1212RX
	12 x 12	90	26	25	6.4	2	CUT22-H1212LX-90	CUT22-H1212RX-90
	12.7 x 12.7	130	26	25	6.4	-	CUT22-H127127LX	CUT22-H127127RX
	16 x 16	130	26	25	6.4	-	CUT22-H1616LX	CUT22-H1616RX
	20 x 20	120	26	25	6.4	-	CUT22-H2020LX	CUT22-H2020RX
	25 x 25	140	26	25	6.4	-	CUT22-H2525LX	CUT22-H2525RX
E 3.1 mm Type CUT31	16 x 16	120	42	37	7.8	4	CUT31-H1616LX	CUT31-H1616RX
	20 x 20	120	42	37	7.8	-	CUT31-H2020LX	CUT31-H2020RX
	25 x 25	140	42	37	7.8	-	CUT31-H2525LX	CUT31-H2525RX

Pièces de rechange Ersatzteile Spare parts	L	R	Serrage Anzug Torque
CUT 16	CUT16LX-SET	CUT16RX-SET	V-M4X10-BN7
CUT 22	CUT22LX-SET	CUT22RX-SET	V-M4X10-BN7
CUT 31	CUT31LX-SET	CUT31RX-SET	V-M5X10-BN7



Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	Art. N°	Art. N°
E 2.2 mm Type CUT22	16 x 16	130	32	30	7	-	CUT22-H1616LZ-D32	CUT22-H1616RZ-D32
	20 x 20	130	32	30	7	-	CUT22-H2020LZ-D32	CUT22-H2020RZ-D32
	16 x 16	130	42	35	7	4	CUT22-H1616LZ-D42	CUT22-H1616RZ-D42
	20 x 20	130	42	35	7	-	CUT22-H2020LZ-D42	CUT22-H2020RZ-D42
E 3.1 mm Type CUT31	20 x 20	140	52	44	8	5	CUT31-H2020LZ-D52	CUT31-H2020RZ-D52
	25 x 25	140	52	44	8	-	CUT31-H2525LZ-D52	CUT31-H2525RZ-D52
	20 x 20	140	65	50	8	5	CUT31-H2020LZ-D65	CUT31-H2020RZ-D65
	25 x 25	140	65	50	8	-	CUT31-H2525LZ-D65	CUT31-H2525RZ-D65

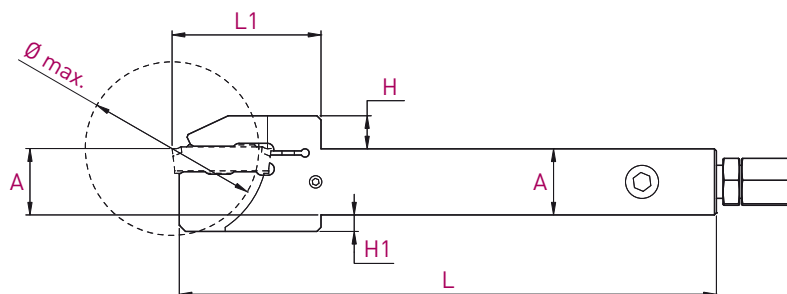
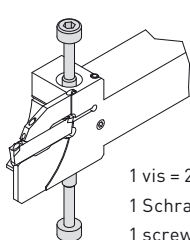
Pièces de rechange Ersatzteile Spare parts		Serrage Anzug Torque
	Art. N°	
CUT 22	V-M4X10-BN7	3.5 Nm
CUT 31	V-M5X10-BN7	4.5 Nm

Porte-outils avec arrosage intégré

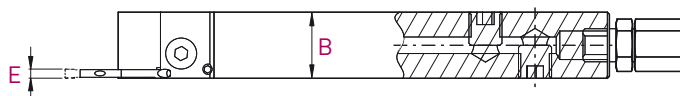
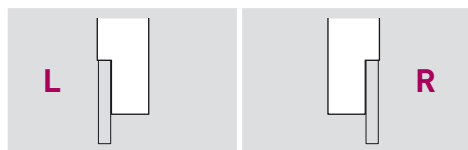
Halter mit integrierter Kühlmittelzufuhr
 Holders with integrated coolant supply

Ø max 65 mm

HZ-JET

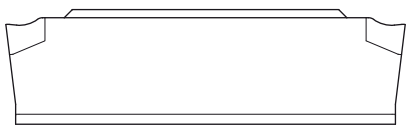
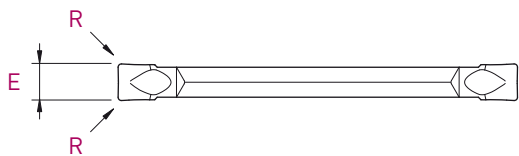
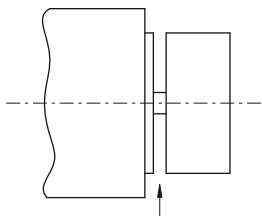


1 vis = 2 possibilités de serrage
 1 Schraube = 2 Spannmöglichkeiten
 1 screw = 2 clamp possibilities



Plaquettes WSP Inserts	A x B	L	Ø max.	L1	H	H1	Art. N°	Art. N°
E 2.2 mm	16 x 16	130	42	36	8	4	CUT22-H1616LZ-JET42	CUT22-H1616RZ-JET42
Type CUT22	20 x 20	130	42	36	8	-	CUT22-H2020LZ-JET42	CUT22-H2020RZ-JET42
E 3.1 mm	16 x 16	140	65	49	9	9	CUT31-H1616LZ-JET65	CUT31-H1616RZ-JET65
Type CUT31	20 x 20	140	65	51	9	5	CUT31-H2020LZ-JET65	CUT31-H2020RZ-JET65
	25 x 25	140	65	51	9	-	CUT31-H2525LZ-JET65	CUT31-H2525RZ-JET65

Pièces de rechange Ersatzteile Spare parts	Art. N°	Serrage Anzug Torque	Art. N°	Art. N°
CUT 22	V-M4X22-CUT	3.5 Nm	J-M8X1-D6	JB-M8X1
CUT 31	V-M5X25-CUT	4.5 Nm	J-M8X1-D6	JB-M8X1



UN



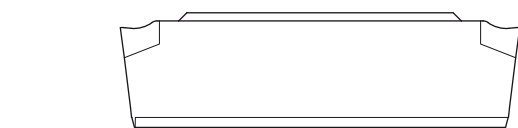
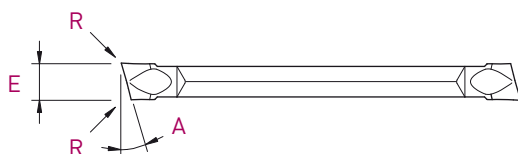
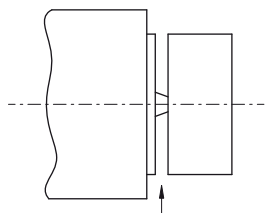
Type	E ± 0.1	R	Art. N°	P	P	P	P	
				M	M	M	M	
				N			N	N
				S			S	S
				TiAlN	Tmax	Zmax	HTA	HAC
CUT16	1.6	0.02	CUT16-UN-000F	•			•	•
	1.6	0.10	CUT16-UN-001	•	•	•	•	•
CUT22	2.2	0.02	CUT22-UN-000F	•			•	•
	2.2	0.20	CUT22-UN-002	•	•	•	•	•
CUT31	3.1	0.02	CUT31-UN-000F	•			•	•
	3.1	0.20	CUT31-UN-002	•	•	•	•	•

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

UL-UR



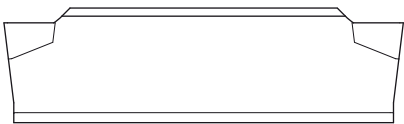
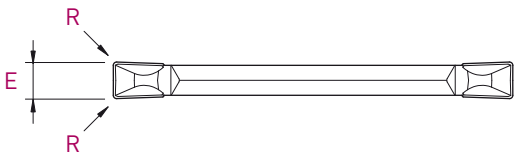
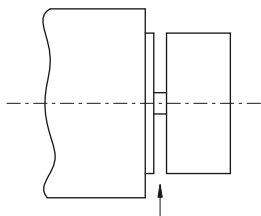
UL



UR



Type	E ±0.1	A	R	Art. N°	P M N S	P M N S	HTA	HAC	Art. N°	P M N S	P M N S	P M N S	HTA	HAC
CUT16	1.6	8°	0.02	CUT16-UL-800F	•	•	•		CUT16-UR-800F	•			•	•
	1.6	15°	0.02	CUT16-UL-1500F	•	•	•		CUT16-UR-1500F	•			•	•
CUT22	2.2	8°	0.02	CUT22-UL-800F	•	•	•		CUT22-UR-800F	•			•	•
	2.2	8°	0.20	-					CUT22-UR-802		•	•		
	2.2	8°	0.20	CUT22-UL-802F	•	•	•		CUT22-UR-802F	•			•	•
	2.2	15°	0.02	CUT22-UL-1500F	•	•	•		CUT22-UR-1500F	•			•	•
CUT31	3.1	8°	0.02	CUT31-UL-800F	•	•	•		CUT31-UR-800F	•			•	•
	3.1	8°	0.20	CUT31-UL-802F	•	•	•		CUT31-UR-802F	•			•	•
	3.1	15°	0.02	CUT31-UL-1500F	•	•	•		CUT31-UR-1500F	•			•	•



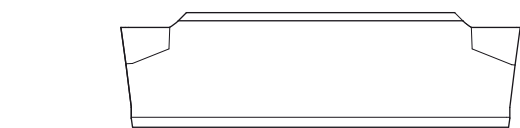
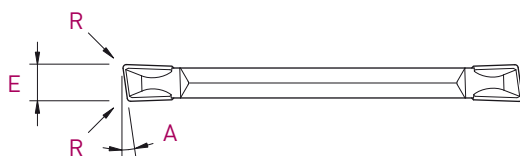
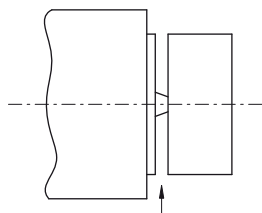
Type	E ± 0.1	R	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> TiAlN	<div><div>P</div><div>M</div><div></div><div></div></div> Tmax
CUT22	2.2	0.20	CUT22-PN-002	●	●
CUT31	3.1	0.20	CUT31-PN-002	●	●

Plaquettes de tronçonnage

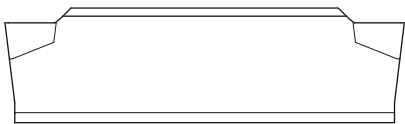
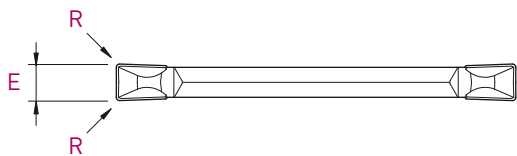
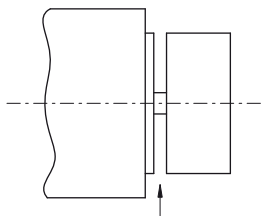
Abstechwendeplatten

Cut off inserts

PR



Type	E ± 0.1	A	R	Art. N°	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>M</div> <div></div> <div></div> </div>	
					TiAlN	Tmax
CUT16	1.6	8°	0.10	CUT16-PR-801	•	•
CUT22	2.2	8°	0.20	CUT22-PR-802	•	•
CUT31	3.1	8°	0.20	CUT31-PR-802	•	•



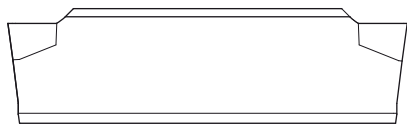
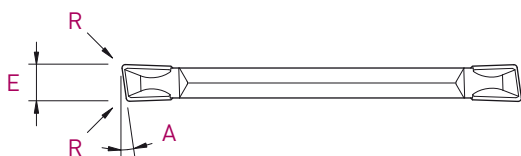
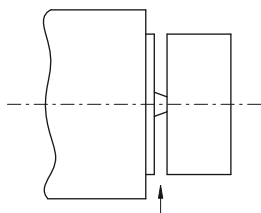
Type	E ± 0.1	R	Art. N°	<div>☐ ☒ N ☒ S z</div>
CUT22	2.2	0.20	CUT22-PNW-002	•
CUT31	3.1	0.20	CUT31-PNW-002	•

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

PRW



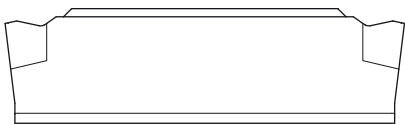
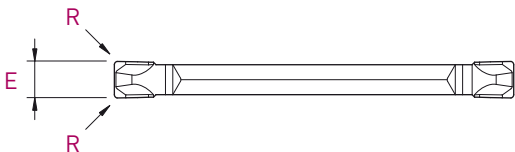
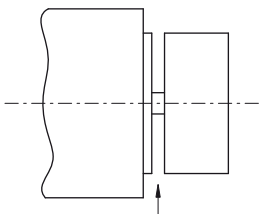
PRW



Type	E ± 0.1	A	R	Art. N°	z
CUT16	1.6	8°	0.10	CUT16-PRW-801	●
CUT22	2.2	8°	0.20	CUT22-PRW-802	●
CUT31	3.1	8°	0.20	CUT31-PRW-802	●



z

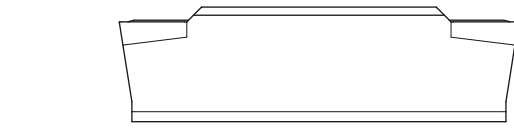
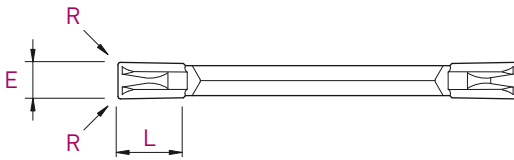
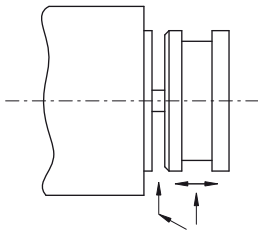


Type	E ± 0.1	R	Art. N°	T:AlN	Tmax	Zmax
CUT22	2.2	0.20	CUT22-TN-002	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div></div>	<div><div>P</div><div>M</div></div>
CUT31	3.1	0.20	CUT31-TN-002	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div></div>	<div><div>P</div><div>M</div></div>

Plaquettes de fonçage, tournage et tronçonnage

WSP zum einstecken, drehen und abstechen

Solid carbide inserts for grooving, turning and cut off

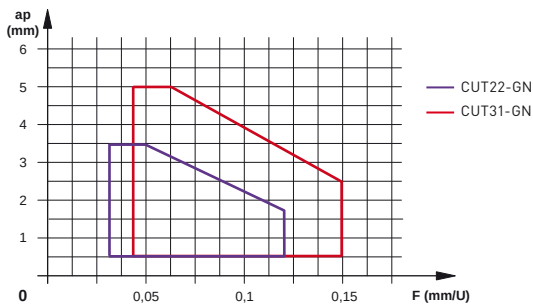
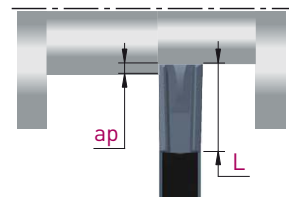
GN**GN**

Type	E ± 0.1	L	R	Art. N°	TiAlN	Tmax	HAC
CUT22	2.2	3.5	0.15	CUT22-GN-002	●	●	●
CUT31	3.1	5.0	0.15	CUT31-GN-002	●	●	●

Conseils d'utilisation pour plaquettes type GN

Anwendungsempfehlungen für GN-Wendelplatten

Application recommendations for GN inserts



$a_p \max = L$ dans matière à bonne usinabilité
 $a_p \max = L$ in Werkstoffe mit gute Zerspanbarkeit
 $a_p \max = L$ in material with good machinability

IN-Line



APPLITEC
CUTTING TOOLS

Index

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Infos et avantages Infos und Vorteile Infos and advantages			> 12.06
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Fonçage-tournage Einstechen und drehen Grooving and turning	GT-ZFX		> 12.36
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Codification des porte-outils

Kodifizierung für Halter
Coding guide for holders

BH-D / BHS
BHS-D / BHY-D

**H****HS****HY**

B H 4 - D 20 - 100

Ligne produit d'alésage
Innendreihen Produktlinie
Boring product line

Porte-outils
Halter
Holders

Ø alésage
Bohrung Ø
Bore Ø

Queue cylindrique
Zylindrischer Schaft
Cylindrical shank

Ø/∅ queue
Schaft Ø/∅
Shank Ø/∅

Longueur
Länge
Length



HK

B	HK	4	N	-	20	-	32R
---	----	---	---	---	----	---	-----

Barres d'alésage compatibles (longueur L3)
Kompatible Bohrstangen (Länge L3)
Compatible boring bars (length L3)

∅ queue
Schaft ∅
Shank ∅

Géométrie du porte-outil
Haltergeometrie
Tool holder geometry

∅ alésage
Bohrung ∅
Bore ∅

Porte-outils
Halter
Holders

Ligne produit d'alésage
Innendrehen Produktlinie
Boring product line

Codification des barres d'alésage

Kodifizierung für Bohrstangen

Coding guide for holders



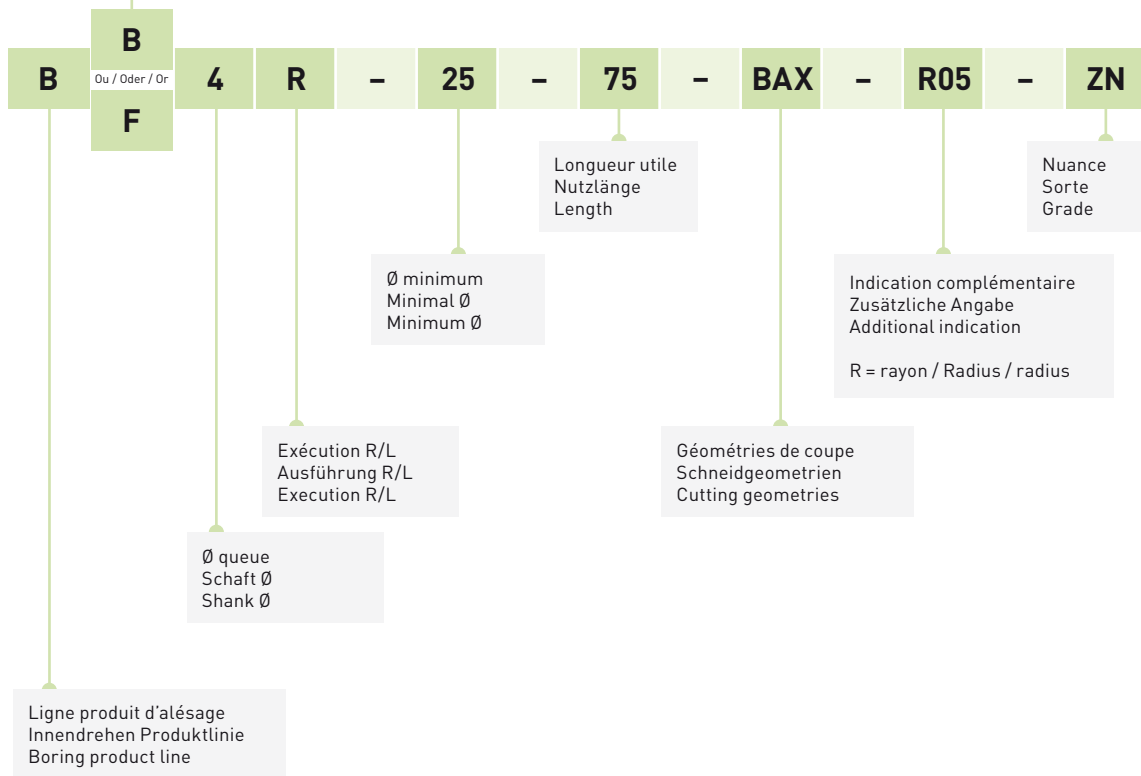
B

Arrosage intégré
Integrierter Kühlmittelzufuhr
Integrated coolant supply



F

Sans arrosage
Ohne Kühlung
Without coolant



Infos et avantages

Infos und Vorteile

Infos and advantages

Porte-outils avec écrou de serrage

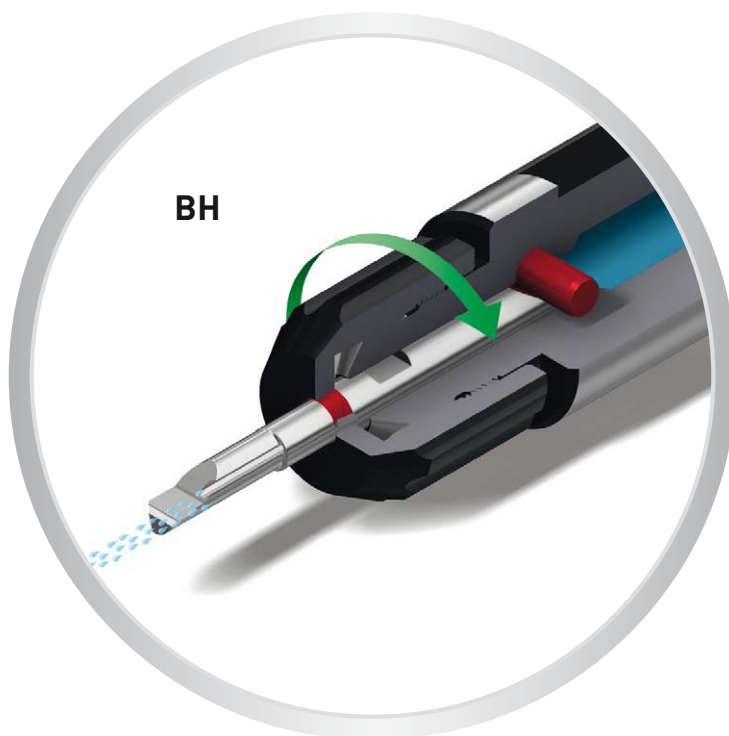
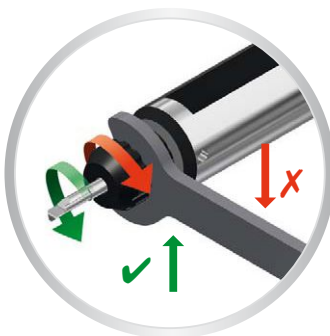
Halter mit Spannmutter

Holders with clamping nut

Arrosage par la barre d'alésage

Kühlung durch die Bohrstange

Cooling through the boring bar



Porte-outils avec arrosage multiple

Halter mit mehrfaches Kühlungssystem
Holders with multiple coolant system

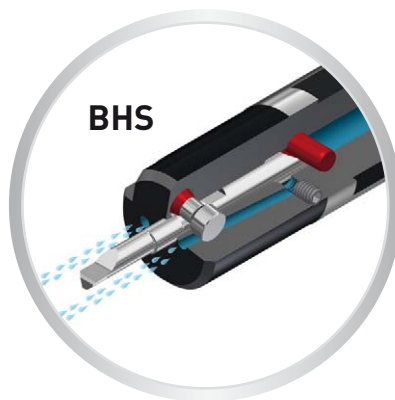
Infos et avantages

Infos und Vorteile
Infos and advantages

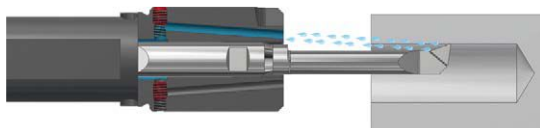
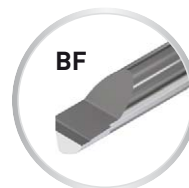
Système de serrage à vis transversale

Querverschraubungsspannsystem

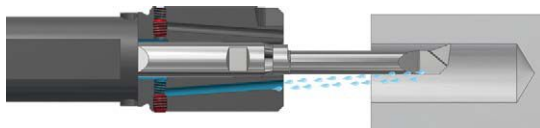
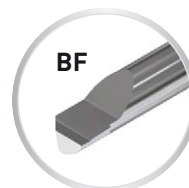
Clamping system with transverse screw



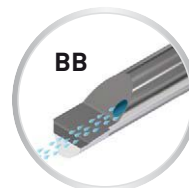
Arrosage sur l'arête de coupe
Kühlung auf der Schneidkante
Cooling on the cutting edge



Arrosage favorisant l'évacuation des copeaux
Spanabfuhr fördernde Kühlung
Cooling for better chip outflow



Arrosage par le centre de l'outil
Zentrale Kühlmittelzufuhr
Cooling through the center of the tool



IN-Line

Infos et avantages

Infos und Vorteile

Infos and advantages

Porte-outils à serrage hydraulique

Hydro-Dehnspann-System Halter

Holders with hydraulic clamping system

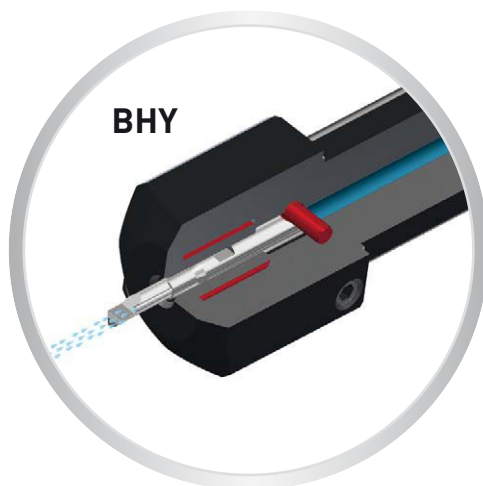


Excellente absorption des vibrations
Ausgezeichnete Schwingungsdämpfung
Excellent vibration absorbtion

Arrosage par la barre d'alésage

Kühlung durch die Bohrstange

Cooling through the boring bar



Infos et avantages

Infos und Vorteile

Infos and advantages

Porte-outils coudés

Gekröpfte Halter

Cranked holders

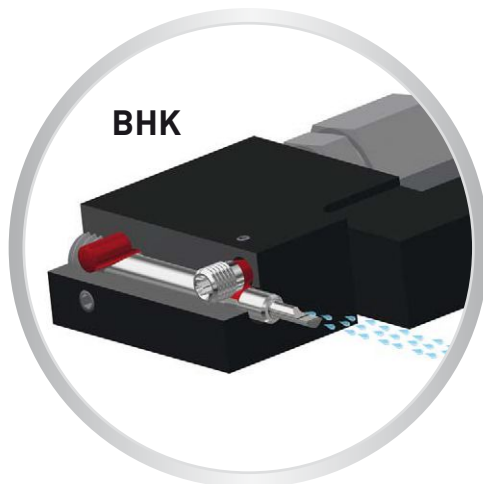
Système de serrage à vis transversale
Querverschraubungssystem
Clamping system with transverse screw



Arrosage par la barre d'alésage

Kühlung durch die Bohrstange

Cooling through the boring bar



Recommandations de serrage

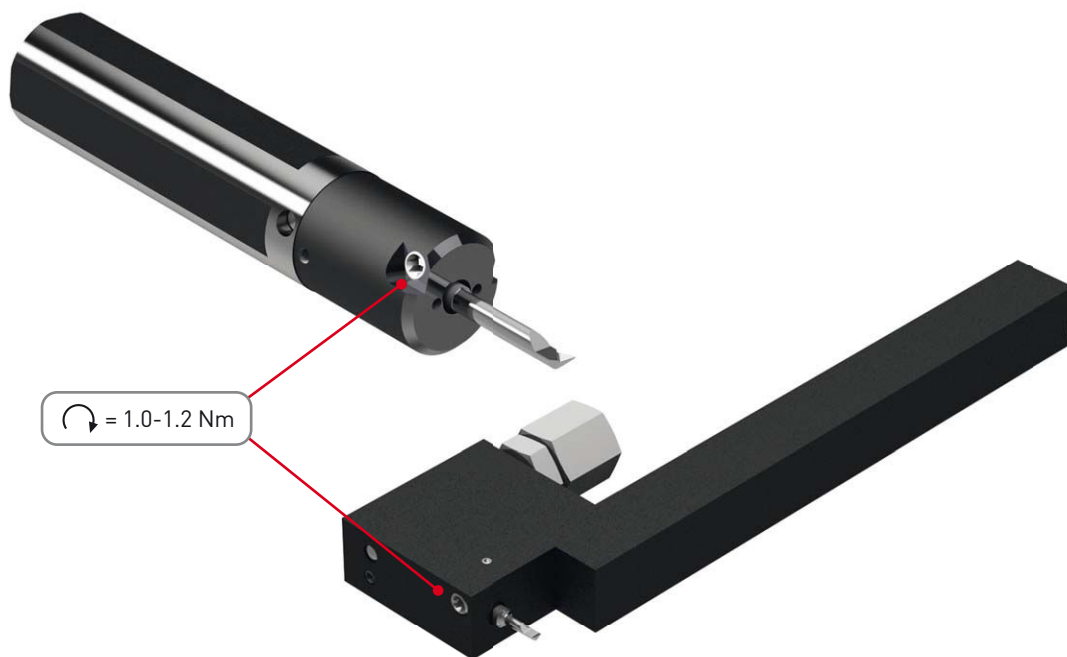
Spannempfehlungen

Clamping recommendations

Infos et avantages

Infos und Vorteile

Infos and advantages



Nous recommandons le serrage des porte-outils type BHS et BHK avec ce type de tournevis dynamométrique.

Wir empfehlen für das Anziehen der Halter Typ BHS und BHK diese Art von Drehmomentschraubendreher.

For holders type BHS and BHK clamping, we recommend this kind of torque screwdriver.



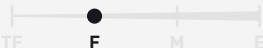
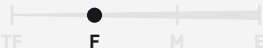
Art. N°

SET-NM1.2-TX8

Nuances

Sorten

Grades

<p>μK30</p>	<p>ZTAF</p>  <ul style="list-style-type: none"> • nuance universelle pour l'usage des aciers, aciers inoxydables, aciers alliés, alliages de titane • bonne résistance à la température 	<p> K30</p> <p>ZN + revêtement PVD ZN + PVD Beschichtung ZN + PVD coating</p>  <p>P ★★★★★ M ★★★★★ N ★★★★★ S ★★★★★</p> <ul style="list-style-type: none"> • Vielzweck-Hartmetallsorte für die Bearbeitung von Stahl, rostfreien Stählen, Stahllegierung, Titanlegierung • gute Warmfestigkeit 	<ul style="list-style-type: none"> • universal grade for steel, stainless steel, alloyed steel, titanium alloys • good heat resistance
<p>μK30</p>	<p>ZTAXF</p>  <ul style="list-style-type: none"> • nuance très résistante à l'usure et à la température, recommandée pour l'usinage des matières suivantes : inox 304, 316L, 317L, 904, Phynox • aciers alliés contenant : chrome nickel, vanadium, molybdène, ... 	<p> K30</p> <p>ZN + revêtement PVD ZN + PVD Beschichtung ZN + PVD coating</p>  <p>P ★★★★★ M ★★★★★ N ★★★★★ S ★★★★★</p> <ul style="list-style-type: none"> • sehr verschleißfeste und temperaturbeständige Sorte, für folgende Materialien empfohlen : Inox 304, 316L, 317L, 904, Phynox • legierter Stahl enthaltend : Chrom-Nickel, Vanadium, Molybdän, ... 	<ul style="list-style-type: none"> • very wear and high temperature resistant grade, recommended for following material : Inox 304, 316L, 317L, 904, Phynox • alloy steel containing : Chrome-nickel, Vanadium, Molybdenum, ...
<p>μK30</p>	<p>ZN</p>  <ul style="list-style-type: none"> • nuance de base micro-grain tenace • 1^{er} choix pour l'usinage des métaux non ferreux 	<p> K30</p> <p>Non revêtu Unbeschichtet Uncoated</p> <p>P ★★★★★ M ★★★★★ N ★★★★★ S ★★★★★</p> <ul style="list-style-type: none"> • zähe Basis Feinkornsorte • erste Wahl für die Bearbeitung von Nichteisenmetalle 	<ul style="list-style-type: none"> • tough base micro-grain grade • first choice for non-ferrous materials

Paramètres de coupe

Schnittwerte

Machining data

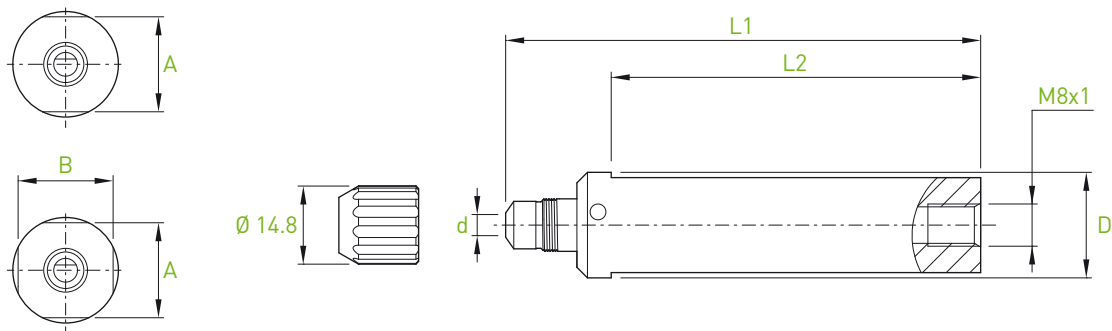
Matière Werkstoff Material	VC (m/min)	Ø barre d'alésage Bohrstange Ø boring bar Ø		
		Ø1.0 - Ø2.0 (mm/U)	Ø2.5 - Ø4.0 (mm/U)	Ø4.5 - Ø5.5 (mm/U)
Acier de décolletage Automatenstahl Free-cutting steel P	60-100	0.02-0.03	0.02-0.08	0.03-0.10
Acier faiblement allié Leicht legierter Stahl Low alloyed steel P	50-80	0.01-0.03	0.02-0.05	0.03-0.06
Acier fortement allié Legierter Stahl High alloyed steel P	40-60	0.01-0.02	0.02-0.04	0.02-0.06
Acier inoxydable Rostfreistahl Stainless steel M	40-90	0.01-0.03	0.02-0.05	0.03-0.08
Aluminium N	60-150	0.01-0.03	0.02-0.06	0.03-0.10
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze N	60-150	0.01-0.03	0.02-0.05	0.03-0.08
Titane Titan Titanium S	30-70	0.01-0.03	0.02-0.05	0.03-0.10

BH4-D

Porte-outils avec écrou de serrage

Halter mit Spannmutter

Holders with clamping nut



d	Bars	D	L1	L2	A x B	2 flats	4 flats	Art. N°
4	BB4... BF4...	10	75	55	8.8x8.8	●		BH4-D10-75
		12	75	55	11.2x11.2	●		BH4-D12-75
		12.7	75	55	11.2x11.2	●		BH4-D12.7-75
		15.87	75	55	14x14		●	BH4-D15.87-75-F4
		16	75	55	14x14	●		BH4-D16-75
		16	75	55	14x14		●	BH4-D16-75-F4
		16	110	90	14x14		●	BH4-D16-110-F4
		19.05	90	70	17x17		●	BH4-D19.05-90-F4
		20	90	70	18x18	●		BH4-D20-90
		20	90	70	18x18		●	BH4-D20-90-F4
		20	160	140	18x18		●	BH4-D20-160-F4
		22	90	70	20x20	●		BH4-D22-90
		22	90	70	20x20		●	BH4-D22-90-F4
		22	130	110	20x20		●	BH4-D22-130-F4
		25	100	80	23x23	●		BH4-D25-100
		25	100	80	23x23		●	BH4-D25-100-F4
		25	170	150	23x23		●	BH4-D25-170-F4
		25.4	100	80	23.4x23.4	●		BH4-D25.4-100
		28	100	80	26x26	●		BH4-D28-100

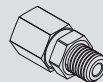
Pièces de rechange
Ersatzteile
Spare parts

Art. N°



Art. N°

Option



Art. N°

BH4...

BH4-M10

C-BH4-M10

BH4...

J-M8X1-D6

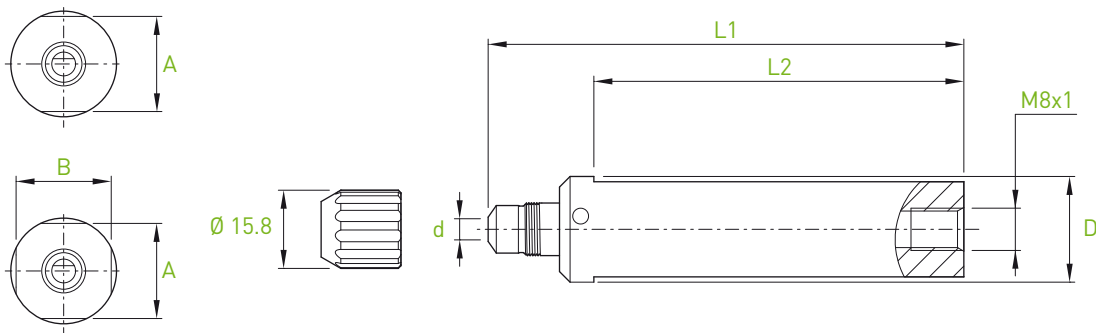
more option
see JET-Line

Porte-outils avec écrou de serrage

Halter mit Spannmutter

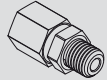
Holders with clamping nut

BH6-D



d	Bars	D	L1	L2	A x B	2 flats	4 flats	Art. N°
6	BB6... BF6...	12	75	55	11.2x11.2	●		BH6-D12-75
		12.7	75	55	11.2x11.2	●		BH6-D12.7-75
		15.87	75	55	14x14	●		BH6-D15.87-75
		16	75	55	14x14	●		BH6-D16-75
		19.05	90	70	17x17	●		BH6-D19.05-90
		20	90	70	18x18	●		BH6-D20-90
		20	90	70	18x18		●	BH6-D20-90-F4
		20	160	140	18x18		●	BH6-D20-160-F4
		22	90	70	20x20	●		BH6-D22-90
		22	90	70	20x20		●	BH6-D22-90-F4
		22	130	110	20x20		●	BH6-D22-130-F4
		25	100	80	23x23	●		BH6-D25-100
		25	100	80	23x23		●	BH6-D25-100-F4
		25	170	150	23x23		●	BH6-D25-170-F4
		25.4	100	80	23.4x23.4	●		BH6-D25.4-100
		28	100	80	26x26	●		BH6-D28-100

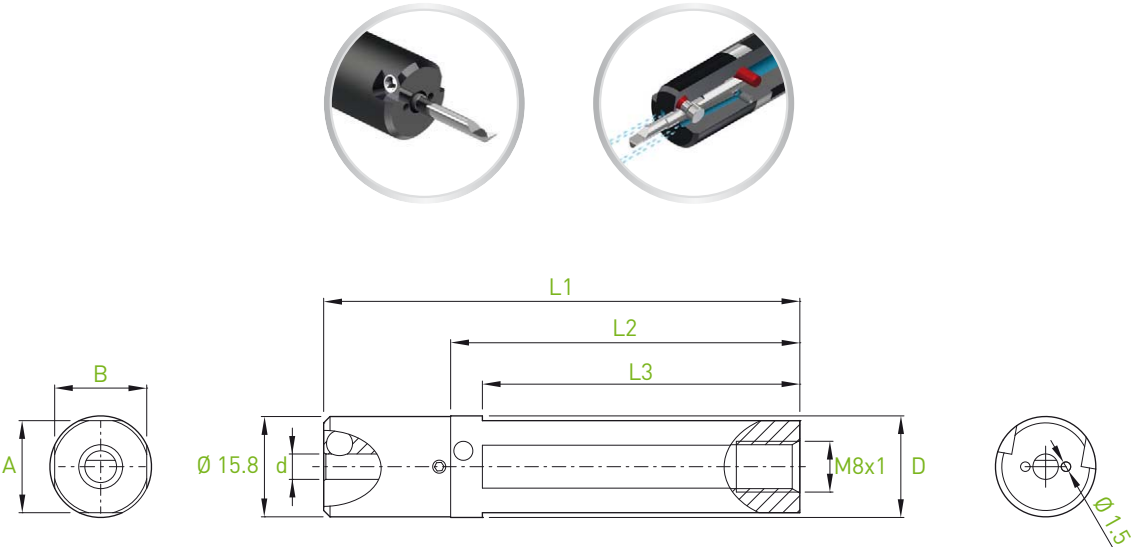
Pièces de rechange Ersatzteile Spare parts		
	Art. N°	Art. N°
BH6...	BH6-M12	C-BH6-M12

Option	
	Art. N°
BH6...	J-M8X1-D6

more option
see JET-Line

BHS4-D

Porte-outils avec arrosage multiple
Halter mit mehrfaches Kühlungssystem
Holders with multiple coolant system



d	Bars	D	L1	L2	L3	A x B	Art. N°
4	BB4... BF4...	10	75	55	50	9.2x9.2	BHS4-D10-75-F4
		12	75	55	50	11x11	BHS4-D12-75-F4
		12.7	75	55	50	11.7x11.7	BHS4-D12.7-75-F4
		15.87	75	55	50	14.5x14.5	BHS4-D15.87-75-F4
		16	75	55	50	14.5x14.5	BHS4-D16-75-F4
		16	110	90	85	14.5x14.5	BHS4-D16-110-F4
		19.05	90	70	65	17x17	BHS4-D19.05-90-F4
		20	90	70	65	18x18	BHS4-D20-90-F4
		20	160	140	135	18x18	BHS4-D20-160-F4
		22	90	70	65	20x20	BHS4-D22-90-F4
		22	130	110	105	20x20	BHS4-D22-130-F4
		25	100	80	75	23x23	BHS4-D25-100-F4
		25	170	150	145	23x23	BHS4-D25-170-F4
		25.4	100	80	75	23x23	BHS4-D25.4-100-F4
		28	100	80	75	26x26	BHS4-D28-100-F4

Pièces de rechange
Ersatzteile
Spare parts

Art. N°

BHS4...

V-BHS-M4X0.5-T8

Option

Art. N°

BHS4...

C-T8

Art. N°

J-M8X1-D6

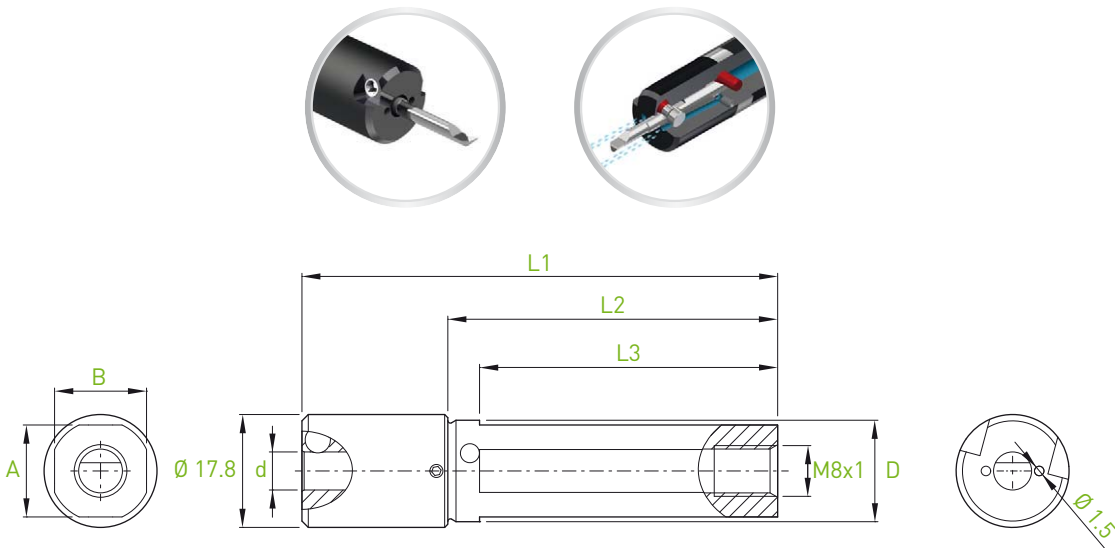
more option
see JET-Line

Art. N°

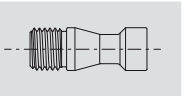
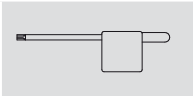
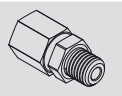
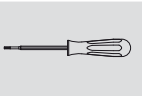
SET-NM1.2-TX8

Porte-outils avec arrosage multiple
Halter mit mehrfaches Kühlungssystem
Holders with multiple coolant system

BHS6-D

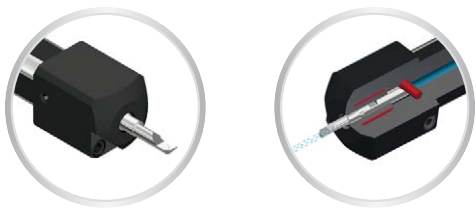
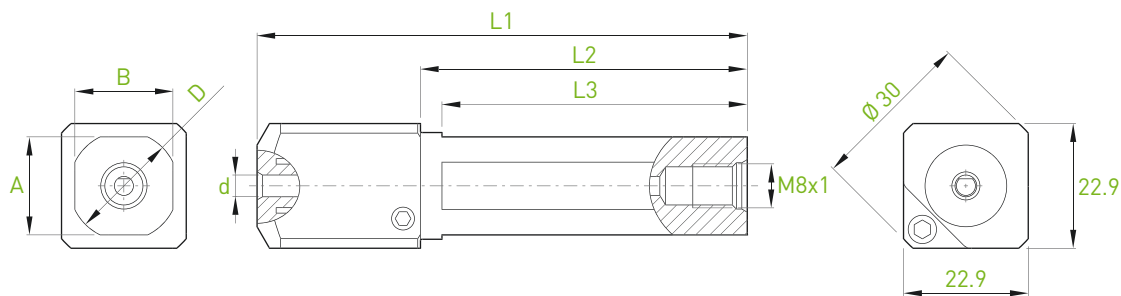


d	Bars	D	L1	L2	L3	A x B	Art. N°
6	BB6... BF6...	12	75	52	47	11x11	BHS6-D12-75-F4
		12.7	75	52	47	11.7x11.7	BHS6-D12.7-75-F4
		15.87	75	52	47	14.5x14.5	BHS6-D15.87-75-F4
		16	75	52	47	14.5x14.5	BHS6-D16-75-F4
		16	110	87	82	14.5x14.5	BHS6-D16-110-F4
		19.05	90	67	62	17x17	BHS6-D19.05-90-F4
		20	90	67	62	18x18	BHS6-D20-90-F4
		20	160	137	132	18x18	BHS6-D20-160-F4
		22	90	67	62	20x20	BHS6-D22-90-F4
		22	130	107	102	20x20	BHS6-D22-130-F4
		25	100	77	72	23x23	BHS6-D25-100-F4
		25	170	147	142	23x23	BHS6-D25-170-F4
		25.4	100	77	72	23x23	BHS6-D25.4-100-F4
		28	100	77	72	26x26	BHS6-D28-100-F4

Pièces de rechange Ersatzteile Spare parts		Option			
	Art. N°		Art. N°	Art. N°	Art. N°
BHS4...	V-BHS-M4X0.5-T8	BHS6...	C-T8	J-M8X1-D6 <small>more option see JET-Line</small>	SET-NM1.2-TX8

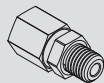
BHY4-D

Porte-outils à serrage hydraulique
Hydro-Dehnspann-System Halter
Holders with hydraulic clamping system



d	Bars	D	L1	L2	L3	A x B	Art. N°
4	BB4... BF4...	12	90	60	55	11.2x11.2	BHY4-D12-90-F4
		16	90	60	55	14.5x14.5	BHY4-D16-90-F4
		19.05	90	60	55	17x17	BHY4-D19.05-90-F4
		20	90	60	55	18x18	BHY4-D20-90-F4
		22	90	60	55	20x20	BHY4-D22-90-F4
		25	100	70	65	23x23	BHY4-D25-100-F4

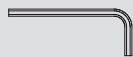
Pièces de rechange
Ersatzteile
Spare parts



Art. N°

J-M8X1-D6

more option
see JET-Line

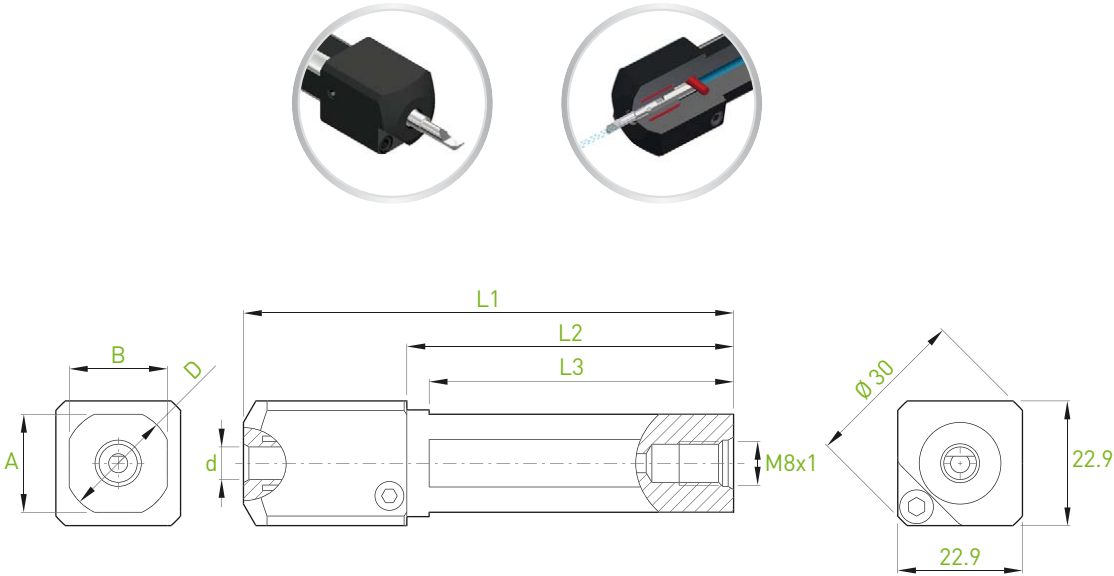


Art. N°

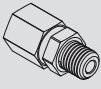
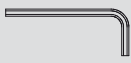
C-6P-3.0

Porte-outils à serrage hydraulique
Hydro-Dehnspann-System Halter
Holders with hydraulic clamping system

BHY6-D

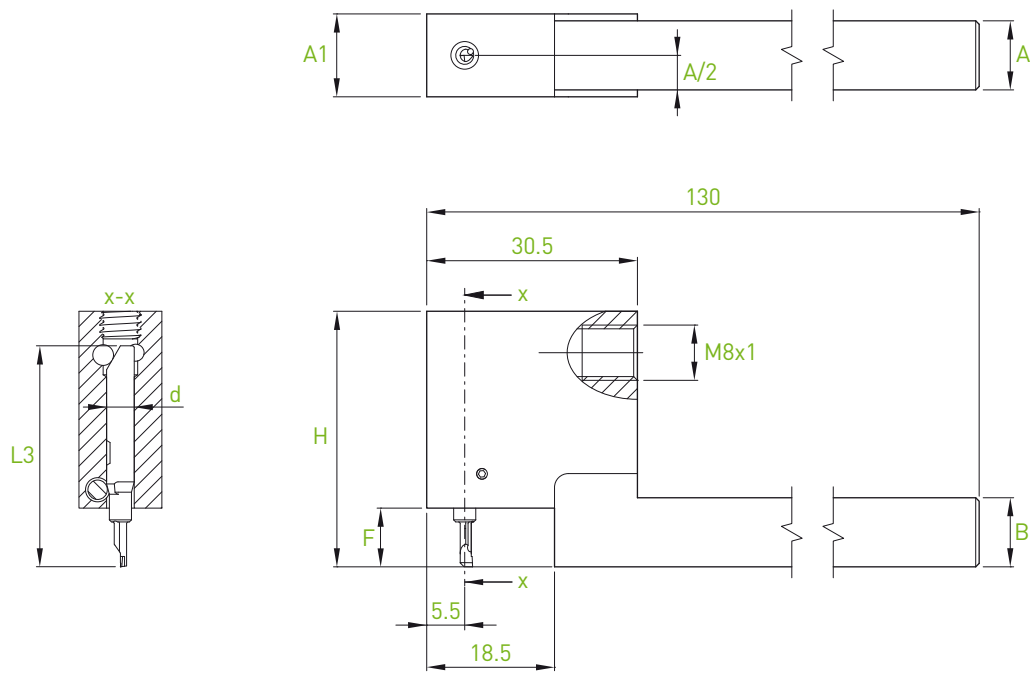


d	Bars	D	L1	L2	L3	A x B	Art. N°
6	BB6... BF6...	12	90	60	55	11.2x11.2	BHY6-D12-90-F4
		16	90	60	55	14.5x14.5	BHY6-D16-90-F4
		19.05	90	60	55	17x17	BHY6-D19.05-90-F4
		20	90	60	55	18x18	BHY6-D20-90-F4
		22	90	60	55	20x20	BHY6-D22-90-F4
		25	100	70	65	23x23	BHY6-D25-100-F4

Pièces de rechange Ersatzteile Spare parts		
	Art. N°	Art. N°
BHY6...	J-M8X1-D6	C-6P-3.0
	more option see JET-Line	

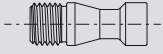
BHK4N

Porte-outils coudés
Kröpfhalter
Cranked holders



d	Bars	L3	A x B	F	H	A1	Art. N°
4	BB4R... BF4R...	32	8x8	8.5	37	12	BHK4N-0808X-32R
			10x10	8.5	37	12	BHK4N-1010X-32R
			12x12	8.5	37	12	BHK4N-1212X-32R
			16x16	8.5	37	16	BHK4N-1616X-32R
		37	8x8	13.5	42	12	BHK4N-0808X-37R
			10x10	13.5	42	12	BHK4N-1010X-37R
			12x12	13.5	42	12	BHK4N-1212X-37R
			16x16	13.5	42	16	BHK4N-1616X-37R
		42	10x10	18.5	47	12	BHK4N-1010X-42R
			12x12	18.5	47	12	BHK4N-1212X-42R
			16x16	18.5	47	16	BHK4N-1616X-42R

Pièces de rechange
Ersatzteile
Spare parts

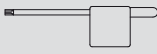


Art. N°

BHK4N...

V-BHK-M4X0.5-T8

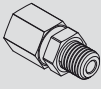
Option



Art. N°

BHK4N...

C-T8



Art. N°

J-M8X1-D6
more option
see JET-Line



Art. N°

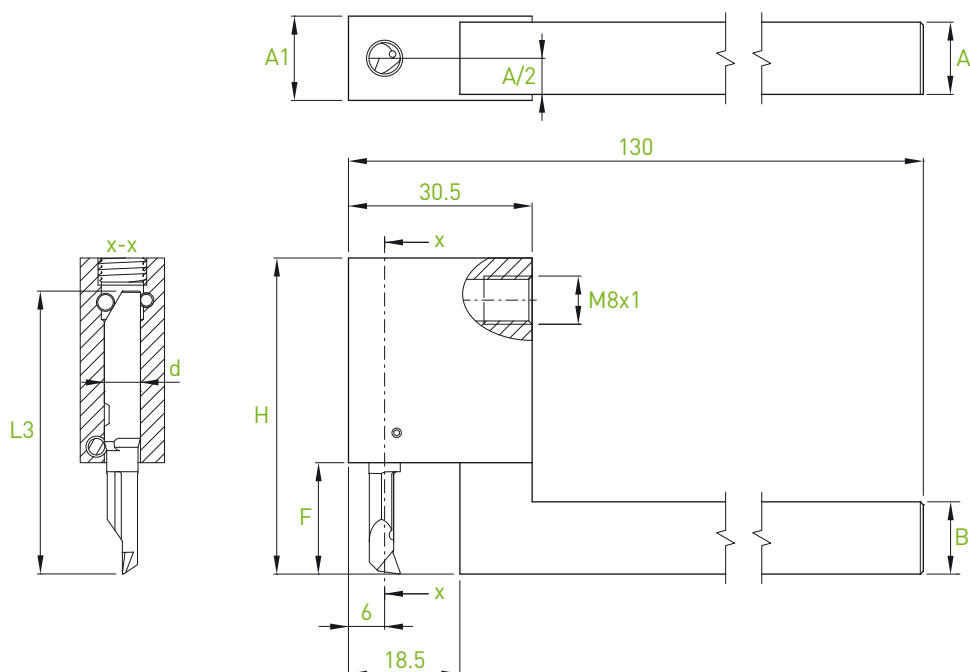
SET-NM1.2-TX8

Porte-outils coudés

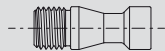
Kröpfhalter

Cranked holders

BHK6N



d	Bars	L3	A x B	F	H	A1	Art. N°
6	BB6R... BF6R...	47	10x10	18.5	52.5	12	BHK6N-1010X-47R
			12x12	18.5	52.5	12	BHK6N-1212X-47R
			16x16	18.5	52.5	16	BHK6N-1616X-47R
		57	10x10	28.5	62.5	12	BHK6N-1010X-57R
			12x12	28.5	62.5	12	BHK6N-1212X-57R
			16x16	28.5	62.5	16	BHK6N-1616X-57R

Pièces de rechange
Ersatzteile
Spare parts

Art. N°

BHK6N...

V-BHK-M4X0.5-T8

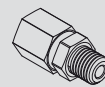
Option



Art. N°

BHK6N...

C-T8



Art. N°

J-M8X1-D6

more option
see JET-Line

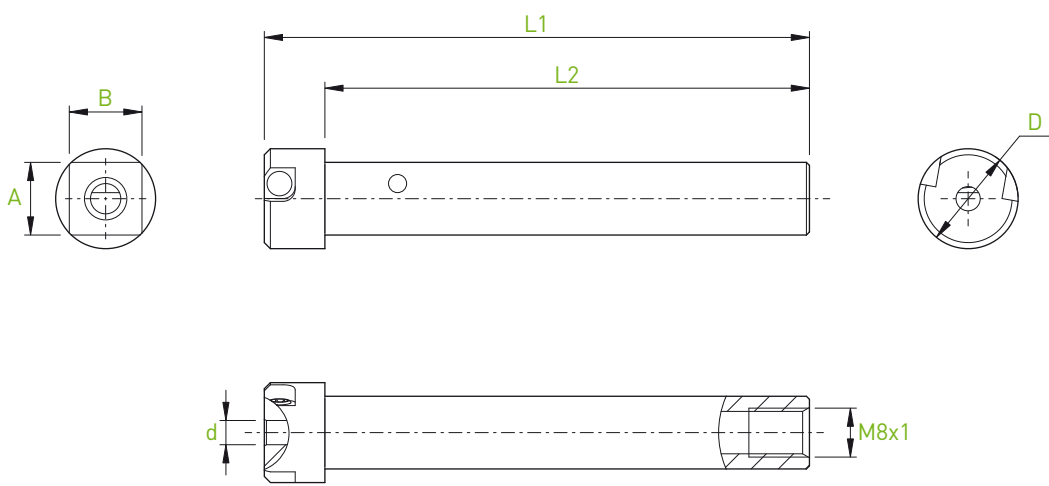
Art. N°

SET-NM1.2-TX8

BHS4

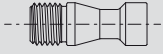
Porte-outils section carrée

Viereckige Halter
Square holders



d	Bars	A x B	L1	L2	D	Art. N°
4	BB4... BF4...	12x12	90	80	16.5	BHS4-1212-90
		16x16	100	90	15.5	BHS4-1616-100

Pièces de rechange
Ersatzteile
Spare parts

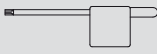


Art. N°

BHS4...

V-BHS-M4X0.5-T8

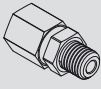
Option



Art. N°

BHS4...

C-T8



Art. N°

J-M8X1-D6
more option
see JET-Line



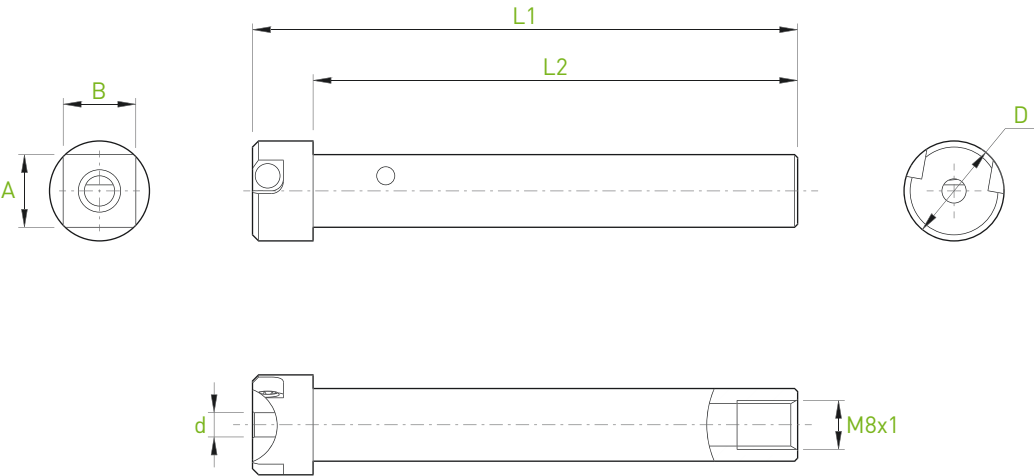
Art. N°

SET-NM1.2-TX8

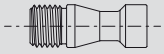
Porte-outils section carrée

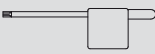
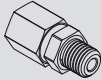
Viereckige Halter
Square holders

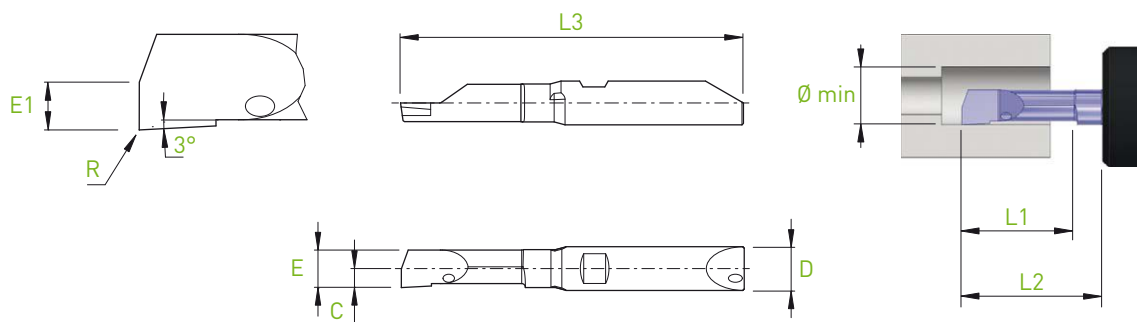
BHS6



d	Bars	A x B	L1	L2	D	Art. N°
6	BB6... BF6...	12x12	90	80	17.5	BHS6-1212-90
		16x16	100	-	-	BHS4-1616-100

Pièces de rechange Ersatzteile Spare parts	
	Art. N°
BHS6...	V-BHS-M4X0.5-T8

Option			
	Art. N°	Art. N°	Art. N°
BHS6...	C-T8	J-M8X1-D6	SET-NM1.2-TX8
		more option see JET-Line	



												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	E1	C	R	L3	Art. N°					
												ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	0.3	0.9	10	8.5	0.27	0.13	0.15	0	32	BB4R/L-0309-BA	●	●	●	●	●
		0.4	1.2	10	8.5	0.36	0.18	0.20	0	32	BB4R/L-0412-BA	●	●	●	●	●
		0.5	1.5	10	8.5	0.45	0.22	0.25	0	32	BB4R/L-0515-BA	●	●	●	●	●
		0.6	1.8	10	8.5	0.54	0.27	0.30	0	32	BB4R/L-0618-BA	●	●	●	●	●
		0.7	2.1	10	8.5	0.63	0.31	0.35	0	32	BB4R/L-0721-BA	●	●	●	●	●
		0.8	2.4	10	8.5	0.72	0.36	0.40	0	32	BB4R/L-0824-BA	●	●	●	●	●
		0.9	2.7	10	8.5	0.81	0.40	0.45	0	32	BB4R/L-0927-BA	●	●	●	●	●
		1.0	3.0	10	8.5	0.90	0.45	0.60	0.02	32	BB4R/L-1030-BA-R02	●	●	●	●	●
		1.2	3.6	10	8.5	1.08	0.54	0.60	0.02	32	BB4R/L-1236-BA-R02	●	●	●	●	●
		1.5	4.5	10	8.5	1.35	0.67	0.65	0.02	32	BB4R/L-1545-BA-R02	●	●	●	●	●
		2.0	6.0	10	8.5	1.80	0.90	1.15	0.02	32	BB4R/L-2060-BA-R02	●	●	●	●	●
		2.5	7.5	10	8.5	2.25	1.13	1.30	0.02	32	BB4R/L-2575-BA-R02	●	●	●	●	●
		3.0	9.0	15	13.5	2.70	1.35	1.35	0.05	37	BB4R/L-3090-BA-R05	●	●	●	●	●
		3.5	10.5	15	13.5	3.15	1.58	1.60	0.05	37	BB4R/L-35105-BA-R05	●	●	●	●	●

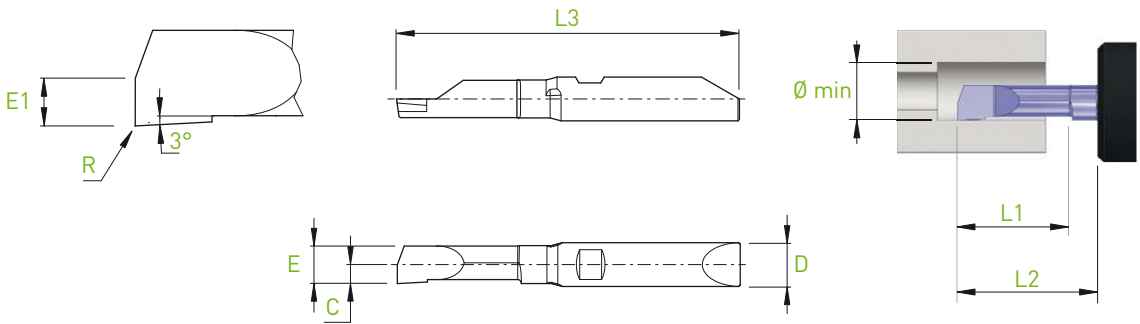
Alésage

Ausbohren
Boring

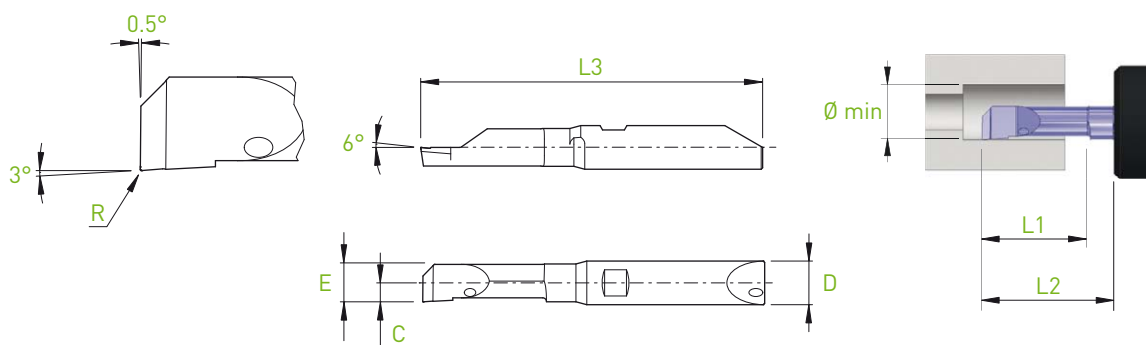


BF4...

BA



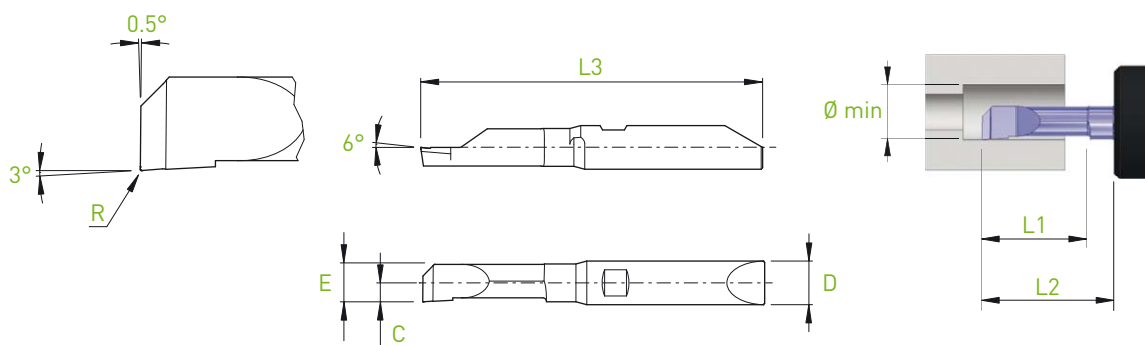
												R			L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	E1	C	R	L3	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> ZTAF	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> ZTAXF	<div><div>P</div><div>N</div><div>S</div></div> ZN	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> ZTAF	<div><div>P</div><div>N</div><div>S</div></div> ZN
4	BH4... BHS4... BHY4... BHK4...	0.3	0.9	10	8.5	0.27	0.13	0.15	0	32	BF4R/L-0309-BA	●	●	●	●	●
		0.4	1.2	10	8.5	0.36	0.18	0.20	0	32	BF4R/L-0412-BA	●	●	●	●	●
		0.5	1.5	10	8.5	0.45	0.22	0.25	0	32	BF4R/L-0515-BA	●	●	●	●	●
		0.6	1.8	10	8.5	0.54	0.27	0.30	0	32	BF4R/L-0618-BA	●	●	●	●	●
		0.7	2.1	10	8.5	0.63	0.31	0.35	0	32	BF4R/L-0721-BA	●	●	●	●	●
		0.8	2.4	10	8.5	0.72	0.36	0.40	0	32	BF4R/L-0824-BA	●	●	●	●	●
		0.9	2.7	10	8.5	0.81	0.40	0.45	0	32	BF4R/L-0927-BA	●	●	●	●	●
		1.0	3.0	10	8.5	0.90	0.45	0.60	0.02	32	BF4R/L-1030-BA-R02	●	●	●	●	●
		1.2	3.6	10	8.5	1.08	0.54	0.60	0.02	32	BF4R/L-1236-BA-R02	●	●	●	●	●
		1.5	4.5	10	8.5	1.35	0.67	0.65	0.02	32	BF4R/L-1545-BA-R02	●	●	●	●	●
		2.0	6.0	10	8.5	1.80	0.90	1.15	0.02	32	BF4R/L-2060-BA-R02	●	●	●	●	●
		2.5	7.5	10	8.5	2.25	1.13	1.30	0.02	32	BF4R/L-2575-BA-R02	●	●	●	●	●
		3.0	9.0	15	13.5	2.70	1.35	1.35	0.05	37	BF4R/L-3090-BA-R05	●	●	●	●	●
3.5	10.5	15	13.5	3.15	1.58	1.60	0.05	37	BF4R/L-35105-BA-R05	●	●	●	●	●		



D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	R	L3	Art. N°	R		L	
											ZTAF P M N S	ZTAXF P M N S	ZN P M N S	ZN P M N S
4	BH4... BHS4... BHY4... BHK4...	0.5	1.5	10	8.5	0.45	0.25	0	32	BB4R/L-0515-BAX	•	•	•	•
		0.6	1.8	10	8.5	0.54	0.30	0	32	BB4R/L-0618-BAX	•	•	•	•
		0.7	2.1	10	8.5	0.63	0.35	0	32	BB4R/L-0721-BAX	•	•	•	•
		0.8	2.4	10	8.5	0.72	0.40	0	32	BB4R/L-0824-BAX	•	•	•	•
		0.9	2.7	10	8.5	0.81	0.45	0	32	BB4R/L-0927-BAX	•	•	•	•
		1.0	3.0	10	8.5	0.90	0.60	0.02	32	BB4R/L-1030-BAX-R02	•	•	•	•
			5.0	10	8.5	0.90	0.60	0.02	32	BB4R/L-1050-BAX-R02	•	•	•	•
		1.5	4.5	10	8.5	1.35	0.65	0.02	32	BB4R/L-1545-BAX-R02	•	•	•	•
			7.5	10	8.5	1.35	0.65	0.02	32	BB4R/L-1575-BAX-R02	•	•	•	•
		2.0	6.0	10	8.5	1.80	1.15	0.02	32	BB4R/L-2060-BAX-R02	•	•	•	•
			10.0	15	13.5	1.80	1.15	0.02	37	BB4R/L-20100-BAX-R02	•	•	•	•
		2.5	7.5	10	8.5	2.25	1.30	0.05	32	BB4R/L-2575-BAX-R05	•	•	•	•
			12.5	15	13.5	2.25	1.30	0.05	37	BB4R/L-25125-BAX-R05	•	•	•	•
		3.0	9.0	15	13.5	2.70	1.35	0.05	37	BB4R/L-3090-BAX-R05	•	•	•	•
			15.0	20	18.5	2.70	1.35	0.05	42	BB4R/L-30150-BAX-R05	•	•	•	•
		3.5	10.5	15	13.5	3.15	1.60	0.05	37	BB4R/L-35105-BAX-R05	•	•	•	•
			17.5	20	18.5	3.15	1.60	0.05	42	BB4R/L-35175-BAX-R05	•	•	•	•

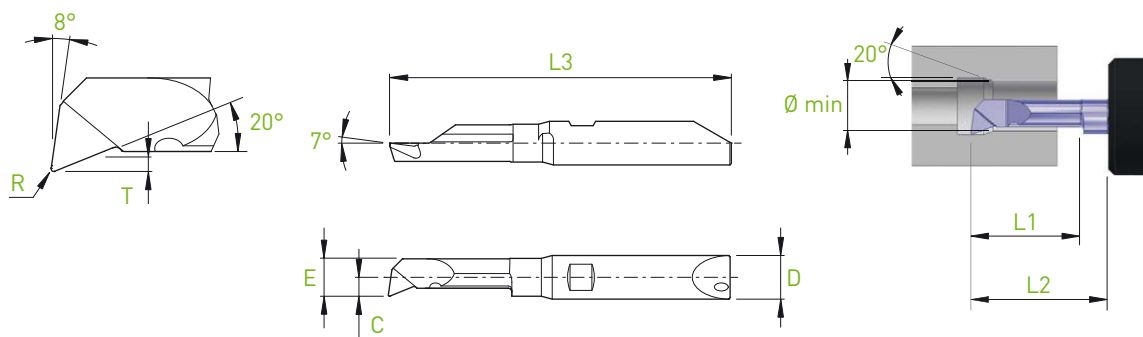
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	3.80	2.20	0.05	47	BB6R/L-40120-BAX-R05	•	•	•	•
			20.0	30	28.5	3.80	2.20	0.05	57	BB6R/L-40200-BAX-R05	•	•	•	•
		4.5	13.5	20	18.5	4.28	2.30	0.05	47	BB6R/L-45135-BAX-R05	•	•	•	•
			22.5	30	28.5	4.28	2.30	0.05	57	BB6R/L-45225-BAX-R05	•	•	•	•
		5.0	15.0	20	18.5	4.75	2.40	0.05	47	BB6R/L-50150-BAX-R05	•	•	•	•
			25.0	30	28.5	4.75	2.40	0.05	57	BB6R/L-50250-BAX-R05	•	•	•	•
		5.5	16.5	20	18.5	5.15	2.60	0.05	47	BB6R/L-55165-BAX-R05	•	•	•	•
			27.5	30	28.5	5.15	2.60	0.05	57	BB6R/L-55275-BAX-R05	•	•	•	•

Alésage
 Ausbohren
 Boring

BF4... / BF6...
BAX


											R			L	
				L2 BH4... BHY4...	L2 BHS4... BHK4...						<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>	<div><div>P</div><div>M</div><div>N</div><div>S</div></div>	<div><div>P</div><div></div><div>N</div><div>S</div></div>
D h5	Holder	Ø min	L1			E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	0.5	1.5	10	8.5	0.45	0.25	0	32	BF4R/L-0515-BAX	●	●	●	●	●
		0.6	1.8	10	8.5	0.54	0.30	0	32	BF4R/L-0618-BAX	●	●	●	●	●
		0.7	2.1	10	8.5	0.63	0.35	0	32	BF4R/L-0721-BAX	●	●	●	●	●
		0.8	2.4	10	8.5	0.72	0.40	0	32	BF4R/L-0824-BAX	●	●	●	●	●
		0.9	2.7	10	8.5	0.81	0.45	0	32	BF4R/L-0927-BAX	●	●	●	●	●
		1.0	3.0	10	8.5	0.90	0.60	0.02	32	BF4R/L-1030-BAX-R02	●	●	●	●	●
			5.0	10	8.5	0.90	0.60	0.02	32	BF4R/L-1050-BAX-R02	●	●	●	●	●
		1.5	4.5	10	8.5	1.35	0.65	0.02	32	BF4R/L-1545-BAX-R02	●	●	●	●	●
			7.5	10	8.5	1.35	0.65	0.02	32	BF4R/L-1575-BAX-R02	●	●	●	●	●
		2.0	6.0	10	8.5	1.80	1.15	0.02	32	BF4R/L-2060-BAX-R02	●	●	●	●	●
			10.0	15	13.5	1.80	1.15	0.02	37	BF4R/L-20100-BAX-R02	●	●	●	●	●
		2.5	7.5	10	8.5	2.25	1.30	0.05	32	BF4R/L-2575-BAX-R05	●	●	●	●	●
			12.5	15	13.5	2.25	1.30	0.05	37	BF4R/L-25125-BAX-R05	●	●	●	●	●
		3.0	9.0	15	13.5	2.70	1.35	0.05	37	BF4R/L-3090-BAX-R05	●	●	●	●	●
			15.0	20	18.5	2.70	1.35	0.05	42	BF4R/L-30150-BAX-R05	●	●	●	●	●
		3.5	10.5	15	13.5	3.15	1.60	0.05	37	BF4R/L-35105-BAX-R05	●	●	●	●	●
			17.5	20	18.5	3.15	1.60	0.05	42	BF4R/L-35175-BAX-R05	●	●	●	●	●

D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	R	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	3.80	2.20	0.05	47	BF6R/L-40120-BAX-R05	•	•	•	•	•
			20.0	30	28.5	3.80	2.20	0.05	57	BF6R/L-40200-BAX-R05	•	•	•	•	•
		4.5	13.5	20	18.5	4.28	2.30	0.05	47	BF6R/L-45135-BAX-R05	•	•	•	•	•
			22.5	30	28.5	4.28	2.30	0.05	57	BF6R/L-45225-BAX-R05	•	•	•	•	•
		5.0	15.0	20	18.5	4.75	2.40	0.05	47	BF6R/L-50150-BAX-R05	•	•	•	•	•
			25.0	30	28.5	4.75	2.40	0.05	57	BF6R/L-50250-BAX-R05	•	•	•	•	•
		5.5	16.5	20	18.5	5.15	2.60	0.05	47	BF6R/L-55165-BAX-R05	•	•	•	•	•
			27.5	30	28.5	5.15	2.60	0.05	57	BF6R/L-55275-BAX-R05	•	•	•	•	•



D _{h5}	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	R		L	
												PTMNS	PTMNS	PTMNS	PTMNS
4	BH4... BHS4... BHY4... BHK4...	1.0	3.0	10	8.5	0.15	0.90	0.70	0.05	32	BB4R/L-1030-BCX-R05	●	●	●	●
			5.0	10	8.5	0.15	0.90	0.70	0.05	32	BB4R/L-1050-BCX-R05	●	●	●	●
		1.5	4.5	10	8.5	0.23	1.35	0.75	0.05	32	BB4R/L-1545-BCX-R05	●	●	●	●
			7.5	10	8.5	0.23	1.35	0.75	0.05	32	BB4R/L-1575-BCX-R05	●	●	●	●
		2.0	6.0	10	8.5	0.30	1.80	1.15	0.05	32	BB4R/L-2060-BCX-R05	●	●	●	●
			10.0	15	13.5	0.30	1.80	1.15	0.05	37	BB4R/L-20100-BCX-R05	●	●	●	●
		2.5	7.5	10	8.5	0.38	2.25	1.30	0.10	32	BB4R/L-2575-BCX-R10	●	●	●	●
			12.5	15	13.5	0.38	2.25	1.30	0.10	37	BB4R/L-25125-BCX-R10	●	●	●	●
		3.0	9.0	15	13.5	0.45	2.70	1.35	0.10	37	BB4R/L-3090-BCX-R10	●	●	●	●
			15.0	20	18.5	0.45	2.70	1.35	0.10	42	BB4R/L-30150-BCX-R10	●	●	●	●
		3.5	10.5	15	13.5	0.53	3.15	1.60	0.10	37	BB4R/L-35105-BCX-R10	●	●	●	●
			17.5	20	18.5	0.53	3.15	1.60	0.10	42	BB4R/L-35175-BCX-R10	●	●	●	●
D _{h5}	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	ZTAF		ZTAF	
												ZTAF	ZTAF	ZTAF	ZTAF
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.60	3.80	2.20	0.15	47	BB6R/L-40120-BCX-R15	●	●	●	●
			20.0	30	28.5	0.60	3.80	2.20	0.15	57	BB6R/L-40200-BCX-R15	●	●	●	●
		4.5	13.5	20	18.5	0.68	4.28	2.30	0.15	47	BB6R/L-45135-BCX-R15	●	●	●	●
			22.5	30	28.5	0.68	4.28	2.30	0.15	57	BB6R/L-45225-BCX-R15	●	●	●	●
		5.0	15.0	20	18.5	0.75	4.75	2.40	0.15	47	BB6R/L-50150-BCX-R15	●	●	●	●
			25.0	30	28.5	0.75	4.75	2.40	0.15	57	BB6R/L-50250-BCX-R15	●	●	●	●
		5.5	16.5	20	18.5	0.83	5.15	2.60	0.15	47	BB6R/L-55165-BCX-R15	●	●	●	●
			27.5	30	28.5	0.83	5.15	2.60	0.15	57	BB6R/L-55275-BCX-R15	●	●	●	●

Alésage-copiage

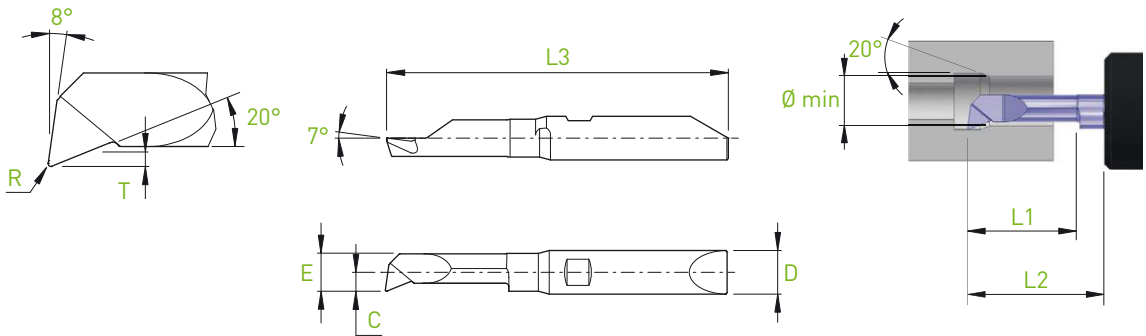
Ausbohren-kopieren

Boring-chambering

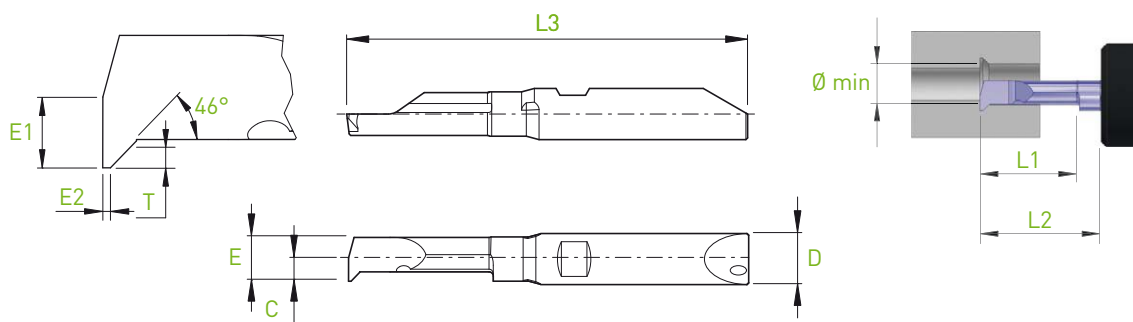


BF4... / BF6...

BCX



D _{h5}	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	R		L	
												P	P	P	P
4	BH4... BHS4... BHY4... BHK4...	1.0	3.0	10	8.5	0.15	0.90	0.70	0.05	32	BF4R/L-1030-BCX-R05	●	●	●	●
			5.0	10	8.5	0.15	0.90	0.70	0.05	32	BF4R/L-1050-BCX-R05	●	●	●	●
		1.5	4.5	10	8.5	0.23	1.35	0.75	0.05	32	BF4R/L-1545-BCX-R05	●	●	●	●
			7.5	10	8.5	0.23	1.35	0.75	0.05	32	BF4R/L-1575-BCX-R05	●	●	●	●
		2.0	6.0	10	8.5	0.30	1.80	1.15	0.05	32	BF4R/L-2060-BCX-R05	●	●	●	●
			10.0	15	13.5	0.30	1.80	1.15	0.05	37	BF4R/L-20100-BCX-R05	●	●	●	●
		2.5	7.5	10	8.5	0.38	2.25	1.30	0.10	32	BF4R/L-2575-BCX-R10	●	●	●	●
			12.5	15	13.5	0.38	2.25	1.30	0.10	37	BF4R/L-25125-BCX-R10	●	●	●	●
		3.0	9.0	15	13.5	0.45	2.70	1.35	0.10	37	BF4R/L-3090-BCX-R10	●	●	●	●
			15.0	20	18.5	0.45	2.70	1.35	0.10	42	BF4R/L-30150-BCX-R10	●	●	●	●
		3.5	10.5	15	13.5	0.53	3.15	1.60	0.10	37	BF4R/L-35105-BCX-R10	●	●	●	●
			17.5	20	18.5	0.53	3.15	1.60	0.10	42	BF4R/L-35175-BCX-R10	●	●	●	●
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.60	3.80	2.20	0.15	47	BF6R/L-40120-BCX-R15	●	●	●	●
			20.0	30	28.5	0.60	3.80	2.20	0.15	57	BF6R/L-40200-BCX-R15	●	●	●	●
		4.5	13.5	20	18.5	0.68	4.28	2.30	0.15	47	BF6R/L-45135-BCX-R15	●	●	●	●
			22.5	30	28.5	0.68	4.28	2.30	0.15	57	BF6R/L-45225-BCX-R15	●	●	●	●
		5.0	15.0	20	18.5	0.75	4.75	2.40	0.15	47	BF6R/L-50150-BCX-R15	●	●	●	●
			25.0	30	28.5	0.75	4.75	2.40	0.15	57	BF6R/L-50250-BCX-R15	●	●	●	●
		5.5	16.5	20	18.5	0.83	5.15	2.60	0.15	47	BF6R/L-55165-BCX-R15	●	●	●	●
			27.5	30	28.5	0.83	5.15	2.60	0.15	57	BF6R/L-55275-BCX-R15	●	●	●	●
D _{h5}	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	R		L	
												ZTAF	ZTAXF	ZN	ZTAF



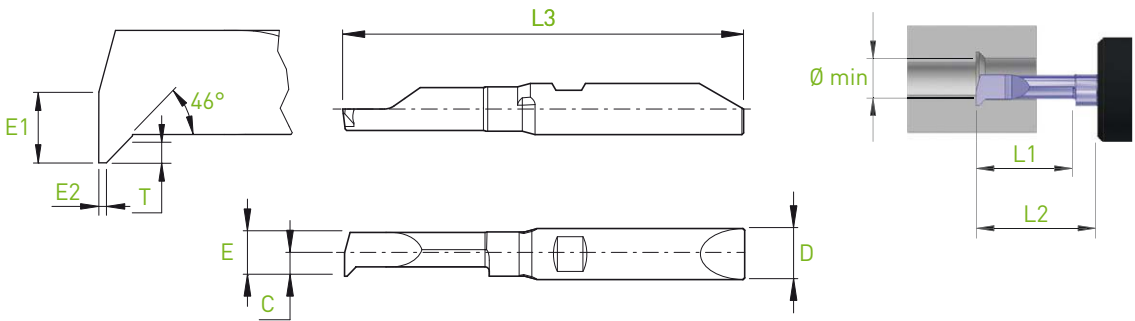
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													P M N S	P M N S	P M N S	P M N S
4	BH4... BHS4... BHY4... BHK4...	0.3	0.6	10	8.5	0.05	0.27	0.13	0.15	0.03	32	BB4R/L-0306-C45-E03	•	•	•	•
		0.4	0.8	10	8.5	0.07	0.36	0.18	0.20	0.03	32	BB4R/L-0408-C45-E03	•	•	•	•
		0.5	1.0	10	8.5	0.08	0.45	0.22	0.25	0.03	32	BB4R/L-0510-C45-E03	•	•	•	•
		0.6	1.2	10	8.5	0.10	0.54	0.27	0.30	0.03	32	BB4R/L-0612-C45-E03	•	•	•	•
		0.7	1.2	10	8.5	0.12	0.63	0.32	0.35	0.03	32	BB4R/L-0714-C45-E03	•	•	•	•
		0.8	1.6	10	8.5	0.14	0.72	0.36	0.40	0.05	32	BB4R/L-0816-C45-E05	•	•	•	•
		0.9	1.8	10	8.5	0.15	0.81	0.41	0.45	0.05	32	BB4R/L-0918-C45-E05	•	•	•	•
		1.0	3.0	10	8.5	0.17	0.90	0.45	0.70	0.10	32	BB4R/L-1030-C45-E10	•	•	•	•
		1.2	3.6	10	8.5	0.20	1.08	0.54	0.70	0.10	32	BB4R/L-1236-C45-E10	•	•	•	•
		1.5	4.5	10	8.5	0.25	1.35	0.67	0.75	0.10	32	BB4R/L-1545-C45-E10	•	•	•	•
		2.0	6.0	10	8.5	0.34	1.80	0.90	1.15	0.20	32	BB4R/L-2060-C45-E20	•	•	•	•
		2.5	7.5	10	8.5	0.43	2.25	1.13	1.30	0.20	32	BB4R/L-2575-C45-E20	•	•	•	•
6	BH6... BHS6... BHY6... BHK6...	3.0	9.0	15	13.5	0.51	2.70	1.35	1.35	0.30	37	BB4R/L-3090-C45-E30	•	•	•	•
		3.5	10.5	15	13.5	0.60	3.15	1.58	1.60	0.30	37	BB4R/L-35105-C45-E30	•	•	•	•
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	E1	C	E2	L3	Art. N°	ZTAF		ZTAF	
													ZTAF	ZTAXF	ZN	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.68	3.80	1.90	2.30	0.40	47	BB6R/L-40120-C45-E40	•	•	•	•
		5.0	15.0	20	18.5	0.85	4.75	2.37	2.50	0.50	47	BB6R/L-50150-C45-E50	•	•	•	•

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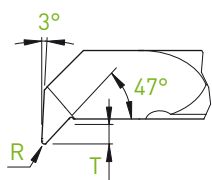
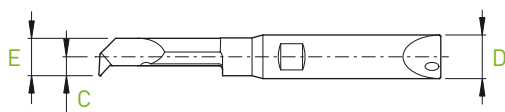
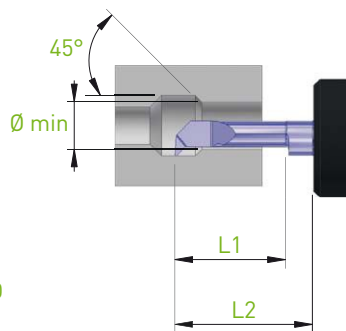


BF4... / BF6...

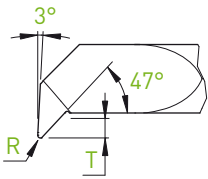
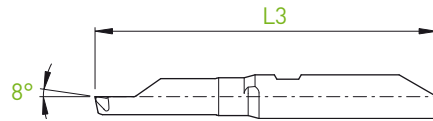
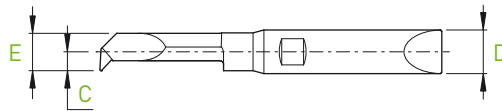
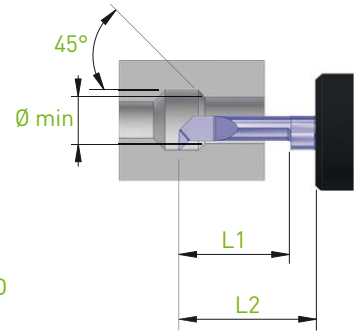
C45



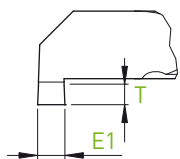
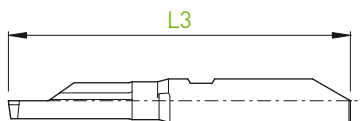
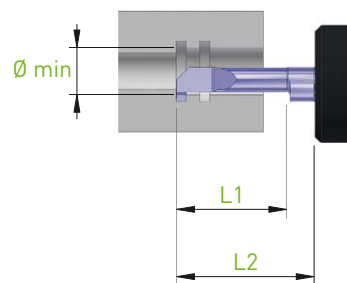
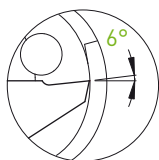
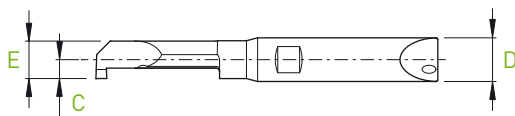
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	E1	C	E2	L3	Art. N°	R		L	
													P	P	P	P
													M	M	M	M
4	BH4... BHS4... BHY4... BHK4...	0.3	0.6	10	8.5	0.05	0.27	0.13	0.15	0.03	32	BF4R/L-0306-C45-E03	ZTAF	ZTAXF	ZN	ZTAF
		0.4	0.8	10	8.5	0.07	0.36	0.18	0.20	0.03	32	BF4R/L-0408-C45-E03	•	•	•	•
		0.5	1.0	10	8.5	0.08	0.45	0.22	0.25	0.03	32	BF4R/L-0510-C45-E03	•	•	•	•
		0.6	1.2	10	8.5	0.10	0.54	0.27	0.30	0.03	32	BF4R/L-0612-C45-E03	•	•	•	•
		0.7	1.4	10	8.5	0.12	0.63	0.32	0.35	0.03	32	BF4R/L-0714-C45-E03	•	•	•	•
		0.8	1.6	10	8.5	0.14	0.72	0.36	0.40	0.05	32	BF4R/L-0816-C45-E05	•	•	•	•
		0.9	1.8	10	8.5	0.15	0.81	0.41	0.45	0.05	32	BF4R/L-0918-C45-E05	•	•	•	•
		1.0	3.0	10	8.5	0.17	0.90	0.45	0.70	0.10	32	BF4R/L-1030-C45-E10	•	•	•	•
		1.2	3.6	10	8.5	0.20	1.08	0.54	0.70	0.10	32	BF4R/L-1236-C45-E10	•	•	•	•
		1.5	4.5	10	8.5	0.25	1.35	0.67	0.75	0.10	32	BF4R/L-1545-C45-E10	•	•	•	•
		2.0	6.0	10	8.5	0.34	1.80	0.90	1.15	0.20	32	BF4R/L-2060-C45-E20	•	•	•	•
		2.5	7.5	10	8.5	0.43	2.25	1.13	1.30	0.20	32	BF4R/L-2575-C45-E20	•	•	•	•
		3.0	9.0	15	13.5	0.51	2.70	1.35	1.35	0.30	37	BF4R/L-3090-C45-E30	•	•	•	•
		3.5	10.5	15	13.5	0.60	3.15	1.58	1.60	0.30	37	BF4R/L-35105-C45-E30	•	•	•	•
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.68	3.80	1.90	2.30	0.40	47	BF6R/L-40120-C45-E40	ZTAF	ZTAXF	ZN	ZTAF
		5.0	15.0	20	18.5	0.85	4.75	2.37	2.50	0.50	47	BF6R/L-50150-C45-E50	•	•	•	•



D _{h5}	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	R		L	
												PTMNS	PTMNS	PTMNS	PTMNS
4	BH4... BHS4... BHY4... BHK4...	2.5	7.5	10	8.5	0.50	2.25	1.35	0.10	32	BB4R/L-2575-C45X-R10	●	●	●	●
			12.5	15	13.5	0.50	2.25	1.35	0.10	37	BB4R/L-25125-C45X-R10	●	●	●	●
		3.0	9.0	15	13.5	0.60	2.70	1.45	0.10	37	BB4R/L-3090-C45X-R10	●	●	●	●
			15.0	20	18.5	0.60	2.70	1.45	0.10	42	BB4R/L-30150-C45X-R10	●	●	●	●
		3.5	10.5	15	13.5	0.70	3.15	1.60	0.10	37	BB4R/L-35105-C45X-R10	●	●	●	●
			17.5	20	18.5	0.70	3.15	1.60	0.10	42	BB4R/L-35175-C45X-R10	●	●	●	●
D _{h5}	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	R		L	
												ZTAF	ZTAXF	ZN	ZTAF
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.80	3.80	2.30	0.15	47	BB6R/L-40120-C45X-R15	●	●	●	●
			20.0	30	28.5	0.80	3.80	2.30	0.15	57	BB6R/L-40200-C45X-R15	●	●	●	●
		4.5	13.5	20	18.5	0.90	4.28	2.40	0.15	47	BB6R/L-45135-C45X-R15	●	●	●	●
			22.5	30	28.5	0.90	4.28	2.40	0.15	57	BB6R/L-45225-C45X-R15	●	●	●	●
		5.0	15.0	20	18.5	1.00	4.75	2.50	0.15	47	BB6R/L-50150-C45X-R15	●	●	●	●
			25.0	30	28.5	1.00	4.75	2.50	0.15	57	BB6R/L-50250-C45X-R15	●	●	●	●
		5.5	16.5	20	18.5	1.10	5.15	2.60	0.15	47	BB6R/L-55165-C45X-R15	●	●	●	●
			27.5	30	28.5	1.10	5.15	2.60	0.15	57	BB6R/L-55275-C45X-R15	●	●	●	●



D _{h5}	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	T	E	C	R	L3	Art. N°	R		L	
												PTMNS	PTMNS	PTMNS	PTMNS
4	BH4... BHS4... BHY4... BHK4...	2.5	7.5	10	8.5	0.50	2.25	1.35	0.10	32	BF4R/L-2575-C45X-R10	•	•	•	•
			12.5	15	13.5	0.50	2.25	1.35	0.10	37	BF4R/L-25125-C45X-R10	•	•	•	•
		3.0	9.0	15	13.5	0.60	2.70	1.45	0.10	37	BF4R/L-3090-C45X-R10	•	•	•	•
			15.0	20	18.5	0.60	2.70	1.45	0.10	42	BF4R/L-30150-C45X-R10	•	•	•	•
		3.5	10.5	15	13.5	0.70	3.15	1.60	0.10	37	BF4R/L-35105-C45X-R10	•	•	•	•
			17.5	20	18.5	0.70	3.15	1.60	0.10	42	BF4R/L-35175-C45X-R10	•	•	•	•
D _{h5}	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	R	L3	Art. N°	R		L	
												PTMNS	PTMNS	PTMNS	PTMNS
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	0.80	3.80	2.30	0.15	47	BF6R/L-40120-C45X-R15	•	•	•	•
			20.0	30	28.5	0.80	3.80	2.30	0.15	57	BF6R/L-40200-C45X-R15	•	•	•	•
		4.5	13.5	20	18.5	0.90	4.28	2.40	0.15	47	BF6R/L-45135-C45X-R15	•	•	•	•
			22.5	30	28.5	0.90	4.28	2.40	0.15	57	BF6R/L-45225-C45X-R15	•	•	•	•
		5.0	15.0	20	18.5	1.00	4.75	2.50	0.15	47	BF6R/L-50150-C45X-R15	•	•	•	•
			25.0	30	28.5	1.00	4.75	2.50	0.15	57	BF6R/L-50250-C45X-R15	•	•	•	•
		5.5	16.5	20	18.5	1.10	5.15	2.60	0.15	47	BF6R/L-55165-C45X-R15	•	•	•	•
			27.5	30	28.5	1.10	5.15	2.60	0.15	57	BF6R/L-55275-C45X-R15	•	•	•	•

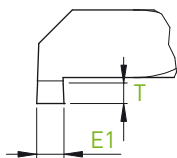
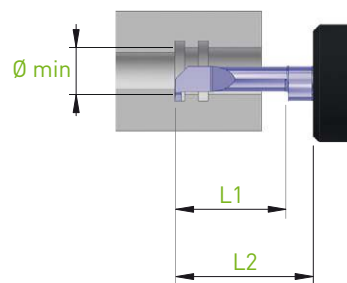
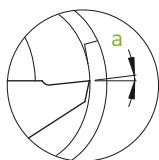
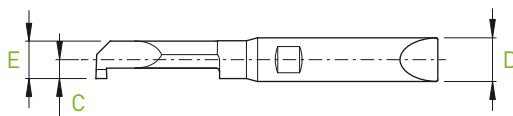


D _{h5}	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	C	L3	Art. N°	R		L	
												P M N S	P M N S	P M N S	P M N S
4	BH4... BHS4... BHY4... BHK4...	3.0	9.0	15	13.5	0.50	0.60	2.70	1.45	37	BB4R/L-3090-G050X	•	•	•	•
			15.0	20	18.5	0.50	0.60	2.70	1.45	42	BB4R/L-30150-G050X	•	•	•	•
		3.5	10.5	15	13.5	0.75	0.70	3.15	1.60	37	BB4R/L-35105-G075X	•	•	•	•
			17.5	20	18.5	0.75	0.70	3.15	1.60	42	BB4R/L-35175-G075X	•	•	•	•
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	1.00	0.80	3.80	2.20	47	BB6R/L-40120-G100X	•	•	•	•
			20.0	30	28.5	1.00	0.80	3.80	2.20	57	BB6R/L-40200-G100X	•	•	•	•
			13.5	20	18.5	1.00	0.90	4.28	2.40	47	BB6R/L-45135-G100X	•	•	•	•
						1.50					BB6R/L-45135-G150X	•	•	•	•
		4.5	22.5	30	28.5	1.00	0.90	4.28	2.40	57	BB6R/L-45225-G100X	•	•	•	•
						1.50					BB6R/L-45225-G150X	•	•	•	•
			15.0	20	18.5	1.00	1.00	4.75	2.50	47	BB6R/L-50150-G100X	•	•	•	•
						1.50					BB6R/L-50150-G150X	•	•	•	•
		5.0	25.0	30	28.5	1.00	1.00	4.75	2.50	57	BB6R/L-50250-G100X	•	•	•	•
						1.50					BB6R/L-50250-G150X	•	•	•	•
			16.5	20	18.5	1.00	1.10	5.15	2.60	47	BB6R/L-55165-G100X	•	•	•	•
						1.50					BB6R/L-55165-G150X	•	•	•	•
						2.00					BB6R/L-55165-G200X	•	•	•	•
						1.00					BB6R/L-55275-G100X	•	•	•	•
		5.5	27.5	30	28.5	1.50	1.10	5.15	2.60	57	BB6R/L-55275-G150X	•	•	•	•
						2.00					BB6R/L-55275-G200X	•	•	•	•

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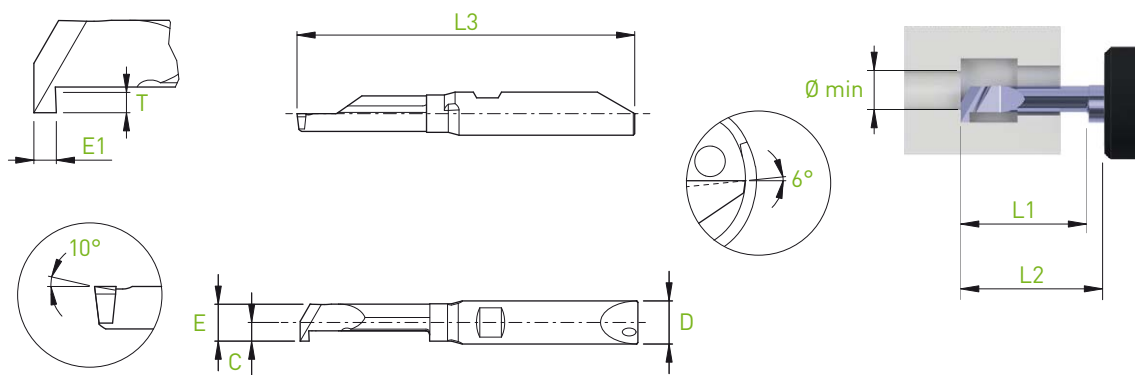

BF4... / BF6...

GX

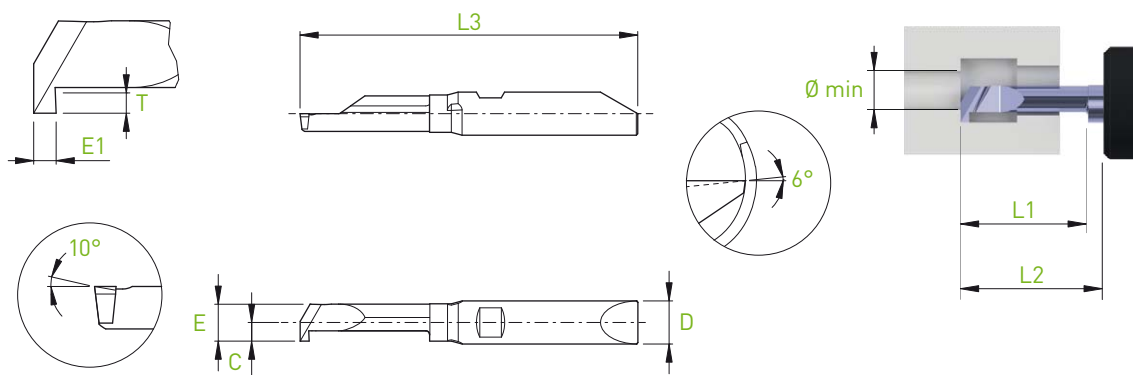


D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	a	C	L3	Art. N°	R		L	
													P M N S	P M N S	P M N S	P M N S
4	BH4... BHS4... BHY4... BHK4...	0.5	1.0	10	8.5	0.15	0.10	0.45	3°	0.25	32	BF4R/L-0510-G015X	•	•	•	•
		0.7	1.4	10	8.5	0.20	0.14	0.63		0.35	32	BF4R/L-0714-G020X	•	•	•	•
		1.0	2.0	10	8.5	0.30	0.20	0.90		0.60	32	BF4R/L-1020-G030X	•	•	•	•
		1.5	3.0	10	8.5	0.40	0.30	1.35	6°	0.80	32	BF4R/L-1530-G040X	•	•	•	•
		2.0	6.0	10	8.5	0.40	0.40	1.80		1.15	32	BF4R/L-2060-G040X	•	•	•	•
		2.5	7.5	10	8.5	0.50	0.50	2.25		1.15	32	BF4R/L-2575-G050X	•	•	•	•
		3.0	9.0	15	13.5	0.50	0.60	2.70		1.45	37	BF4R/L-3090-G050X	•	•	•	•
			15.0	20	18.5	0.50	0.60	2.70		1.45	42	BF4R/L-30150-G050X	•	•	•	•
		3.5	10.5	15	13.5	0.75	0.70	3.15		1.60	37	BF4R/L-35105-G075X	•	•	•	•
			17.5	20	18.5	0.75	0.70	3.15		1.60	42	BF4R/L-35175-G075X	•	•	•	•

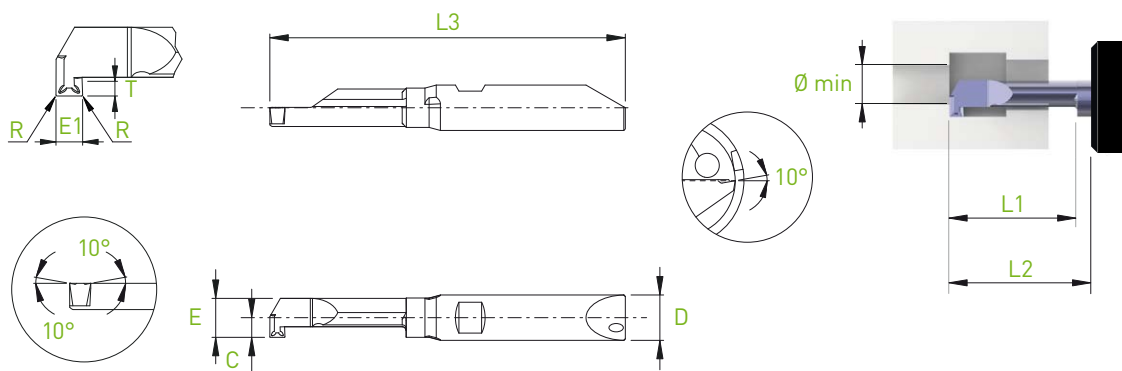
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	a	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	12.0	20	18.5	1.00	0.80	3.80	6°	2.20	47	BF6R/L-40120-G100X	•	•	•	•	•
			20.0	30	28.5	1.00	0.80	3.80		2.20	57	BF6R/L-40200-G100X	•	•	•	•	•
		4.5	13.5	20	18.5	1.00	0.90	4.28		2.40	47	BF6R/L-45135-G100X	•	•	•	•	•
						1.50						BF6R/L-45135-G150X	•	•	•	•	•
			22.5	30	28.5	1.00	0.90	4.28		2.40	57	BF6R/L-45225-G100X	•	•	•	•	•
						1.50						BF6R/L-45225-G150X	•	•	•	•	•
		5.0	15.0	20	18.5	1.00	1.00	4.75		2.50	47	BF6R/L-50150-G100X	•	•	•	•	•
						1.50						BF6R/L-50150-G150X	•	•	•	•	•
			25.0	30	28.5	1.00	1.00	4.75		2.50	57	BF6R/L-50250-G100X	•	•	•	•	•
						1.50						BF6R/L-50250-G150X	•	•	•	•	•
		5.5	16.5	20	18.5	1.50	1.10	5.15		2.60	47	BF6R/L-55165-G100X	•	•	•	•	•
						2.00						BF6R/L-55165-G150X	•	•	•	•	•
						1.00						BF6R/L-55275-G100X	•	•	•	•	•
			27.5	30	28.5	1.50	1.10	5.15		2.60	57	BF6R/L-55275-G150X	•	•	•	•	•
						2.00						BF6R/L-55275-G200X	•	•	•	•	•



D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	C	L3	Art. N°	R		L	
												P	P	P	P
4	BH4... BHS4... BHY4... BHK4...	3.0	9.0	15	13.5	1.00	0.60	2.7	1.45	37	BB4R/L-3090-GT100X	•	•	•	•
			15.0	20	18.5	1.00	0.60	2.7	1.45	42	BB4R/L-30150-GT100X	•	•	•	•
		3.5	10.5	15	13.5	1.00	0.70	3.15	1.6	37	BB4R/L-35105-GT100X	•	•	•	•
			17.5	20	18.5	1.00	0.70	3.15	1.6	42	BB4R/L-35175-GT100X	•	•	•	•
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	C	L3	Art. N°	R		L	
												ZTAF	ZTAXF	ZN	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	14.0	20	18.5	1.25	0.80	3.8	2.2	47	BB6R/L-40140-GT125X	•	•	•	•
			22.0	30	28.5	1.25	0.80	3.8	2.2	57	BB6R/L-40220-GT125X	•	•	•	•
		4.5	16.0	20	18.5	1.25	0.90	4.28	2.4	47	BB6R/L-45160-GT125X	•	•	•	•
			25.0	30	28.5	1.25	0.90	4.28	2.4	57	BB6R/L-45250-GT125X	•	•	•	•
		5.0	17.5	20	18.5	1.25	1.00	4.75	2.5	47	BB6R/L-50175-GT125X	•	•	•	•
			27.5	30	28.5	1.25	1.00	4.75	2.5	57	BB6R/L-50275-GT125X	•	•	•	•
		5.5	17.5	20	18.5	1.25	1.10	5.15	2.6	47	BB6R/L-55175-GT125X	•	•	•	•
			27.5	30	28.5	1.25	1.10	5.15	2.6	57	BB6R/L-55275-GT125X	•	•	•	•

Fonçage-tournageEinstechen und drehen
Grooving and turning**BF4... / BF6...****GTx**

												R	L			
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E1	T	E	C	L3	Art. N°	ZTAF P M N S	ZTAXF P M N S	ZN P M N S	ZTAF P M N S	ZN P M N S
4	BH4... BHS4... BHY4... BHK4...	3.0	9.0	15	13.5	1.00	0.60	2.7	1.45	37	BF4R/L-3090-GT100X	●	●	●	●	●
			15.0	20	18.5	1.00	0.60	2.7	1.45	42	BF4R/L-30150-GT100X	●	●	●	●	●
		3.5	10.5	15	13.5	1.00	0.70	3.15	1.6	37	BF4R/L-35105-GT100X	●	●	●	●	●
			17.5	20	18.5	1.00	0.70	3.15	1.6	42	BF4R/L-35175-GT100X	●	●	●	●	●
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	C	L3	Art. N°	ZTAF	ZTAXF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.0	14.0	20	18.5	1.25	0.80	3.8	2.2	47	BF6R/L-40140-GT125X	●	●	●	●	●
			22.0	30	28.5	1.25	0.80	3.8	2.2	57	BF6R/L-40220-GT125X	●	●	●	●	●
		4.5	16.0	20	18.5	1.25	0.90	4.28	2.4	47	BF6R/L-45160-GT125X	●	●	●	●	●
			25.0	30	28.5	1.25	0.90	4.28	2.4	57	BF6R/L-45250-GT125X	●	●	●	●	●
		5.0	17.5	20	18.5	1.25	1.00	4.75	2.5	47	BF6R/L-50175-GT125X	●	●	●	●	●
			27.5	30	28.5	1.25	1.00	4.75	2.5	57	BF6R/L-50275-GT125X	●	●	●	●	●
		5.5	17.5	20	18.5	1.25	1.10	5.15	2.6	47	BF6R/L-55175-GT125X	●	●	●	●	●
			27.5	30	28.5	1.25	1.10	5.15	2.6	57	BF6R/L-55275-GT125X	●	●	●	●	●



D	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E1	T	E	C	R	L3	Art. N°	R		
													PTAF	PTAF	PTAF
6	BH6... BHS6... BHY6... BHK6...	4.0	14.0	20	18.5	1.25	0.80	3.8	2.2	0.08	47	BB6R-40140-GT125ZFX-R08	●	●	●
			22.0	30	28.5	1.25	0.80	3.8	2.2	0.08	57	BB6R-40220-GT125ZFX-R08	●	●	●
		4.5	16.0	20	18.5	1.25	0.90	4.28	2.4	0.08	47	BB6R-45160-GT125ZFX-R08	●	●	●
			25.0	30	28.5	1.25	0.90	4.28	2.4	0.08	57	BB6R-45250-GT125ZFX-R08	●	●	●
		5.0	17.5	20	18.5	1.25	1.00	4.75	2.5	0.08	47	BB6R-50175-GT125ZFX-R08	●	●	●
			17.5	20	18.5	2.00	1.00	4.75	2.5	0.08	47	BB6R-50175-GT200ZFX-R08	●	●	●
			27.5	30	28.5	1.25	1.00	4.75	2.5	0.08	57	BB6R-50275-GT125ZFX-R08	●	●	●
			27.5	30	28.5	2.00	1.00	4.75	2.5	0.08	57	BB6R-50275-GT200ZFX-R08	●	●	●
		5.5	17.5	20	18.5	1.25	1.10	5.15	2.6	0.08	47	BB6R-55175-GT125ZFX-R08	●	●	●
			17.5	20	18.5	2.00	1.10	5.15	2.6	0.08	47	BB6R-55175-GT200ZFX-R08	●	●	●
			27.5	30	28.5	1.25	1.10	5.15	2.6	0.08	57	BB6R-55275-GT125ZFX-R08	●	●	●
			27.5	30	28.5	2.00	1.10	5.15	2.6	0.08	57	BB6R-55275-GT200ZFX-R08	●	●	●

GT-ZFX

Géométrie de coupe innovante avec brise copeaux de dernière génération
 Innovative Schneidgeometrie mit Spanbrecher der neuesten Generation
 Innovative cutting geometry with next-generation chip breaker



Laser geometry

Très bonne maîtrise du copeau pour matières difficiles
 Sehr gute Spankontrolle für schwierige Werkstoffe
 Very efficient chip control for difficult materials



Three-directional

Géométrie tri-directionnelle permettant un usinage optimal aussi bien en fonçage qu'en tournage, avant et arrière

Drei-direktionale Geometrie für eine optimale Bearbeitung sowohl im Senken als auch im Drehen, vorwärts und rückwärts

Three-directional geometry enabling optimal machining in both plunging and turning, forward and reverse

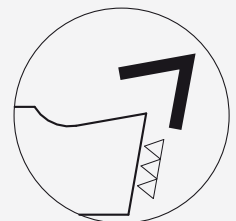


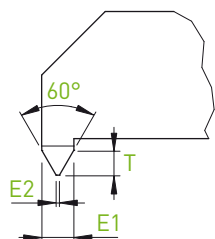
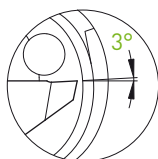
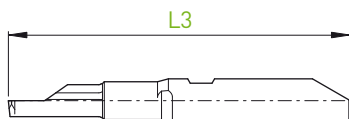
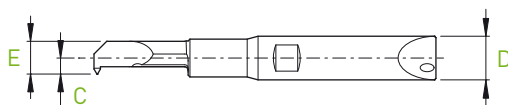
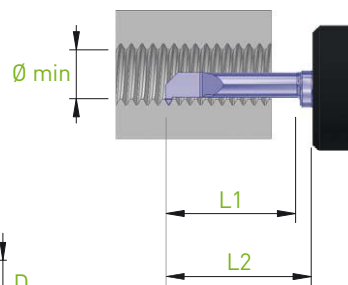
Sharp cutting edge

L'arête de coupe vive assure une finition de haute qualité, réduisant l'effort et l'usure des outils

Die scharfe Schneidkante sorgt für eine hochwertige Oberflächengüte und verringert sowohl die Schnittkräfte als auch den Werkzeugverschleiss

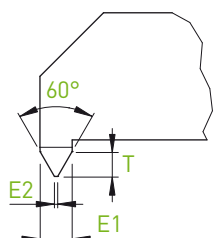
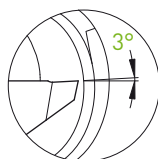
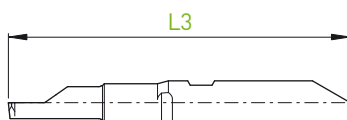
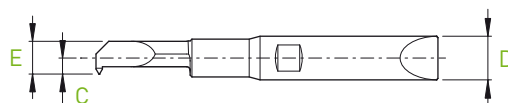
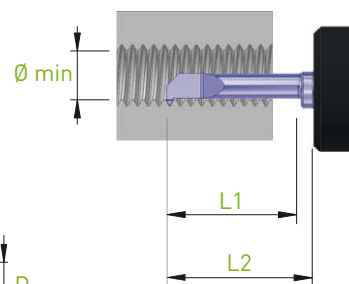
The sharp cutting edge ensures a high-quality finish while reducing cutting forces and tool wear



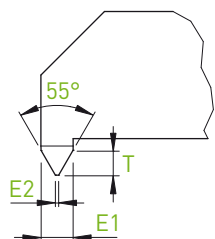
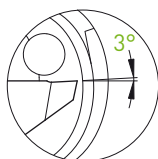
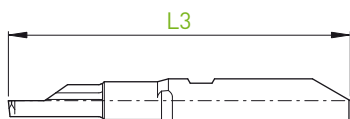
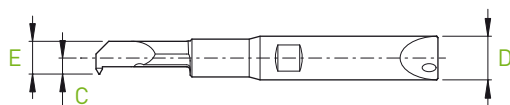
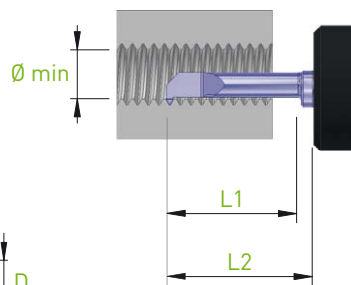


D _{h5}	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	R		L	
															ZTAF	ZN	ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	1.25	3.2	10	8.5	0.20-0.35	80	0.30	0.02	0.25	1.10	0.80	32	BB4R/L-1232-TP60	•	•	•	•
		1.6	4.0	10	8.5	0.25-0.40	72-64	0.35	0.03	0.28	1.41	0.90	32	BB4R/L-1640-TP60	•	•	•	•
		2.5	6.0	10	8.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	32	BB4R/L-2560-TP60	•	•	•	•
			9.0	15	13.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	37	BB4R/L-2590-TP60	•	•	•	•
		3.3	8.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	BB4R/L-3380-TP60	•	•	•	•
			12.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	BB4R/L-33120-TP60	•	•	•	•
D _{h5}	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	R		L	
															ZTAF	ZN	ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.2	10.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	BB6R/L-42100-TP60	•	•	•	•
			15.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	BB6R/L-42150-TP60	•	•	•	•
		5.0	12.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	BB6R/L-50120-TP60	•	•	•	•
			18.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	BB6R/L-50180-TP60	•	•	•	•

Filetage
 Gewindedrehen
 Threading

BF4... / BF6...
TP60


D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	R		L	
															PTAF	ZN	PTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	1.25	3.2	10	8.5	0.20-0.35	80	0.30	0.02	0.25	1.10	0.80	32	BF4R/L-1232-TP60	•	•	•	•
		1.6	4.0	10	8.5	0.25-0.40	72-64	0.35	0.03	0.28	1.41	0.90	32	BF4R/L-1640-TP60	•	•	•	•
		2.5	6.0	10	8.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	32	BF4R/L-2560-TP60	•	•	•	•
			9.0	15	13.5	0.35-0.50	56-48	0.44	0.04	0.34	2.25	1.35	37	BF4R/L-2590-TP60	•	•	•	•
		3.3	8.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	BF4R/L-3380-TP60	•	•	•	•
			12.0	15	13.5	0.50-0.75	40-36	0.62	0.06	0.48	2.97	1.50	37	BF4R/L-33120-TP60	•	•	•	•
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	P (mm)	P (TPI)	E1	E2 (0/-0.01)	T	E	C	L3	Art. N°	R		L	
															PTAF	ZN	PTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	4.2	10.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	BF6R/L-42100-TP60	•	•	•	•
			15.0	20	18.5	0.50-0.80	36-32	0.70	0.06	0.55	3.78	2.10	47	BF6R/L-42150-TP60	•	•	•	•
		5.0	12.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	BF6R/L-50120-TP60	•	•	•	•
			18.0	20	18.5	0.75-1.00	28-24	0.89	0.09	0.69	4.50	2.20	47	BF6R/L-50180-TP60	•	•	•	•



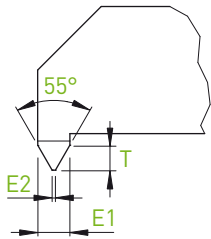
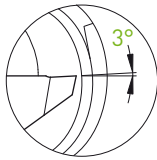
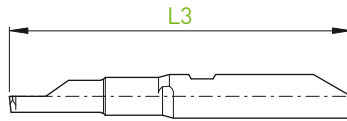
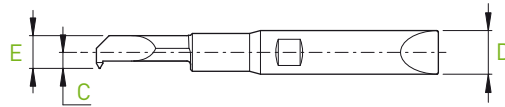
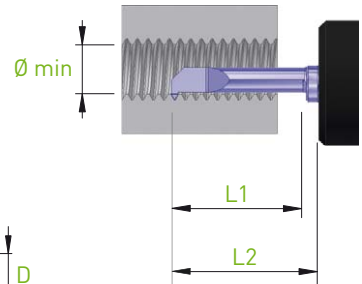
														R		L	
D h5	Holder	Ø min	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	P (TPI)	E1	E2 [0/-0.02]	T	E	C	L3	Art. N°	ZTAF	ZN	ZTAF	ZN
4	BH4...	1.85	4.5	10	8.5	48	0.54	0.09	0.44	1.67	0.97	32	BB4R/L-1845-TP55	•	•	•	•
	BHS4...																
	BHY4...	2.55	6.0	10	8.5	40	0.64	0.10	0.52	2.25	1.35	32	BB4R/L-2560-TP55	•	•	•	•
6	BH6...	3.70	11.0	20	18.5	32-24	1.08	0.13	0.91	3.33	1.83	47	BB6R/L-37110-TP55	•	•	•	•
	BHS6...	5.10	15.0	20	18.5	26-20	1.30	0.16	1.09	4.60	2.05	47	BB6R/L-51150-TP55	•	•	•	•
	BHY6...	5.50	16.0	20	18.5	22-16	1.48	0.19	1.24	5.15	2.60	47	BB6R/L-55160-TP55	•	•	•	•

Filetage

Gewindedrehen
Threading

BF4... / BF6...

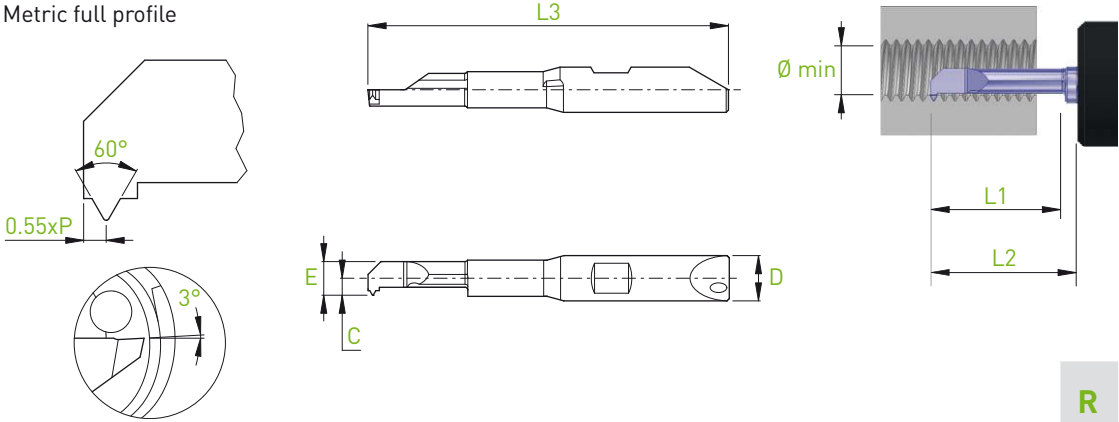
TP55



D _{h5}	Holder	Ø _{min}	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	P (TPI)	E1	E2 [0/-0.02]	T	E	C	L3	Art. N°	R		L	
														ZTAF	ZN	ZTAF	ZN
4	BH4...	1.85	4.5	10	8.5	48	0.54	0.09	0.44	1.67	0.97	32	BF4R/L-1845-TP55	●	●	●	●
	BHS4...																
	BHY4...	2.55	6.0	10	8.5	40	0.64	0.10	0.52	2.25	1.35	32	BF4R/L-2560-TP55	●	●	●	●
6	BH6...	3.70	11.0	20	18.5	32-24	1.08	0.13	0.91	3.33	1.83	47	BF6R/L-37110-TP55	●	●	●	●
	BHS6...	5.10	15.0	20	18.5	26-20	1.30	0.16	1.09	4.60	2.05	47	BF6R/L-51150-TP55	●	●	●	●
	BHY6...	5.50	16.0	20	18.5	22-16	1.48	0.19	1.24	5.15	2.60	47	BF6R/L-55160-TP55	●	●	●	●



Profil complet métrique
Metrisches Vollprofil
Metric full profile





											R		
D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	L3	Art. N°	ZTAF	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>N</div> <div>S</div> </div>
4	BH4... BHS4... BHY4... BHK4...	M3x0.5	2.50	0.50	6.0	10	8.5	2.25	1.35	32	BB4R-2560-TM-0.50	●	●
		M4x0.7	3.30	0.70	8.0	15	13.5	2.97	1.50	37	BB4R-3380-TM-0.70	●	●
D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	L3	Art. N°	ZTAF	<div> <div>P</div> <div>M</div> <div>N</div> <div>S</div> </div> <div> <div>P</div> <div>N</div> <div>S</div> </div>
6	BH6... BHS6... BHY6... BHK6...	M5x0.8	4.20	0.80	10.0	20	18.5	3.78	2.10	47	BB6R-42100-TM-0.80	●	●
		M6x1.0	5.00	1.00	12.0	20	18.5	4.50	2.20	47	BB6R-50120-TM-1.00	●	●

Filetage

Gewindedrehen
Threading

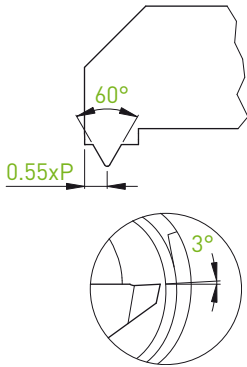
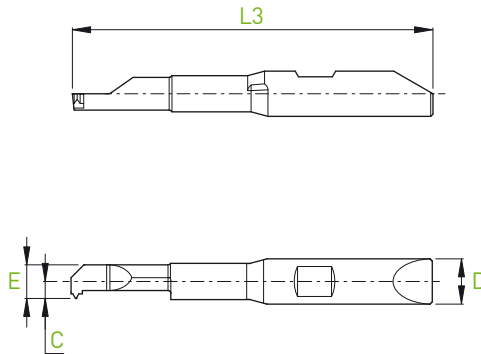
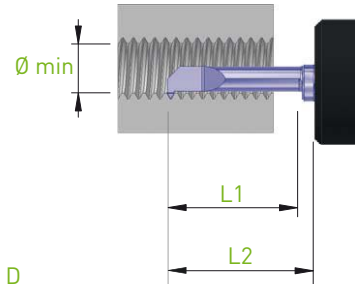
BF4... / BF6...

TM

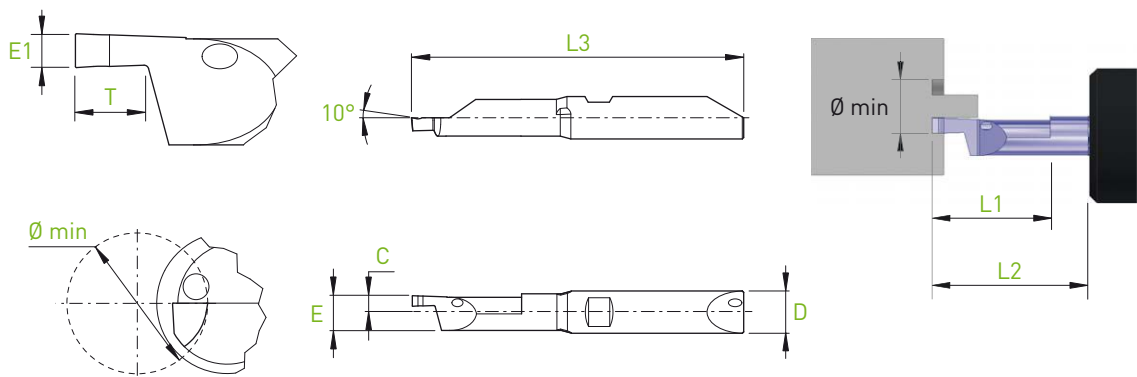
Profil complet métrique

Metrisches Vollprofil

Metric full profile



D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH4... BHY4...	L2 BHS4... BHK4...	E	C	L3	Art. N°	R	
												ZTAF	ZN
4	BH4... BHS4... BHY4... BHK4...	M3x0.5	2.50	0.50	6.0	10	8.5	2.25	1.35	32	BF4R-2560-TM-0.50	•	•
		M4x0.7	3.30	0.70	8.0	15	13.5	2.97	1.50	37	BF4R-3380-TM-0.70	•	•
D h5	Holder	M (min)	Ø min	P (mm)	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	E	C	L3	Art. N°	R	
												ZTAF	ZN
6	BH6... BHS6... BHY6... BHK6...	M5x0.8	4.20	0.80	10.0	20	18.5	3.78	2.10	47	BF6R-42100-TM-0.80	•	•
		M6x1.0	5.00	1.00	12.0	20	18.5	4.50	2.20	47	BF6R-50120-TM-1.00	•	•



											R		
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	E1	L3	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>ZTAF</div>	<div><div>P</div><div></div><div>N</div><div>S</div></div> <div>ZN</div>
6	BH6... BHS6... BHY6... BHK6...	5.0	15.0	20	18.5	3.00	4.90	2.30	1.50	47	BB6R-50150-FEG150X	●	●

Gorge frontale intérieure

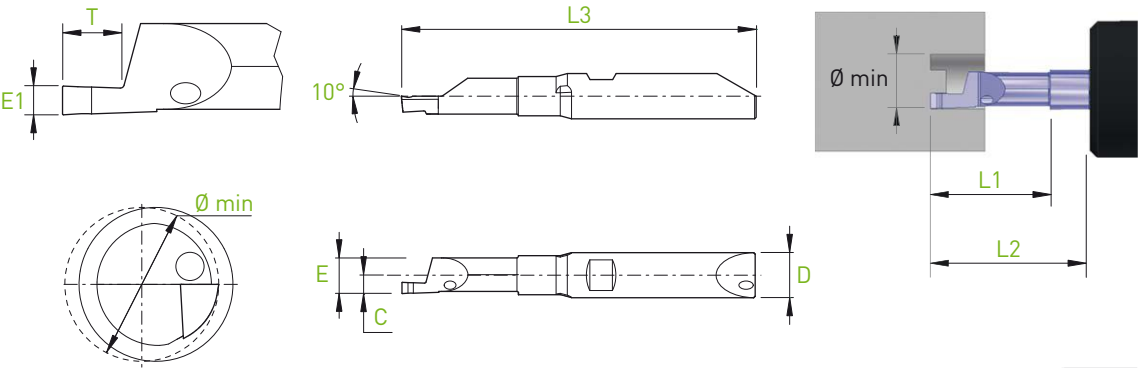
Innen axiales stechen

Internal axial grooving

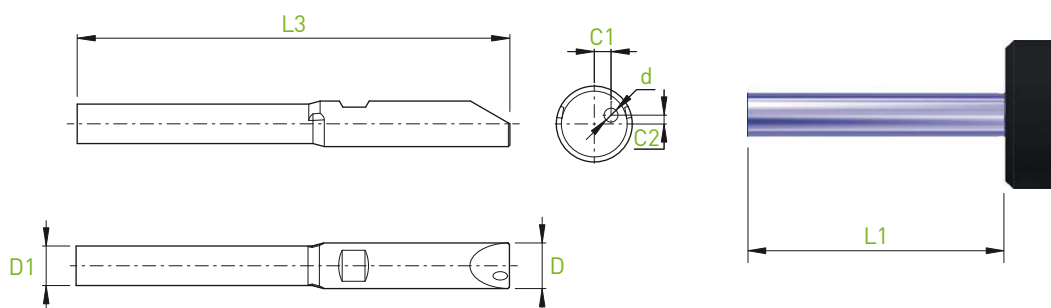


BB6...

FIG



											R		
D h5	Holder	Ø min	L1	L2 BH6... BHY6...	L2 BHS6... BHK6...	T	E	C	E1	L3	Art. N°	<div><div>P</div><div>M</div><div>N</div><div>S</div></div> <div>ZTAF</div>	<div><div>P</div><div></div><div>N</div><div>S</div></div> <div>ZN</div>
6	BH6... BHS6... BHY6... BHK6...	5.0	15.0	20	18.5	3.00	4.75	2.45	1.50	47	BB6R-50150-FIG150X	<div><div>●</div><div>●</div></div>	



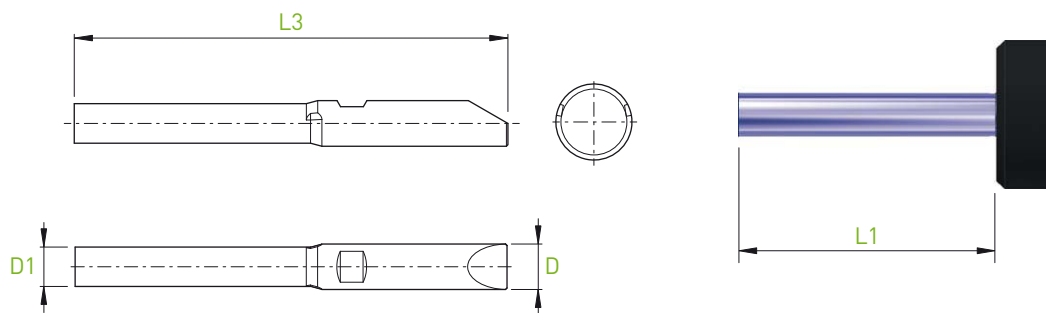
D h5	Holder	L1 BH4... BHY4...	L1 BHS4... BHK4...	D1	C1	C2	d	L3	Art. N°	Z
4	BH4... BHS4... BHY4... BHK4...	20.0	18.5	3.20	0.84	0.55	0.85	42	BB4R-E42	•
D h5	Holder	L1 BH6... BHY6...	L1 BHS6... BHK6...	D1	C1	C2	d	L3	Art. N°	Z
6	BH6... BHS6... BHY6... BHK6...	30.0	28.5	5.20	1.33	0.70	1.10	57	BB6R-E57	•

Ébauches
Rohlinge
Blanks

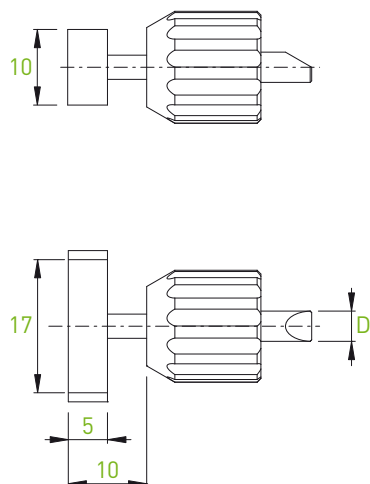


BF4... / BF6...

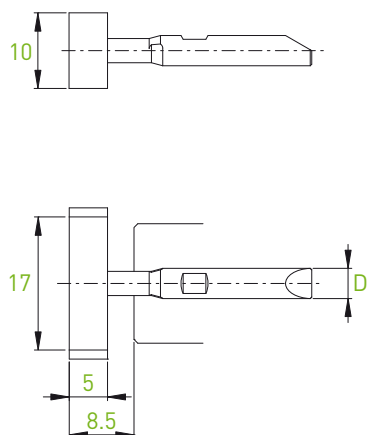
BF_E



D h5	Holder	L1 BH4... BHY4...	L1 BHS4... BHK4...	D1	L3	Art. N°	NZ
4	BH4... BHS4... BHY4... BHK4...	20.0	18.5	3.20	42	BF4-E42	●
D h5	Holder	L1 BH6... BHY6...	L1 BHS6... BHK6...	D1	L3	Art. N°	NZ
6	BH6... BHS6... BHY6... BHK6...	30.0	28.5	5.20	57	BF6-E57	●



D h5	Art. N°	
4	BH4-MASTER	•
6	BH6-MASTER	•



D h5	Art. N°	
4	BHSY4-MASTER	•
6	BHSY6-MASTER	•

Porte-outils avec arrosage pour contre-opération - Machines STAR
 Halter mit Kühlungssystem für Gegenbearbeitung – STAR Maschinen
 Backworking holders with through coolant – STAR Machines

BH4 / BH6
BHS4 / BHS6

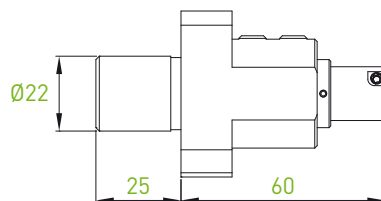


Art. N°

BWD1-2022-STAR-SRR

Art. N°

BHS4-D20-55-BWD1
 BHS6-D20-55-BWD1



Types of STAR machines

SR10J (T22+T24)
 SB16/20 Types C + D + E (T21-T24)
 SB20R Types E + G + N (T21-T24)
 SR20J / JN (T21-T24)
 SR20R / II / III (T21-T24)
 SR20R IV (T21-T24)
 SR32J/JN (T21-T24)
 SW12RII (T21-T24)
 SV20R (T21-T24)
 ECAS12/20 (T21-T24)
 SW20 (T21-T23)



Art. N°

BWD1-2022-STAR-SW

Art. N°

BHS4-D20-55-BWD1
 BHS6-D20-55-BWD1

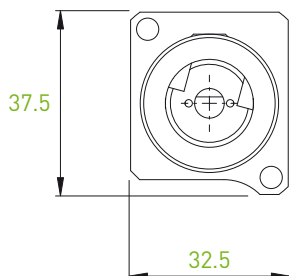
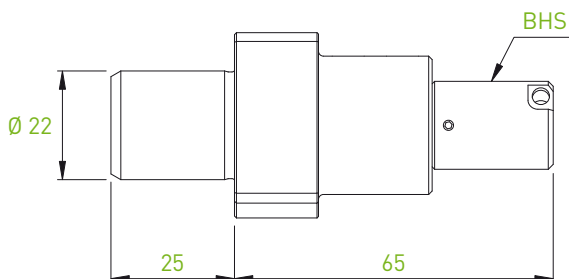
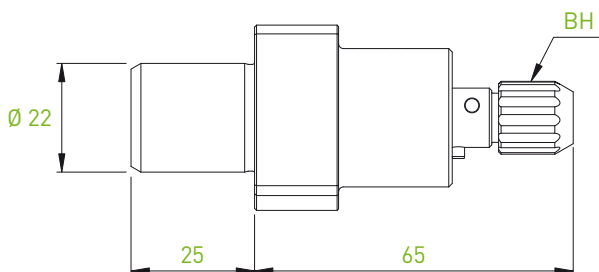


Types of STAR machines

SW12RII (T21-T28)
 SW20 (T21-T23 + T25-T27)
 SV20R (T21-T28)
 SR-20R IV (T21-T28)
 SB12/20R (T22-T24)
 SR38 (T21-T28)

BH4 / BH6 BHS4 / BHS6

Porte-outils avec arrosage pour contre-opération - Machines STAR
Halter mit Kühlungssystem für Gegenbearbeitung – STAR Maschinen
Backworking holders with through coolant – STAR Machines



Art. N°

BWD1-1222-STAR-SW-B

Art. N°

BHS4-D12-51-BWD1-B
BHS6-D12-51-BWD1-B

Art. N°

BH4-D12-51-BWD1-B
BH6-D12-51-BWD1-B

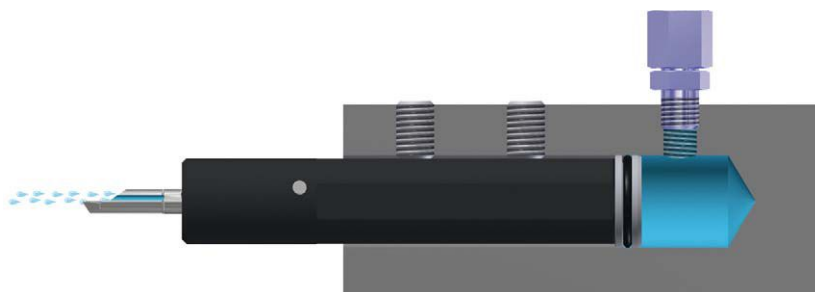
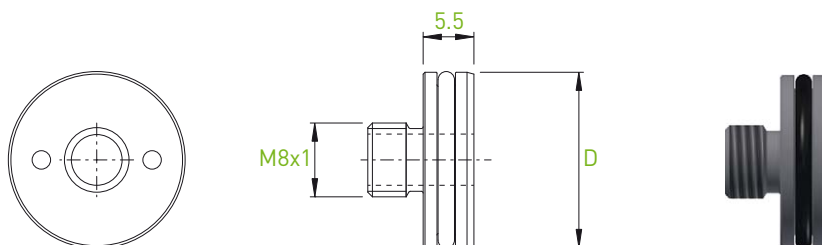
Types of STAR machines

SW12R II (T21-T28)
SW20 (T21-T23 + T25-T27)
SV20R (T21-T28)
SR-20R IV (T21-T28)
SB12/20R (T22-T24)
SR38 (T21-T28)

Bagues d'étanchéité

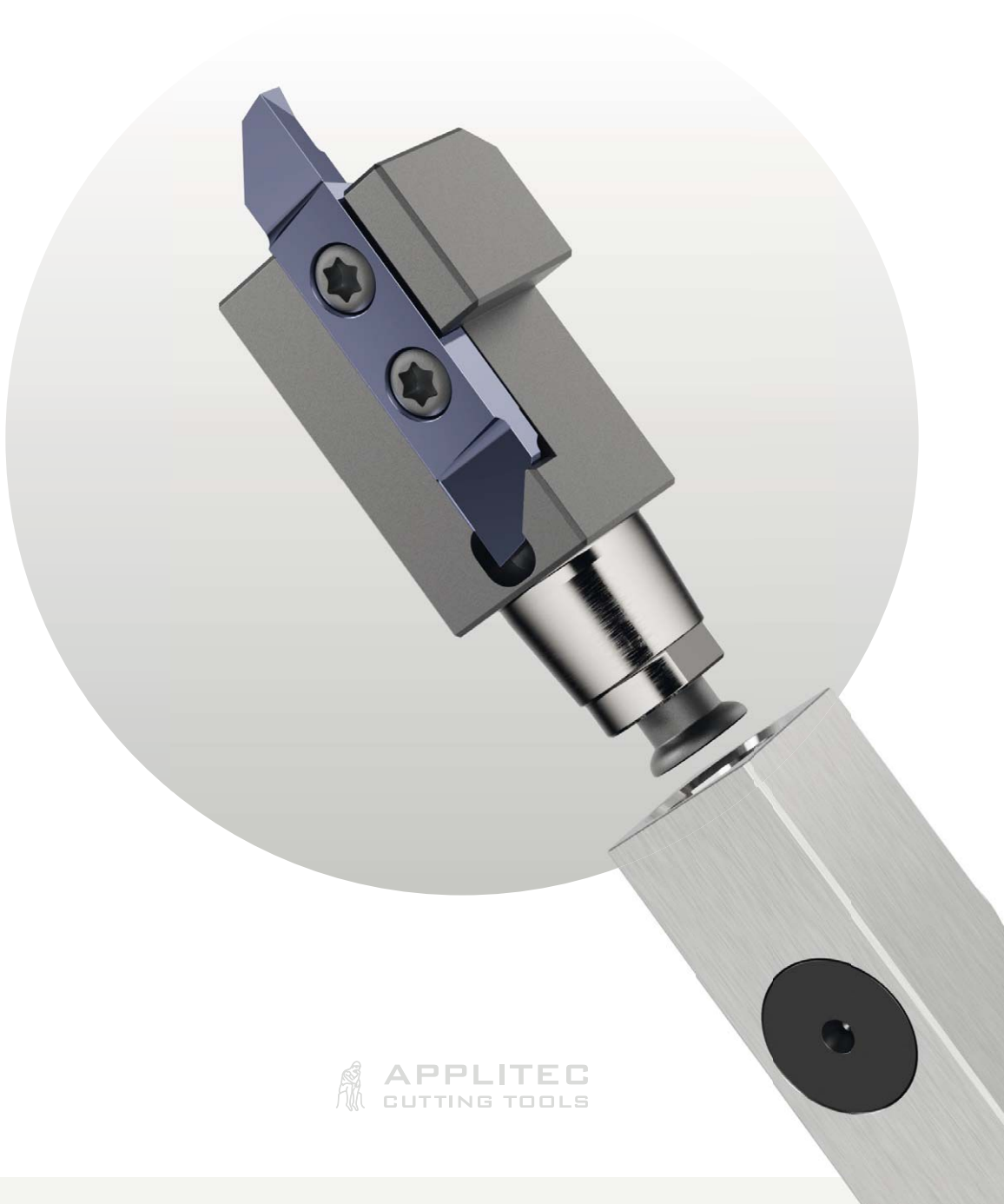
Dichtungsringe

Sealing rings

JB

D	Art. N°	
19.05	JB-M8X1-D19.05	●
20	JB-M8X1-D20	●
22	JB-M8X1-D22	●
25	JB-M8X1-D25	●
25.4	JB-M8X1-D25.4	●

SWITCH-Line



APPLITEC
CUTTING TOOLS

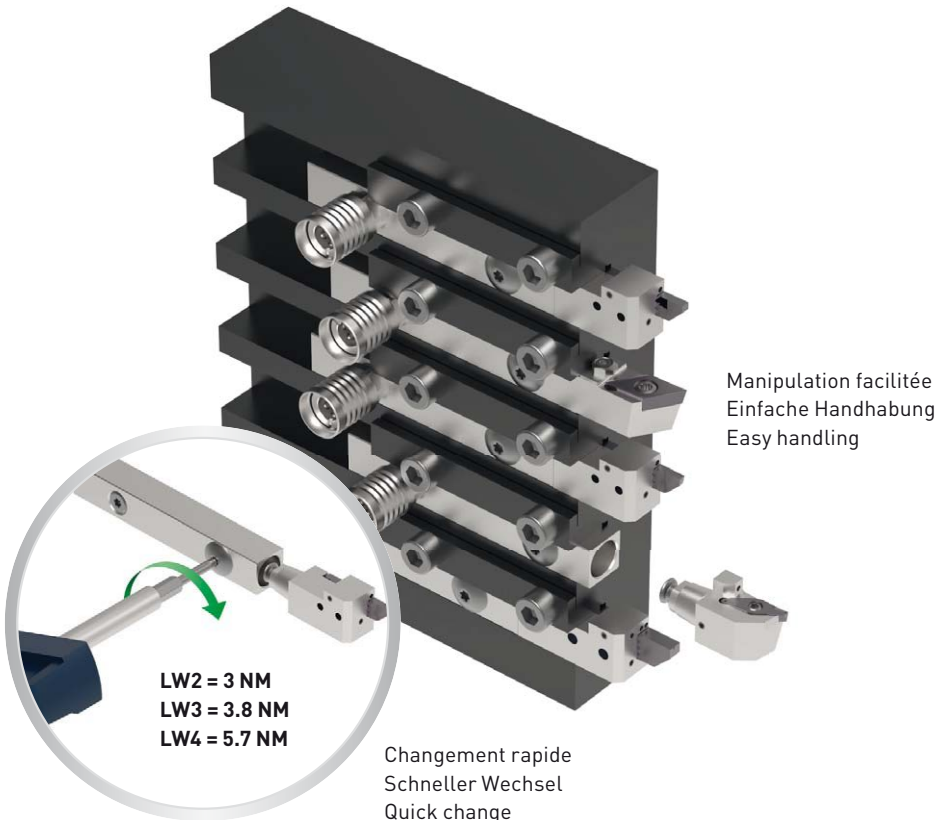
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			LW-750-760-JET	> 13.09
			LW-770-780-JET	> 13.10
ONE-Line			LW-130-JET LW-140-JET	> 13.11
TURN-Line		88°	LW-310-320-JET LW-310-BC/320-BC-JET	> 13.12 > 13.13
		85°	LW-330-340-JET	> 13.14
ISO-Line		80°	LW-SCL-JET LW-SCM-JET	> 13.15 > 13.16
		55°	LW-SDJ-JET LW-SDN-JET LW-SDH-JET	> 13.17 > 13.18 > 13.19
		35°	LW-SVJ-JET LW-SVV-JET	> 13.20 > 13.21
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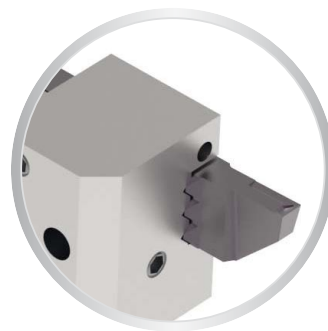
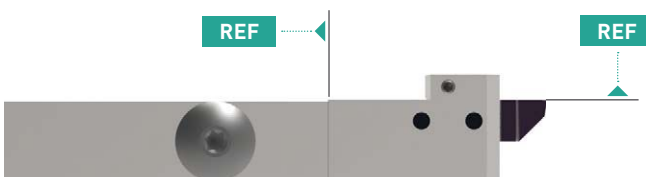
Infos et avantages

Infos und Vorteile

Infos and advantages



Lubrification intégrée
Integrierte Kühlung
Integrated coolant

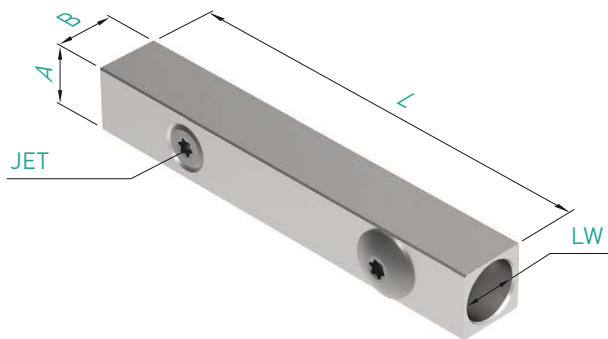


Excellente répétitivité
Ausgezeichnete
Wiederholgenauigkeit
Excellent repeatability

SWITCH-Line

Désignations - Carrés
Bezeichnungen – Quadrate
Designations – Squares

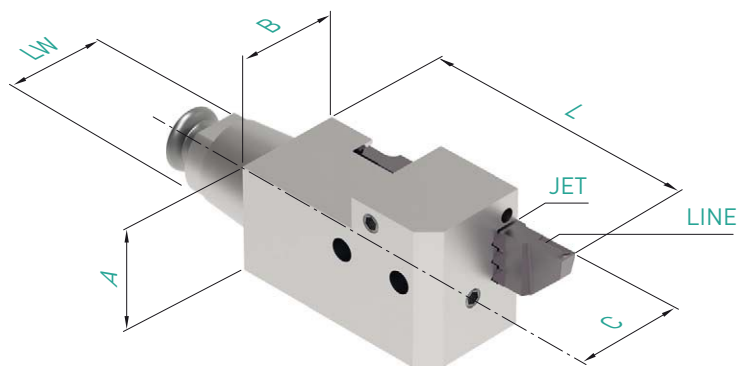
Infos et avantages
Infos und Vorteile
Infos and advantages



LW	A x B	L	JET
Interface	Section	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant

Désignations - Têtes interchangeables
Bezeichnungen - Wechselköpfe
Designations - Interchangeable heads

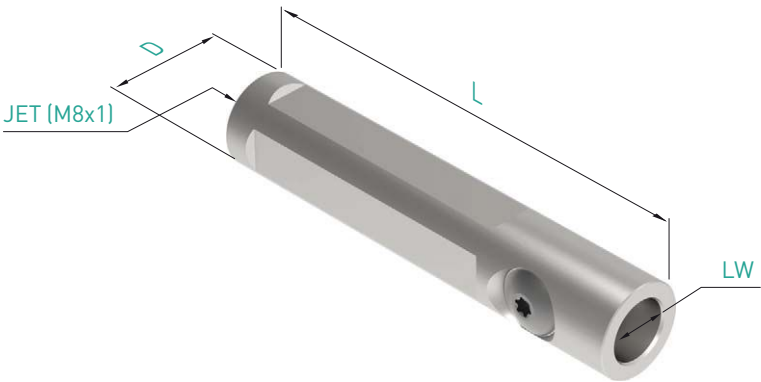
Infos et avantages
Infos und Vorteile
Infos and advantages



LW	LINE	A x B	C	L	JET
Interface	Serie	Section	Localisation axe Achselokalisation Axis location	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant

Infos et avantages
Infos und Vorteile
Infos and advantages

Désignations - Cylindres
Bezeichnungen - Zylinder
Designations - Cylinders



LW	D	L	JET
Interface	Ø	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant

Infos et avantages
Infos und Vorteile
Infos and advantages

Désignations - Têtes porte-pinces
Bezeichnungen - Spannzangenköpfe
Designations - Gripper holder heads

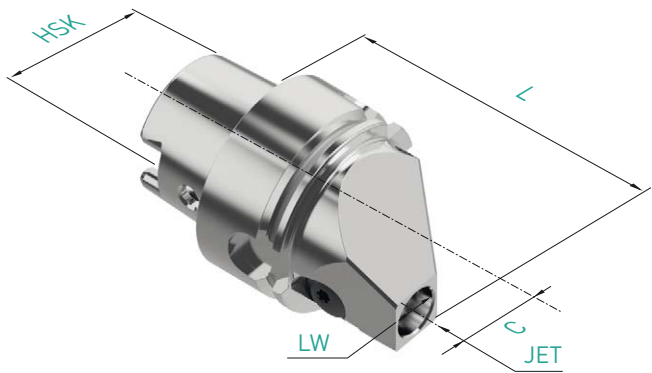


LW	E	D	L
Interface	Pince type Spannzange Typ Gripper type	Ø	Longueur Länge Length

SWITCH-Line

Désignations - HSK
Bezeichnungen - HSK
Designations - HSK

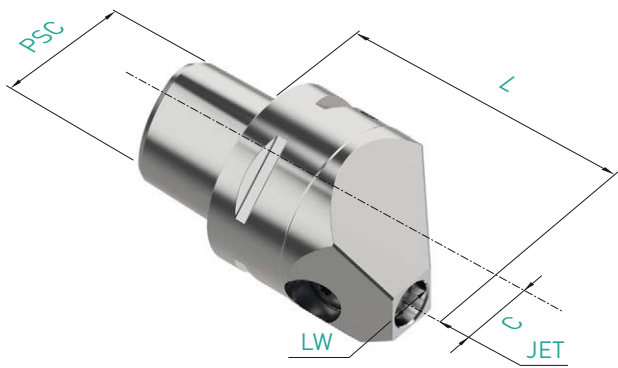
Infos et avantages
Infos und Vorteile
Infos and advantages



HSK	LW	C	L	JET	X
Machine interface	Interface tête interchangeable Wechselkopfschnittstelle Interchangeable head interface	Localisation axe Achsellokalisierung Axis location LW	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant	Spécificité fabricant machine Spezifität Maschinenhersteller Specificity machine manufacturer

Désignations - Têtes interchangeables
Bezeichnungen - Wechselköpfe
Designations - Interchangeable heads

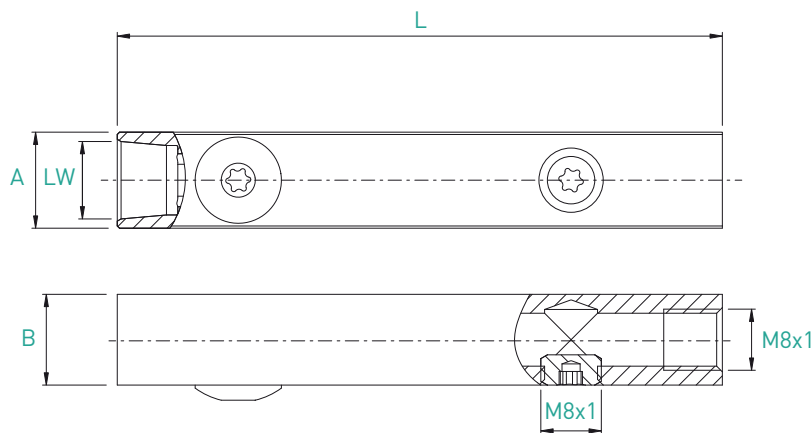
Infos et avantages
Infos und Vorteile
Infos and advantages

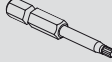


PSC	LW	C	L	JET	X
Machine interface	Interface tête interchangeable Wechselkopfschnittstelle Interchangeable head interface	Localisation axe Achsellokalisierung Axis location LW	Longueur Länge Length	Arrosage intégré Integrierte Kühlung Integrated coolant	Spécificité fabricant machine Spezifität Maschinenhersteller Specificity machine manufacturer

Supports carrés
Viereckige Halter
Square holders

LW-JET

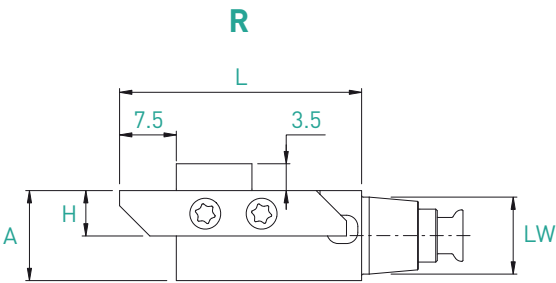
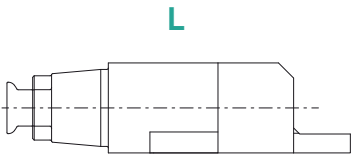
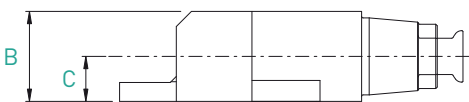
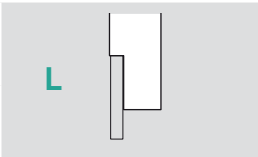
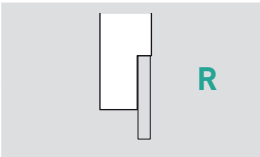


				Pièces de rechange Ersatzteile Spare parts		Options	
							
LW	A x B	L	Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW2	10x10	80	LW2-1010-80-JET	JB-M8X1	LW2-ER1.010.012	CD-NM3.0	TX15-E6.3
LW3	12x12	80	LW3-1212-80-JET	JB-M8X1	LW3-ER1.012.014	CD-NM3.8	TX15-E6.3
LW3	12.7x12	80	LW3-12.7-80-JET				
LW4	15.87x16	80	LW4-15.87-80-JET	JB-M8X1	LW4-ER1.014.019	CD-NM5.7	TX20-E6.3
LW4	16x16	80	LW4-1616-80-JET				



Utilisation d'une clé dynamétrique
recommandée
Benutzung eines
Drehmomentschlüssel empfohlen
Recommended use
of a torque wrench

Options	
	Art. N°
	M8X1
	voir JET-LINE siehe JET-LINE see JET-LINE



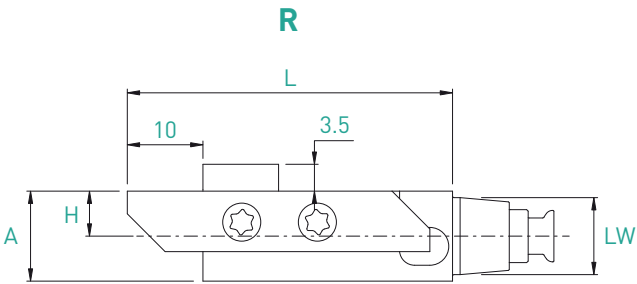
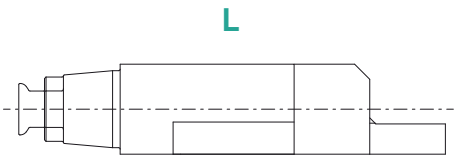
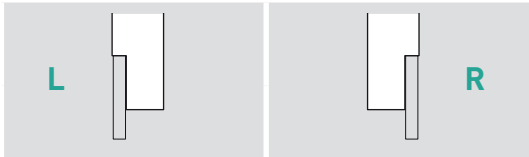
Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
73_-74_	LW3	12x12	6	6	32	LW3-730-12-0632-JET	LW3-740-12-0632-JET
	LW4	16x16	8	8	32	LW4-730-16-0832-JET	LW4-740-16-0832-JET

	Pièces de rechange Ersatzteile Spare parts	Options
LW	Art. N°	Art. N°
LW3	V-M3X7-T8	LW3-U00.ER1.000
LW4		LW4-U00.ER1.000

Têtes interchangeables
Wechselköpfe
Interchangeable heads

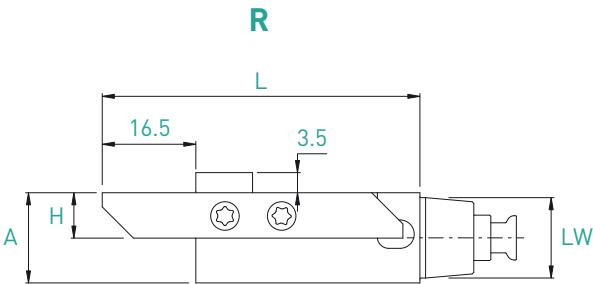
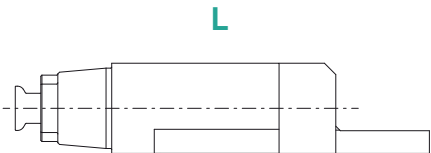
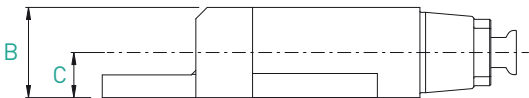
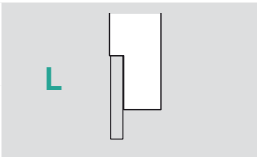
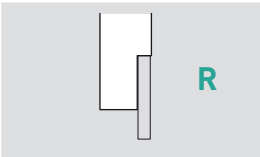
TOP-Line

LW-750/760-JET



Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
75_-76_	LW3	12x12	6	6	43	LW3-750-12-0643-JET	LW3-760-12-0643-JET
	LW4	16x16	8	8	43	LW4-750-16-0843-JET	LW4-760-16-0843-JET

	Pièces de rechange Ersatzteile Spare parts		Options
LW			
LW3	Art. N°	Art. N°	Art. N°
LW4	V-M4X9-T15	LW3-U00.ER1.000 LW4-U00.ER1.000	C-T15



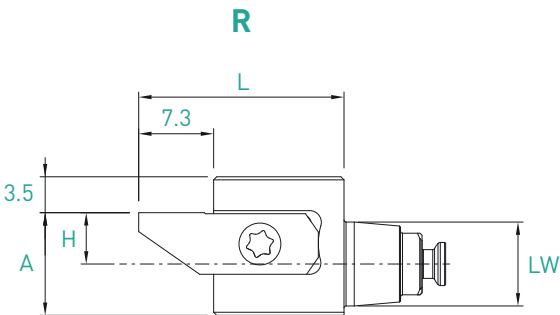
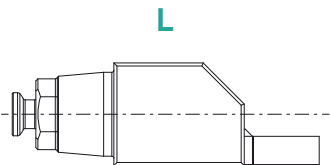
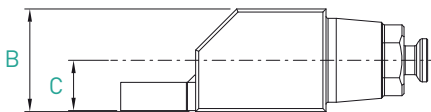
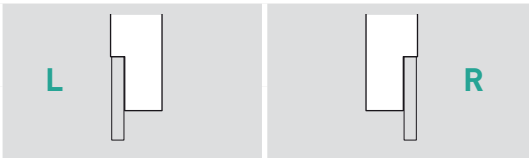
Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
77_-78_	LW4	16x16	8	8	56	LW4-770-16-0856-JET	LW4-780-16-0856-JET

	Pièces de rechange Ersatzteile Spare parts	Options
LW		
LW4	Art. N° V-M4X9-T15	Art. N° LW4-U00.ER1.000
		Art. N° C-T15

Têtes interchangeables
Wechselköpfe
Interchangeable heads

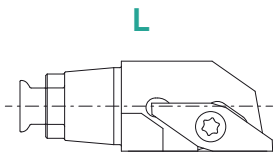
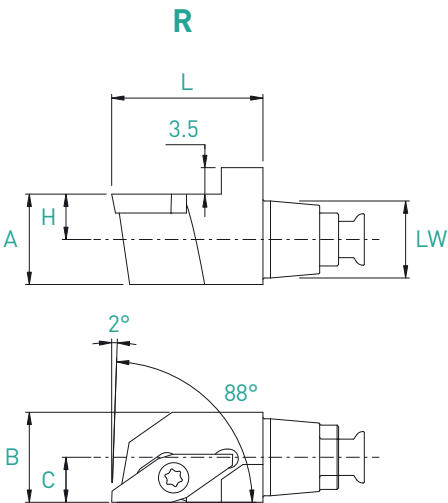
ONE-Line

LW-130/LW-140-JET

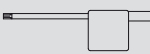


Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
13_-14_	LW2	10x10	5	5	20	LW2-130-10-0520-JET	LW2-140-10-0520-JET

	Pièces de rechange Ersatzteile Spare parts	Options
LW	 Art. N°	 Art. N°
LW4	V-M3X7-T8	LW2-U00.ER1.000
		C-T8



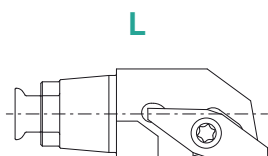
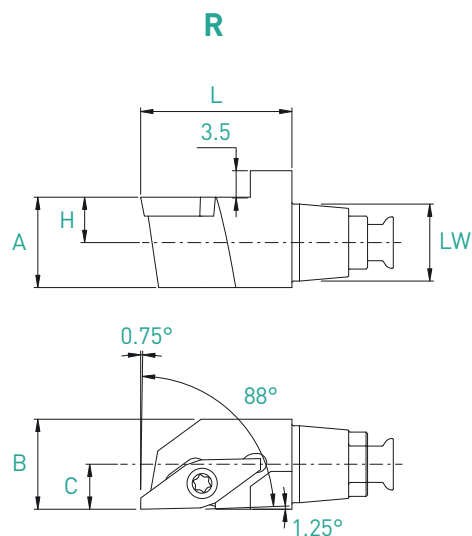
							
Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
31_-32_	LW2	10x10	5	5	20	LW2-310-10-0520-JET	LW2-320-10-0520-JET
	LW3	12x12	6	6	20	LW3-310-12-0620-JET	LW3-320-12-0620-JET
	LW4	16x16	8	8	25	LW4-310-16-0825-JET	LW4-320-16-0825-JET

		Pièces de rechange Ersatzteile Spare parts	Options
			
LW	Art. N°	Art. N°	Art. N°
LW2	V-M2.5X7.8-T8	LW2-U00.ER1.000	C-T8
LW3		LW3-U00.ER1.000	
LW4		LW4-U00.ER1.000	

Têtes interchangeables
Wechselköpfe
Interchangeable heads

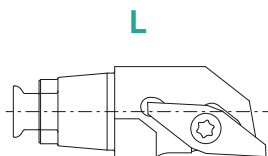
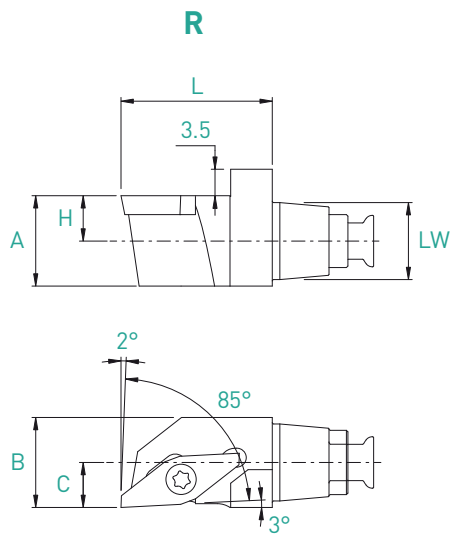
TURN-Line 88°

LW-310-BC/320-BC-JET



Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
31_-32_	LW2	10x10	5	5	20	LW2-310-10-0520-BC-JET	LW2-320-10-0520-BC-JET
	LW3	12x12	6	6	20	LW3-310-12-0620-BC-JET	LW3-320-12-0620-BC-JET
	LW4	16x16	8	8	25	LW4-310-16-0825-BC-JET	LW4-320-16-0825-BC-JET

	Pièces de rechange Ersatzteile Spare parts		Options
LW	Art. N°	Art. N°	Art. N°
LW2	V-M2.5X7.8-T8	LW2-U00.ER1.000	C-T8
LW3		LW3-U00.ER1.000	
LW4		LW4-U00.ER1.000	



							
Plaquettes WSP Inserts						Art. N°	Art. N°
33_-34_	LW2	10x10	5	5	20	LW2-330-10-0520-JET	LW2-340-10-0520-JET
	LW3	12x12	6	6	20	LW3-330-12-0620-JET	LW3-340-12-0620-JET
	LW4	16x16	8	8	25	LW4-330-16-0825-JET	LW4-340-16-0825-JET

Pièces de rechange Ersatzteile Spare parts			Options
LW			
	Art. N°	Art. N°	Art. N°
	LW2	LW2-U00.ER1.000	C-T8
	LW3	LW3-U00.ER1.000	
	LW4	LW4-U00.ER1.000	

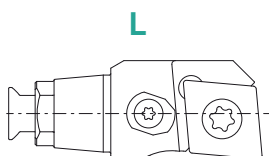
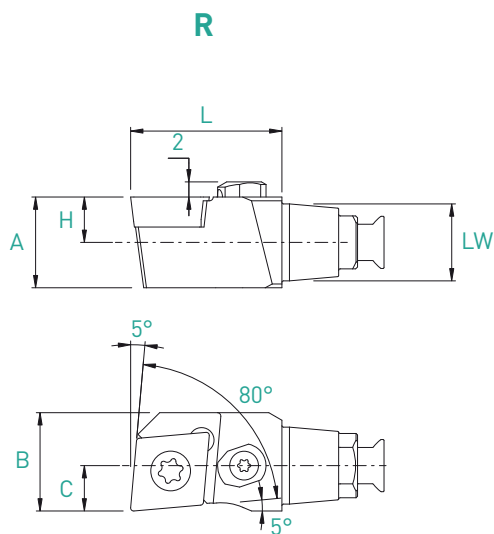
Têtes interchangeables

Wechselköpfe

Interchangeable heads

ISO-Line 80°

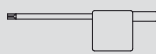
LW-SCL-JET

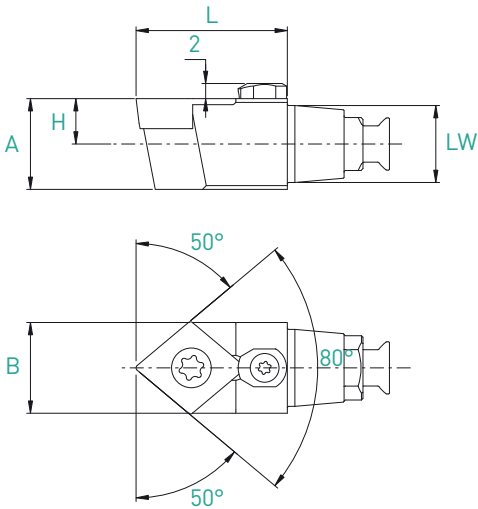


L

R

Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
CC...-0602..	LW2	10x10	5	5	20	LW2-SCLCL-10-0520-06-JET	LW2-SCLCR-10-0520-06-JET
	LW3	12x12	6	6	20	LW3-SCLCL-12-0620-06-JET	LW3-SCLCR-12-0620-06-JET
	LW4	16x16	8	8	25	LW4-SCLCL-16-0825-06-JET	LW4-SCLCR-16-0825-06-JET
CC...-09T3..	LW3	12x12	6	6	20	LW3-SCLCL-12-0620-09-JET	LW3-SCLCR-12-0620-09-JET
	LW4	16x16	8	8	25	LW4-SCLCL-16-0825-09-JET	LW4-SCLCR-16-0825-09-JET

		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW				
		Art. N°	Art. N°	Art. N°	Art. N°
CC...-0602..	LW2	V-M2.5X7.8-T8	LWX-ER1.007.004	LW2-U00.ER1.000	C-T8
	LW3			LW3-U00.ER1.000	
	LW4			LW4-U00.ER1.000	
CC...-09T3..	LW3	V-M4X9-T15-ISO		LW3-U00.ER1.000	C-T15
	LW4			LW4-U00.ER1.000	



Plaquettes WSP Inserts	LW	A x B	H	L	Art. N°
CC...-0602..	LW2	10x10	5	20	LW2-SCMCN-10-0020-06-JET
	LW3	12x12	6	20	LW3-SCMCN-12-0020-06-JET
	LW4	16x16	8	25	LW4-SCMCN-16-0025-06-JET
CC...-09T3..	LW3	12x12	6	20	LW3-SCMCN-12-0020-09-JET
	LW4	16x16	8	25	LW4-SCMCN-16-0025-09-JET

		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW				
		Art. N°	Art. N°	Art. N°	Art. N°
CC...-0602..	LW2	V-M2.5X7.8-T8	LWX-ER1.007.004	LW2-U00.ER1.000	C-T8
	LW3			LW3-U00.ER1.000	
	LW4			LW4-U00.ER1.000	
CC...-09T3..	LW3	V-M4X9-T15-ISO	LWX-ER1.007.004	LW3-U00.ER1.000	C-T15
	LW4			LW4-U00.ER1.000	

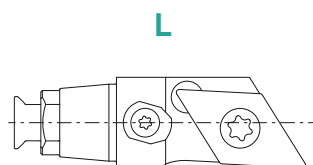
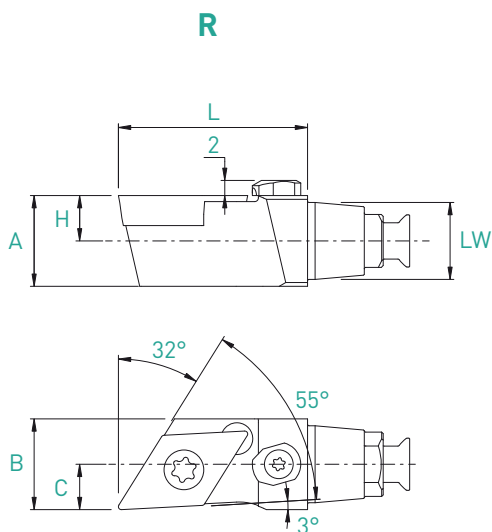
Têtes interchangeables

Wechselköpfe

Interchangeable heads

ISO-Line 55°

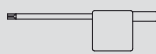
LW-SDJ-JET

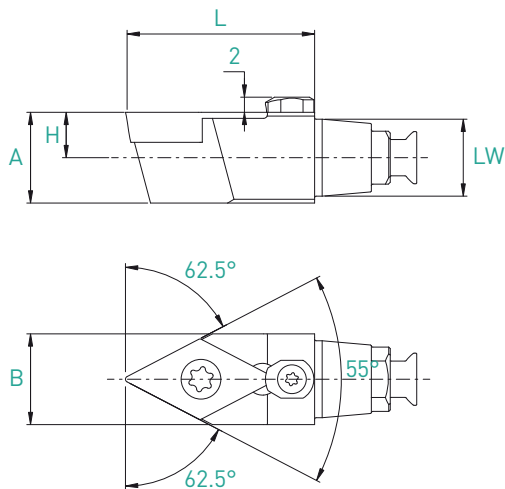


L

R

Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
DC...-0702..	LW2	10x10	5	5	20	LW2-SDJCL-10-0520-07-JET	LW2-SDJCR-10-0520-07-JET
	LW3	12x12	6	6	20	LW3-SDJCL-12-0620-07-JET	LW3-SDJCR-12-0620-07-JET
	LW4	16x16	8	8	25	LW4-SDJCL-16-0825-07-JET	LW4-SDJCR-16-0825-07-JET
DC...-11T3..	LW3	12x12	6	6	25	LW3-SDJCL-12-0625-11-JET	LW3-SDJCR-12-0625-11-JET
	LW4	16x16	8	8	25	LW4-SDJCL-16-0825-11-JET	LW4-SDJCR-16-0825-11-JET

		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW				
		Art. N°	Art. N°	Art. N°	Art. N°
DC...-0702..	LW2	V-M2.5X7.8-T8	LWX-ER1.007.004	LW2-U00.ER1.000	C-T8
	LW3			LW3-U00.ER1.000	
	LW4			LW4-U00.ER1.000	
DC...-11T3..	LW3	V-M4X9-T15-ISO		LW3-U00.ER1.000	C-T15
	LW4			LW4-U00.ER1.000	



Plaquettes WSP Inserts	LW	A x B	H	L	Art. N°
DC...-0702..	LW2	10x10	5	20	LW2-SDNCN-10-0020-07-JET
	LW3	12x12	6	20	LW3-SDNCN-12-0020-07-JET
	LW4	16x16	8	25	LW4-SDNCN-16-0025-07-JET
DC...-11T3..	LW3	12x12	6	25	LW3-SDNCN-12-0025-11-JET
	LW4	16x16	8	25	LW4-SDNCN-16-0025-11-JET

		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW				
		Art. N°	Art. N°	Art. N°	Art. N°
DC...-0702..	LW2	V-M2.5X7.8-T8	LWX-ER1.007.004	LW2-U00.ER1.000	C-T8
	LW3			LW3-U00.ER1.000	
	LW4			LW4-U00.ER1.000	
DC...-11T3..	LW3	V-M4X9-T15-ISO		LW3-U00.ER1.000	C-T15
	LW4			LW4-U00.ER1.000	

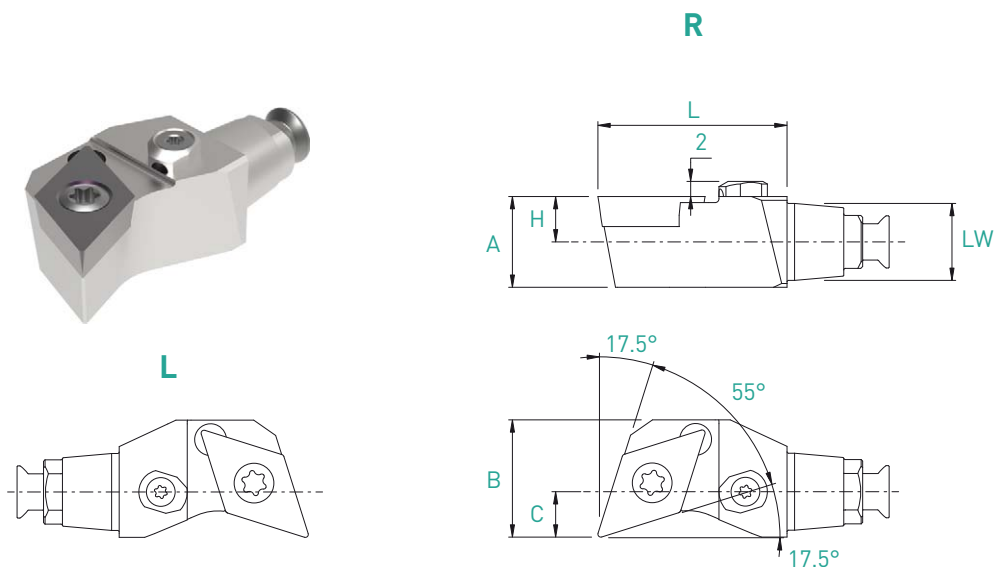
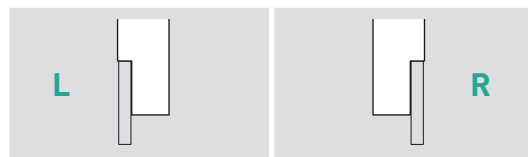
Têtes interchangeables

Wechselköpfe

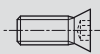
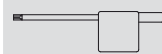
Interchangeable heads

ISO-Line 55°

LW-SDH-JET



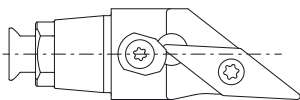
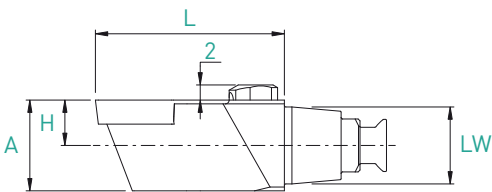
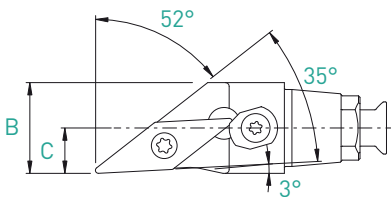
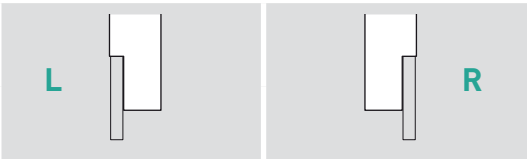
Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
DC...0702..	LW2	10x10	5	5	20	LW2-SDHCL-10-0520-07-JET	LW2-SDHCR-10-0520-07-JET
	LW3	12x15.5	6	6	20	LW3-SDHCL-12-0620-07-JET	LW3-SDHCR-12-0620-07-JET
	LW4	16x16	8	8	25	LW4-SDHCL-16-0825-07-JET	LW4-SDHCR-16-0825-07-JET
DC...11T3..	LW3	12x15.5	6	6	25	LW3-SDHCL-12-0625-11-JET	LW3-SDHCR-12-0625-11-JET
	LW4	16x16	8	8	25	LW4-SDHCL-16-0825-11-JET	LW4-SDHCR-16-0825-11-JET

		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW				
		Art. N°	Art. N°	Art. N°	Art. N°
DC...0702..	LW2	V-M2.5X7.8-T8	LWX-ER1.007.004	LW2-U00.ER1.000	C-T8
	LW3			LW3-U00.ER1.000	
	LW4			LW4-U00.ER1.000	
DC...11T3..	LW3	V-M4X9-T15-ISO		LW3-U00.ER1.000	C-T15
	LW4			LW4-U00.ER1.000	

R

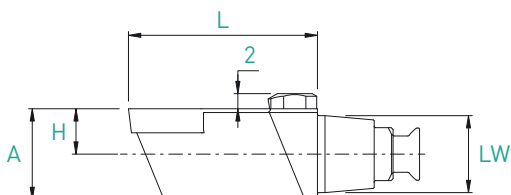
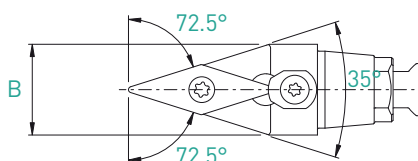


L

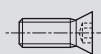
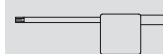


Plaquettes WSP Inserts	LW	A x B	H	C	L	Art. N°	Art. N°
VC...-1103..	LW2	10x10	5	5	25	LW2-SVJCL-10-0525-11-JET	LW2-SVJCR-10-0525-11-JET
	LW3	12x12	6	6	25	LW3-SVJCL-12-0625-11-JET	LW3-SVJCR-12-0625-11-JET
	LW4	16x16	8	8	25	LW4-SVJCL-16-0825-11-JET	LW4-SVJCR-16-0825-11-JET
VC...-1303..	LW3	12x12	6	6	30	LW3-SVJCL-12-0630-13-JET	LW3-SVJCR-12-0630-13-JET
	LW4	16x16	8	8	30	LW4-SVJCL-16-0830-13-JET	LW4-SVJCR-16-0830-13-JET
VC...-1604..	LW4	16x16	8	8	35	LW4-SVJCL-16-0835-16-JET	LW4-SVJCR-16-0835-16-JET

		Pièces de rechange Ersatzteile Spare parts			Options
Plaquettes WSP Inserts	LW				
		Art. N°	Art. N°	Art. N°	Art. N°
VC...-1103..	LW2	V-M2.5X7.8-T8	LWX-ER1.007.004	LW2-U00.ER1.000	C-T8
	LW3			LW3-U00.ER1.000	
	LW4			LW4-U00.ER1.000	
VC...-1303..	LW3	V-M3X7.3-T8-ISO		LW3-U00.ER1.000	C-T15
	LW4			LW4-U00.ER1.000	
VC...-1604..	LW4	V-M4X9-T15-ISO		LW4-U00.ER1.000	C-T15

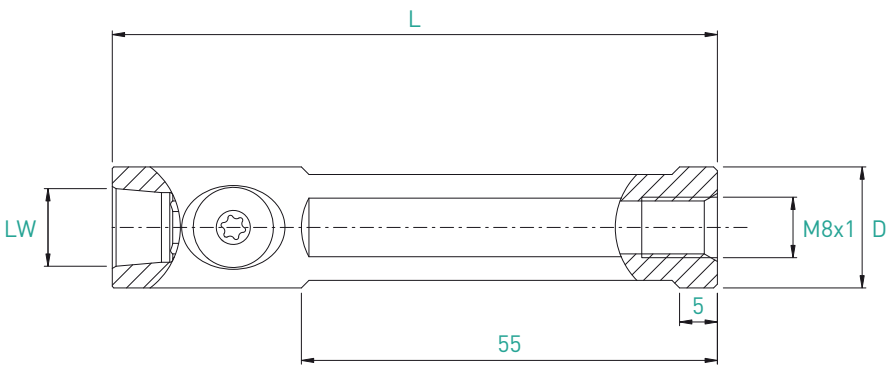


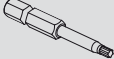
Plaquettes WSP Inserts	LW	A x B	H	L	Art. N°
VC...-1103..	LW2	10x10	5	25	LW2-SVVCN-10-0025-11-JET
	LW3	12x12	6	25	LW3-SVVCN-12-0025-11-JET
	LW4	16x16	8	25	LW4-SVVCN-16-0025-11-JET
VC...-1303..	LW3	12x12	6	30	LW3-SVVCN-12-0030-13-JET
	LW4	16x16	8	30	LW4-SVVCN-16-0030-13-JET
VC...-1604..	LW4	16x16	8	35	LW4-SVVCN-16-0035-16-JET

		Pièces de rechange Ersatzteile Spare parts			Options	
Plaquettes WSP Inserts	LW					
		Art. N°	Art. N°	Art. N°	Art. N°	
VC...-1103..	LW2	V-M2.5X7.8-T8	LWX-ER1.007.004	LW2-U00.ER1.000	C-T8	
	LW3			LW3-U00.ER1.000		
	LW4			LW4-U00.ER1.000		
VC...-1303..	LW3	V-M3X7.3-T8-ISO		LW3-U00.ER1.000		
	LW4			LW4-U00.ER1.000		
VC...-1604..	LW4	V-M4X9-T15-ISO		LW4-U00.ER1.000	C-T15	

LW-D

Supports cylindriques
Zylindrische Halter
Cylinder holders



					Pièces de rechange Ersatzteile Spare parts		Options	
								
LW	D	L	L1	Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3	16	80	55	LW3-D16-80-JET	LW3-ER1.012.014	JB-M8X1	CD-NM3.8	TX15-E6.3
LW4	19.05	80	55	LW4-D19.05-80-JET	LW4-ER1.014.018		CD-NM5.7	TX20-E6.3
	20	80	55	LW4-D20-80-JET	LW4-ER1.014.019			
	22	80	55	LW4-D22-80-JET	LW4-ER1.015.023			
	25	80	55	LW4-D25-80-JET				
	25.4	80	55	LW4-D25.4-80-JET				

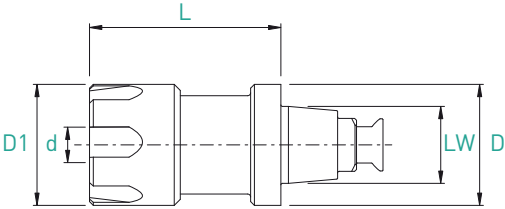


Utilisation d'une clé dynamométrique recommandée
Benutzung eines Drehmomentschlüssel empfohlen
Recommended use of a torque wrench

Options	
	Art. N°
	M8X1 voir JET-LINE siehe JET-LINE see JET-LINE

Têtes interchangeables porte-pince
Spannzangenwechselköpfe
Interchangeable heads gripper holder

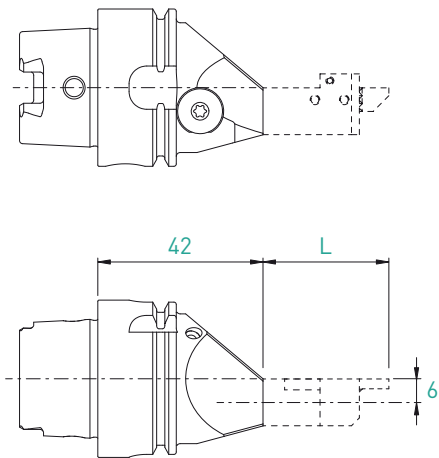
LW-E



Pièces de rechange
Ersatzteile
Spare parts



LW	D	D1	L	Pince type	d	Art. N°	Art. N°	Art. N°
LW3	16	16	26	ER11	0.5-7	LW3-E11-D16-26	E11-ER1.001-012	LW3-U00.ER1.00
LW4	19	16	26	ER11	0.5-7	LW4-E11-D19-26		LW4-U00.ER1.00
	19	22	35	ER16	0.5-10	LW4-E16-D19-35	E16-ER1.001-018	



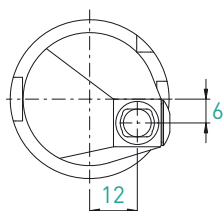
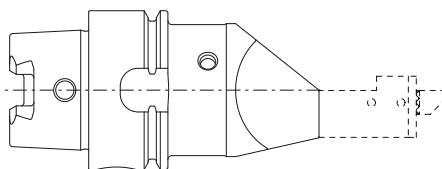
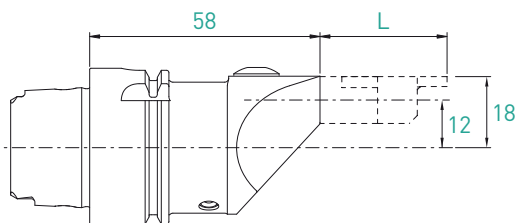
					BUMOTEC S191
LW	Compatibility	Page	L	Art. N°	Art. N°
LW3	LW3-740..	13.06	32	HSK-T40-LW3-0642-JET	HSK-A40-LW3-0642-JET-BU
	LW3-760..	13.07	43		
	LW3-320-340..	13.09/13.11	20		
	LW3-SCLCR..	13.12	20		
	LW3-SCMCN..	13.13	20		
	LW3-SDJCR..	13.14	20		
	LW3-SDNCN..	13.15	20		
	LW3-SDHCR..	13.16	20		
	LW3-SVJCR..	13.17	25		

Pièces de rechange Ersatzteile Spare parts	Options			
Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3-ER1.012.014	CD-NM3.8	TX15-E6.3	HSK-40-JET-M12X1	C-HSK-40-JET

Porte-outils

Halter
Holders

HSK-T40-LW3



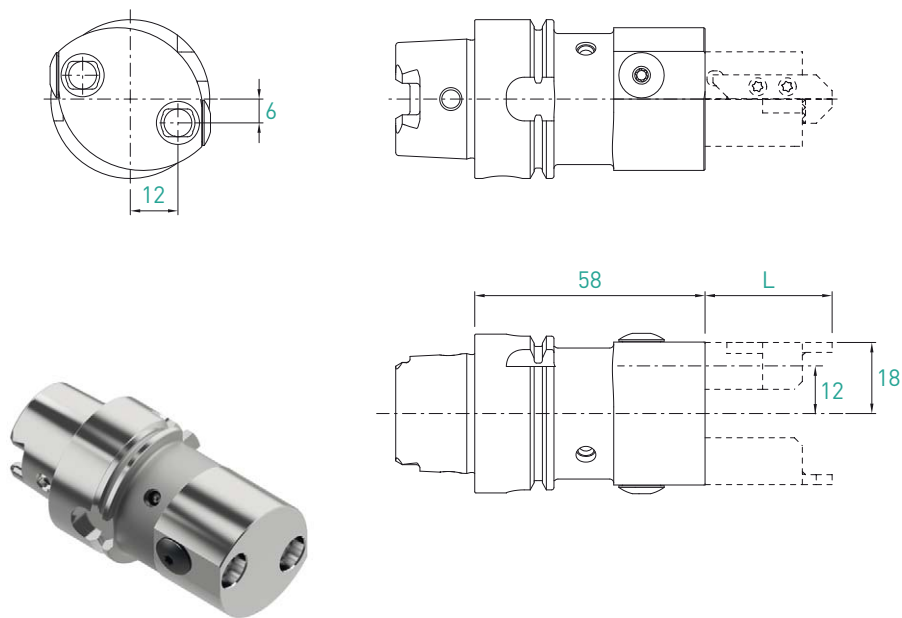
BUMOTEC S191

LW	Compatibility	Page	L	Art. N°	Art. N°
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	LW3-760..	7	43		
	LW3-320-340..	9/11	20		
	LW3-SCLCR..	12	20		
	LW3-SCMCN..	13	20		
	LW3-SDJCR..	14	20		
	LW3-SDNCN..	15	20		
	LW3-SDHCR..	16	20		
	LW3-SVJCR..	17	25		

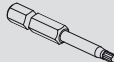
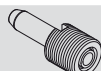
Pièces de rechange Ersatzteile Spare parts	Options			
Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3-ER1.012.014	CD-NM3.8	TX15-E6.3	HSK-40-JET-M12X1	C-HSK-40-JET

HSK-T40-LW3/2

Porte-outils
Halter
Holders



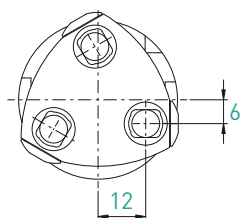
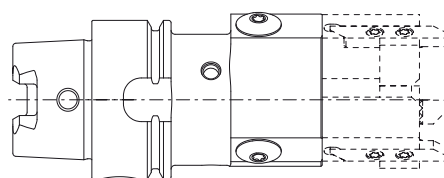
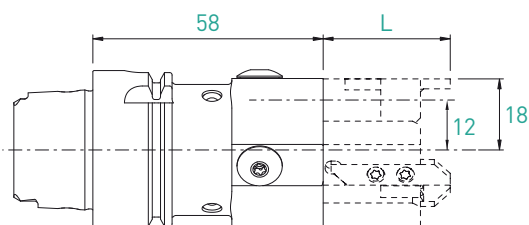
LW	Compatibility	Page	L	Art. N°
LW3	LW3-740..	13.06	32	HSK-T40-LW3/2-1258-JET
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3-ER1.012.014	CD-NM3.8	TX15-E6.3	HSK-40-JET-M12X1	C-HSK-40-JET

Porte-outils

Halter
Holders

HSK-T40-LW3/3

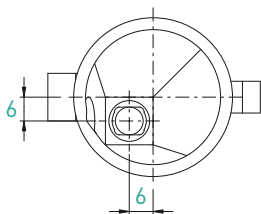
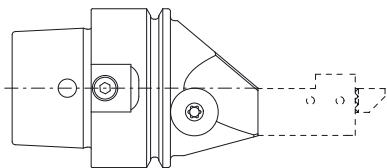
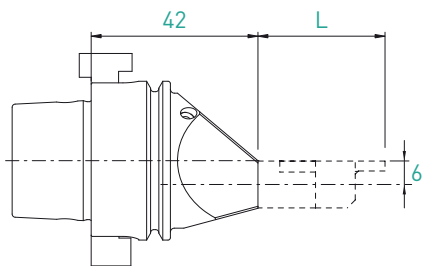


LW	Compatibility	Page	L	Art. N°
LW3	LW3-740..	13.06	32	HSK-T40-LW3/3-1258-JET
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3-ER1.012.014	CD-NM3.8	TX15-E6.3	HSK-40-JET-M12X1	C-HSK-40-JET

HSK-E40-LW3

Porte-outils
Halter
Holders

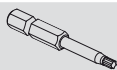


WILLEMIN-MACODEL

LW	Compatibility	Page	L	Art. N°
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	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange
Ersatzteile
Spare parts

Options



Art. N°

Art. N°

Art. N°

Art. N°

Art. N°

LW3-ER1.012.014

CD-NM3.8

TX15-E6.3

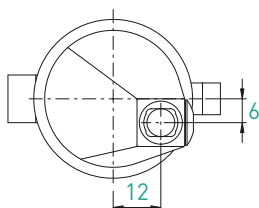
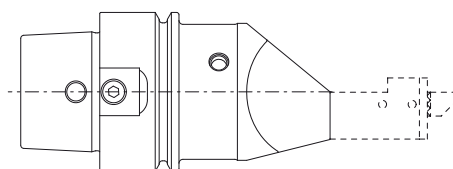
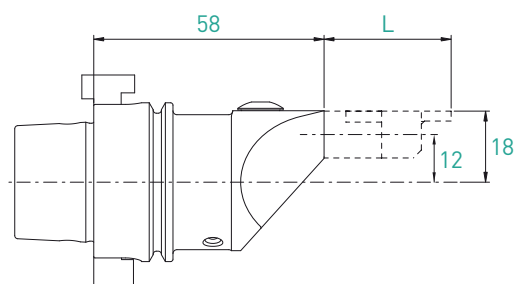
HSK-40-JET-M12X1

C-HSK-40-JET

Porte-outils

Halter
Holders

HSK-E40-LW3

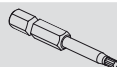
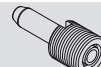


WILLEMIN-MACODEL

LW	Compatibility	Page	L	Art. N°
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	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange
Ersatzteile
Spare parts

Options



Art. N°

Art. N°

Art. N°

Art. N°

Art. N°

LW3-ER1.012.014

CD-NM3.8

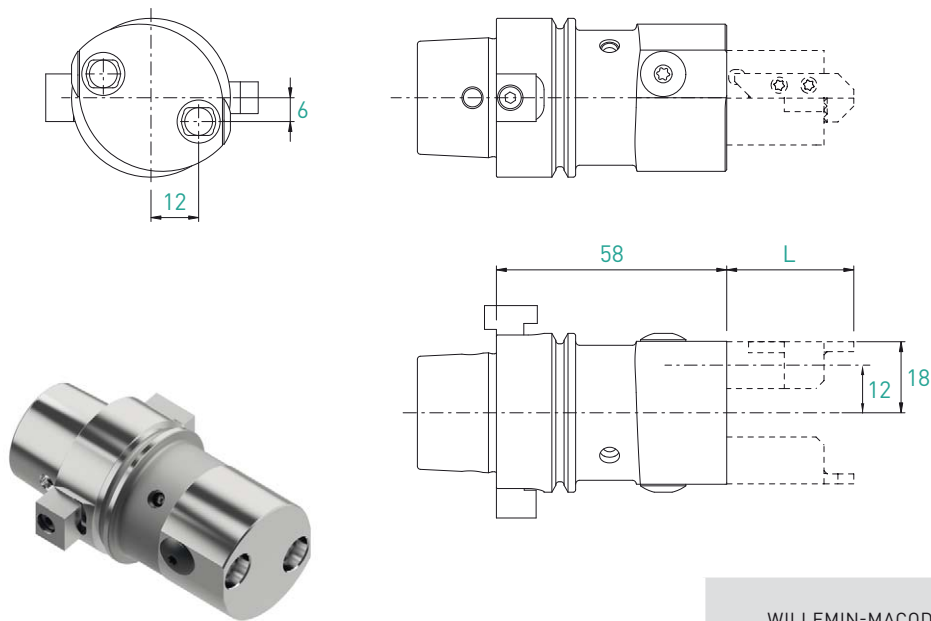
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HSK-40-JET-M12X1

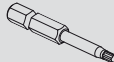
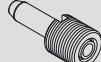
C-HSK-40-JET

HSK-E40-LW3/2

Porte-outils
Halter
Holders



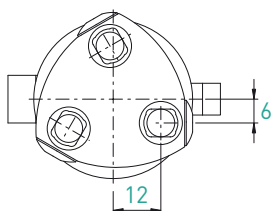
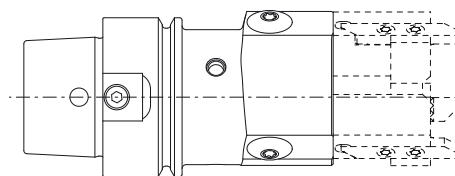
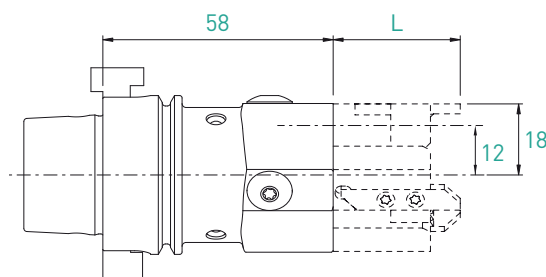
				WILLEMIN-MACODEL
LW	Compatibility	Page	L	Art. N°
LW3	LW3-740..	13.06	32	HSK-E40-LW3/2-1258-JET-WM
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3-ER1.012.014	CD-NM3.8	TX15-E6.3	HSK-40-JET-M12X1	C-HSK-40-JET

Porte-outils

Halter
Holders

HSK-E40-LW3/3

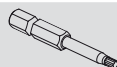
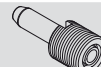


WILLEMIN-MACODEL

LW	Compatibility	Page	L	Art. N°
LW3	LW3-740..	13.06	32	HSK-E40-LW3/3-1258-JET-WM
	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange
Ersatzteile
Spare parts

Options



Art. N°

Art. N°

Art. N°

Art. N°

Art. N°

LW3-ER1.012.014

CD-NM3.8

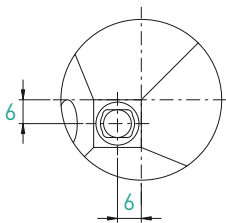
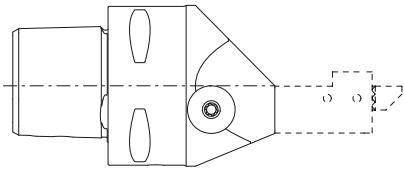
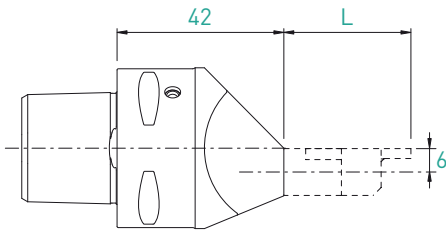
TX15-E6.3

HSK-40-JET-M12X1

C-HSK-40-JET

PSC4-LW3

Porte-outils
Halter
Holders

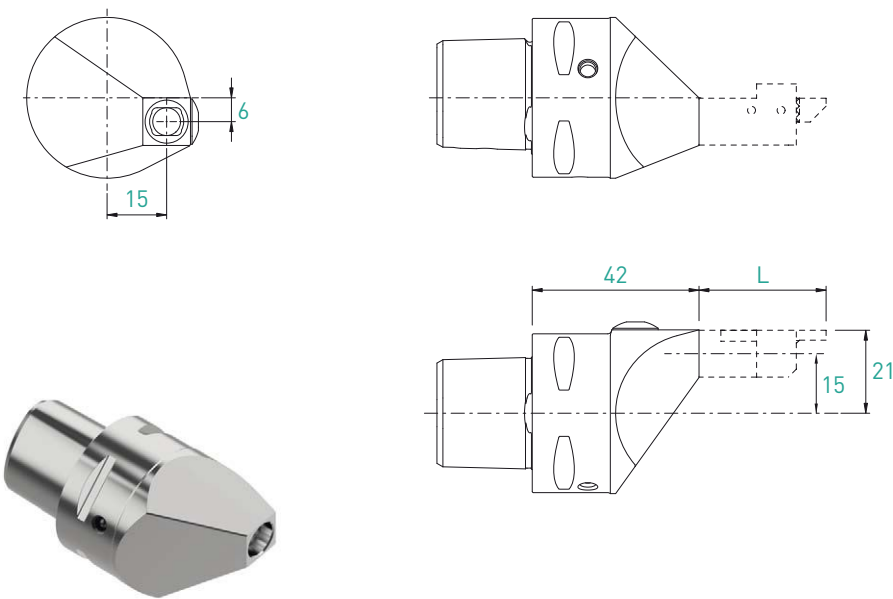


LW	Compatibility	Page	L	Art. N°
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	LW3-760..	13.07	43	
	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3-ER1.012.014	CD-NM3.8	TX15-E6.3	PSC4-JET-M14X1.5	C-PSC4-JET

Porte-outils
Halter
Holders

PSC4-LW3

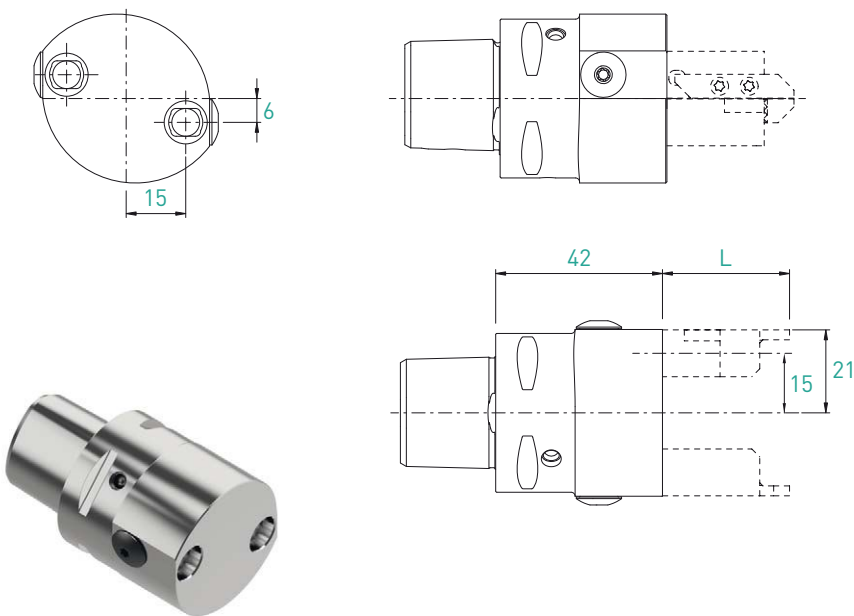


LW	Compatibility	Page	L	Art. N°
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	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
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	LW3-SDHCR..	13.16	20	
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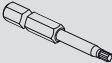
Pièces de rechange Ersatzteile Spare parts	Options			
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PSC4-LW3/2

Porte-outils
Halter
Holders

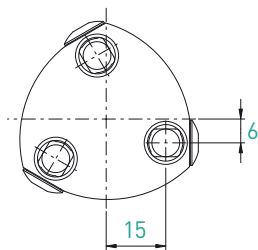
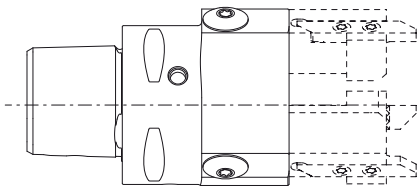
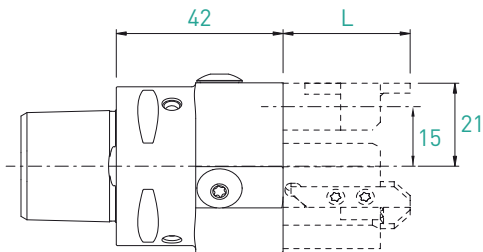


LW	Compatibility	Page	L	Art. N°
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	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
				
Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3-ER1.012.014	CD-NM3.8	TX15-E6.3	PSC4-JET-M14X1.5	C-PSC4-JET

Porte-outils
Halter
Holders

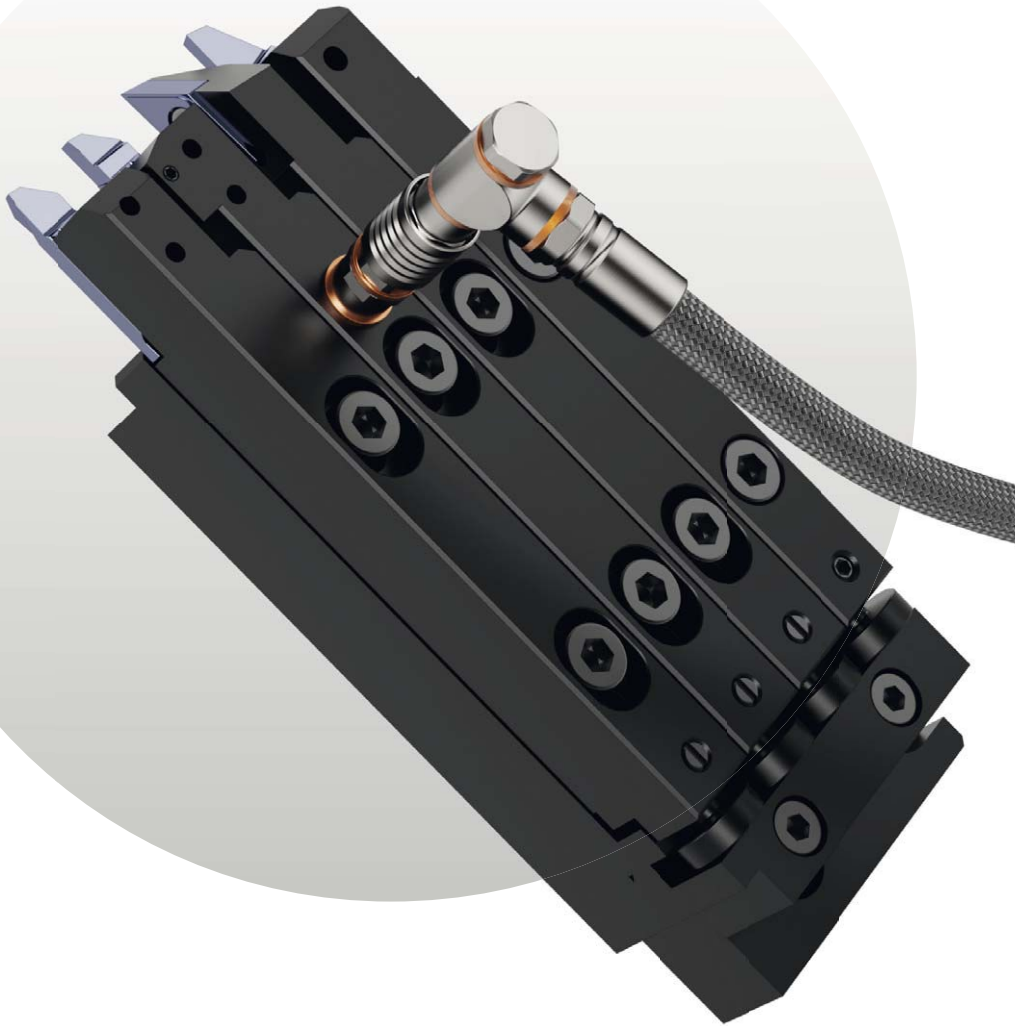
PSC4-LW3/3



LW	Compatibility	Page	L	Art. N°
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	LW3-320-340..	13.09/13.11	20	
	LW3-SCLCR..	13.12	20	
	LW3-SCMCN..	13.13	20	
	LW3-SDJCR..	13.14	20	
	LW3-SDNCN..	13.15	20	
	LW3-SDHCR..	13.16	20	
	LW3-SVJCR..	13.17	25	

Pièces de rechange Ersatzteile Spare parts	Options			
Art. N°	Art. N°	Art. N°	Art. N°	Art. N°
LW3-ER1.012.014	CD-NM3.8	TX15-E6.3	PSC4-JET-M14X1.5	C-PSC4-JET

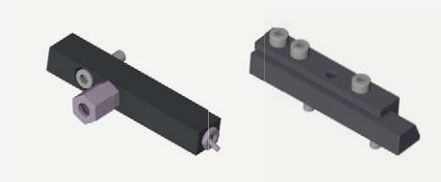
MODU-Line



APPLITEC
CUTTING TOOLS

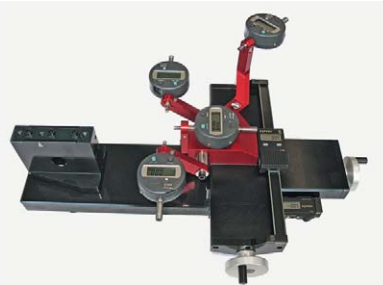
<div> <div>Infos et avantages</div> <div>Infos und Vorteile</div> <div>Infos and advantages</div> </div>		> 14.04	
<div> <div>Supports de base</div> <div>Grundhalter</div> <div>Base holders</div> </div>	<div> <div>Citizen</div> <div>Hanwha</div> <div>Manurhin</div> <div>Metafil</div> <div>Star</div> <div>Tornos</div> <div>Tsugami</div> </div>		<div>> 14.06</div> <div>> 14.20</div> <div>> 14.24</div> <div>> 14.26</div> <div>> 14.28</div> <div>> 14.46</div> <div>> 14.66</div>
	<div> <div>Adaptations disponibles pour les machines suivantes:</div> <div>Verfügbare Anpassungen für folgende Maschinen:</div> <div>Available adapters for the following machines:</div> </div>		
<div> <div>Porte-outils</div> <div>Halter</div> <div>Holders</div> </div>	<div> <div>ML12</div> <div>ML16</div> </div>		<div>12</div> <div>16</div>
	<div> <div>Infos</div> </div>		> 14.74
<div> <div>Porte-outils</div> <div>Halter</div> <div>Holders</div> </div>	<div> <div>Right cut</div> <div>Cut off line</div> </div>		
	<div> <div> <div>TOP-Line</div> <div>TURN-Line</div> <div>ISO-Line</div> <div>EVOCUT-Line</div> <div>CUT-Line</div> <div>PRO-Line</div> <div>ECO-Line</div> <div>IN-Line</div> <div>TOOLING-Line</div> </div> </div>		<div>> 14.78</div> <div>> 14.80</div> <div>> 14.80</div> <div>> 14.83</div> <div>> 14.84</div> <div>> 14.85</div> <div>> 14.86</div> <div>> 14.87</div> <div>> 14.89</div>
		<div> <div>TOP-Line</div> <div>TURN-Line</div> <div>ISO-Line</div> <div>EVOCUT-Line</div> <div>CUT-Line</div> <div>PRO-Line</div> <div>ECO-Line</div> </div>	<div>> 14.90</div> <div>> 14.92</div> <div>> 14.93</div> <div>> 14.94</div> <div>> 14.95</div> <div>> 14.96</div> <div>> 14.97</div>

Modules d'arrosage et de serrage
Kühlmittelzufuhr- und Spannelemente
Coolant and clamping supply unit



> **14.98**

Banc de pré réglage
Voreinstellgerät
Presetting device



> **14.100**

Pièces de rechange et accessoires
Ersatzteile und Zubehör
Spare parts and accessories



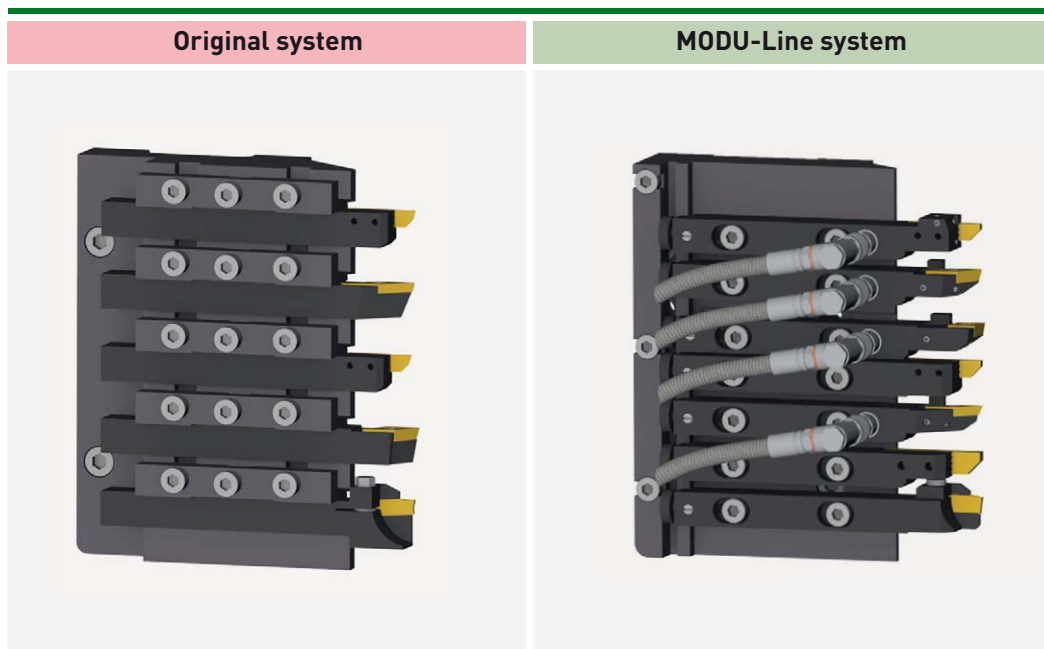
> **14.102**

MODU-Line

Infos et avantages

Infos und Vorteile

Infos and advantages



Système d'outils modulaires
pour tours automatiques

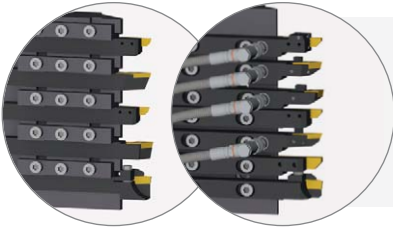
Modulares Werkzeugsystem
für Langdrehautomaten

Modular tooling system for
sliding headstock automatic lathes

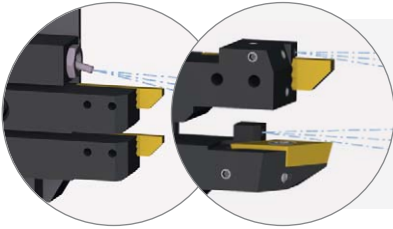
Infos et avantages

Infos und Vorteile

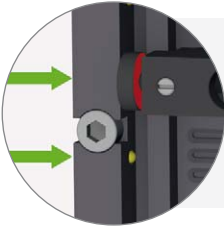
Infos and advantages



Plus d'outils disponibles
Mehr verfügbaren Werkzeuge
More available tools



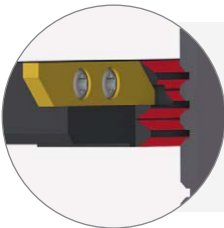
Système d'arrosage efficace
Effizientes Kühlmittelzufuhrsystem
Efficient coolant supply system



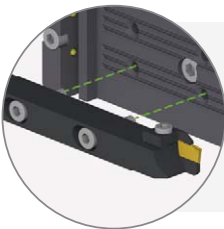
Repositionnement précis, poussée axiale automatique
Präzise Nachpositionierung, automatischer Axialschub
Precise repositioning, automatic axial thrust



Possibilité de préréglage et de réglage de la longueur des outils
Voreinstellbar auf feste oder einstellbare Länge
Presetting on fixed or adjustable length



Système de fixation robuste et rigide
Robustes und starres Spannsystem
Strong and stable clamping system



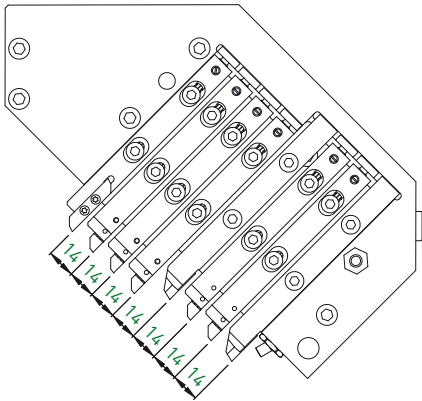
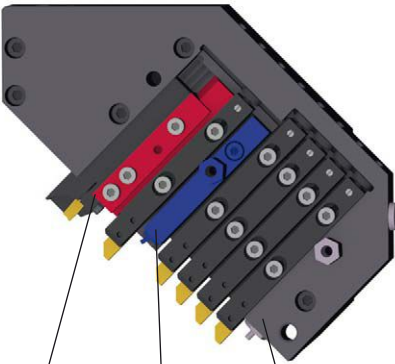
Changement d'outil simple et rapide
Einfacher und schneller Werkzeugwechsel
Easy and quick tool replacement

Citizen			
Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
C12/C16	ML12-CITIZEN-C16	ML12	14.07
L12-1M7	ML12-CITIZEN-L12-1M7		14.08
L12-2M10	ML12-CITIZEN-L12-2M10		14.09
M16V/VIII	ML12-CITIZEN-M16V/VIII		14.10
R04	ML12-CITIZEN-R04-QTF3101-3T		14.13
	ML12-CITIZEN-R04-QTF5008-4T		14.11
	ML12-CITIZEN-R04-QTF5108-4T		
R07	ML12-CITIZEN-R07-QTF4008-5T		14.14
	ML12-CITIZEN-R07-QTF4108-6T		
	ML12-CITIZEN-R07-QTF4208-3T		14.15
	ML12-CITIZEN-R07-QTF4608-4T		
K12/K16	ML16-CITIZEN-K16	ML16	14.16
L16/L20-5M1/5M7	ML16-CITIZEN-L20		14.17
L20E-1M8/L20X-1M10/ L20-2M8/2M12	ML16-CITIZEN-L20E		14.18
L20E-3M	ML16-L20E-GTF7812		14.19

Citizen C12 / C16

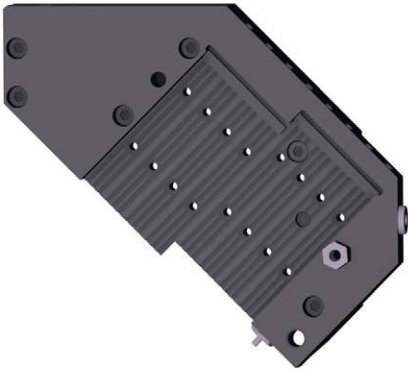
- + 2 outils (max 8)
- + 2 Werkzeuge (max 8)
- + 2 tools (max 8)

ML12



Outil 12 mm possible avec module de serrage
Werkzeug 12 mm mit Spannelement möglich
Tool 12mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)



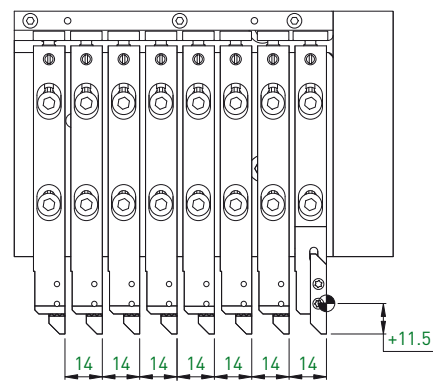
Arrosage intégré
Integrierter Kühlmittel
Integrated coolant

			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-C16	ML12	> 14.77	ML12-FIX-12/14	ML12-JET-5/16	14.98

ML12

- + 2 outils (max 8)
- + 2 Werkzeuge (max 8)
- + 2 tools (max 8)

Citizen L12-1M7

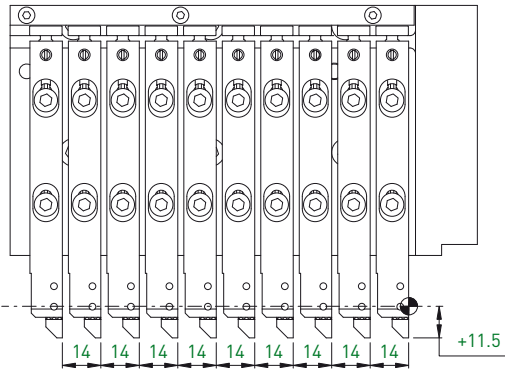


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-L12-1M7	ML12	> 14.77	-	ML12-JET-5/16	14.98

Citizen L12-2M10

- + 3 outils (max 10)
- + 3 Werkzeuge (max 10)
- + 3 tools (max 10)

ML12

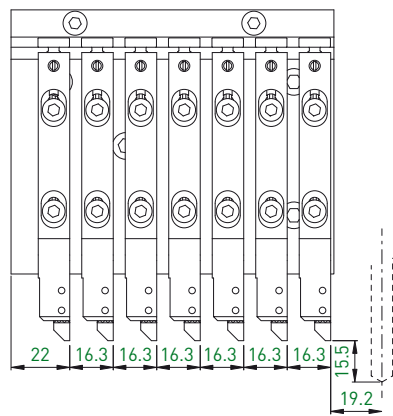


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-L12-2M10	ML12	> 14.77	-	ML12-JET-5/16	14.98

ML12

- + 2 outils (max 7)
- + 2 Werkzeuge (max 7)
- + 2 tools (max 7)

Citizen M16 V/VIII

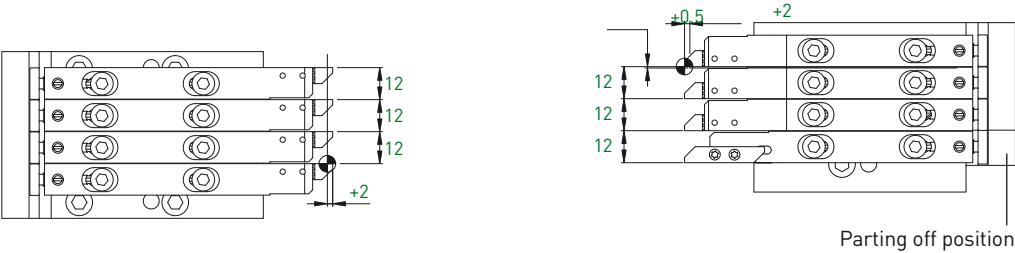
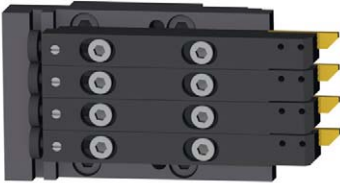


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-M16V/VIII	ML12	> 14.77	-	ML12-JET-5/16	14.98

Citizen R04

- + 1 outil (max 8)
- + 1 Werkzeug (max 8)
- + 1 tool (max 8)

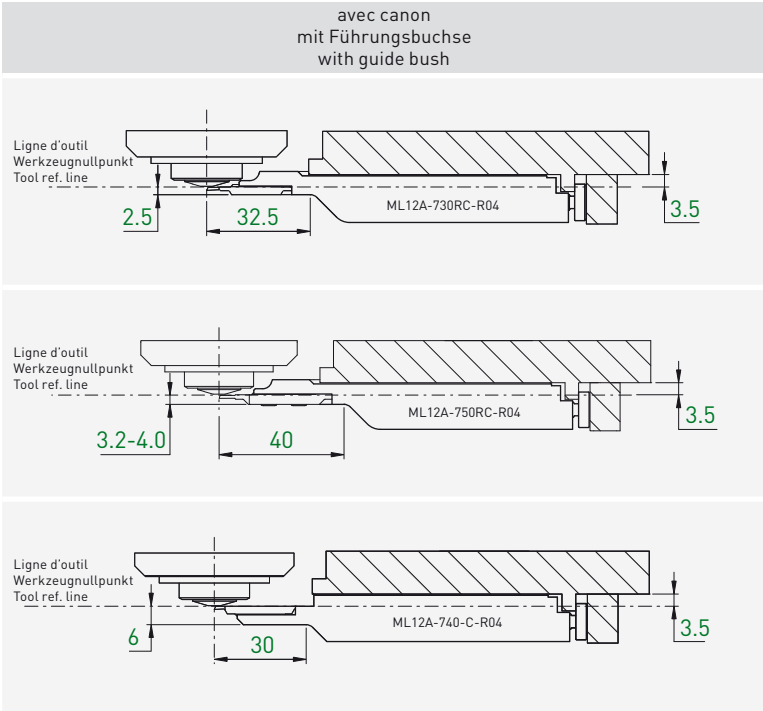
ML12



ML12-CITIZEN-R04-QTF5008-4T

ML12-CITIZEN-R04-QTF5108-4T

Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Accessoires Zubehöre Accessories		
				Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
4T	ML12-CITIZEN-R04-QTF5008-4T	ML12	> 14.77	-	ML12-JET-5/16	14.98
	ML12-CITIZEN-R04-QTF5108-4T					

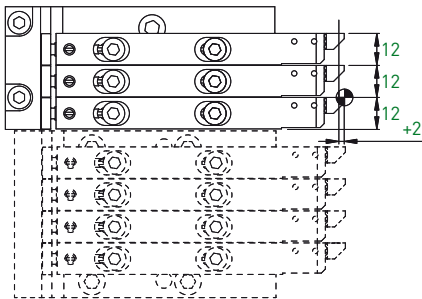


Type de machine Maschinen-Typ Type of machine	Porte-outils Halter Holders	Art. N°	Plaquettes Wendeplatten Inserts	Pages Seiten Pages
Citizen R04	ML12	ML12A-730RC-R04	731R... / 731RSF	> TOP-Line TOP-Watch
		ML12A-750RC-R04	751R... / 751RDSF	
		ML12A-740-C-R04	741 / 741SF	

Citizen R04

- + 3 outils (max 3)
- + 3 Werkzeuge (max 3)
- + 3 tools (max 3)

ML12

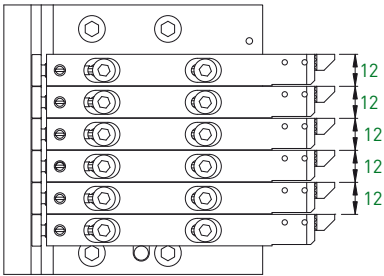
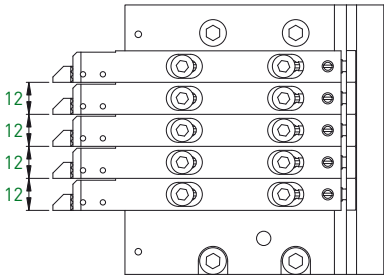


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-CITIZEN-R04-QTF3101-3T	ML12	> 14.77	-	ML12-JET-5/16	14.98

ML12

- + 1 outil (max 11)
- + 1 Werkzeug (max 11)
- + 1 tool (max 11)

Citizen R07



ML12-CITIZEN-R07-QTF4108-6T

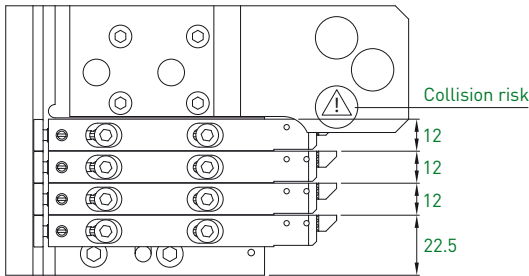
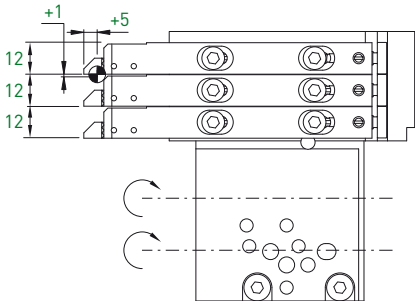
ML12-CITIZEN-R07-QTF4008-5T

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	ML12-CITIZEN-R07-QTF4008-5T	ML12	> 14.77	-	ML12-JET-5/16	14.98
6T	ML12-CITIZEN-R07-QTF4108-6T					

Citizen R07

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

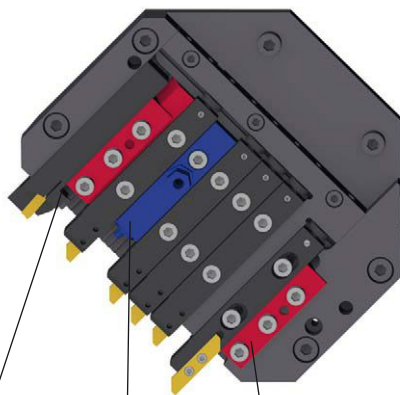
ML12



ML12-CITIZEN-R07-QTF4608-4T

ML12-CITIZEN-R07-QTF4208-3T

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
3T	ML12-CITIZEN-R07-QTF4208-3T	ML12	> 14.77	-	ML12-JET-5/16	14.98
4T	ML12-CITIZEN-R07-QTF4608-4T					



Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)



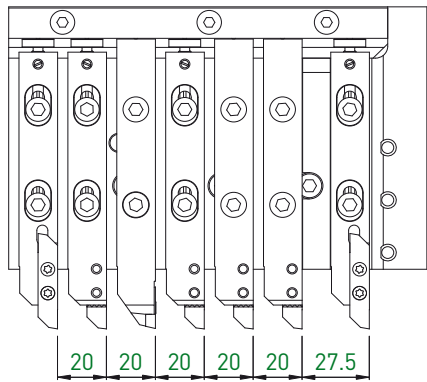
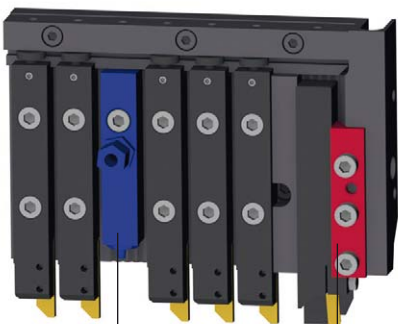
1 serrage ML16-FIX-16 pour outil $\square$ 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug $\square$ 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool $\square$ 16 mm included

			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-CITIZEN-K16	ML16	> 14.77	ML16-FIX-16/16.5	ML16-JET-7/16	14.98

Citizen L16 / L20-5M1 / 5M7

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML16



Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

- 1 serrage ML16-FIX-16 pour outil 16 mm inclus
- 1 Spannung ML16-FIX-16 für Werkzeug 16 mm inbegriffen
- 1 clamping ML16-FIX-16 for tool 16 mm included

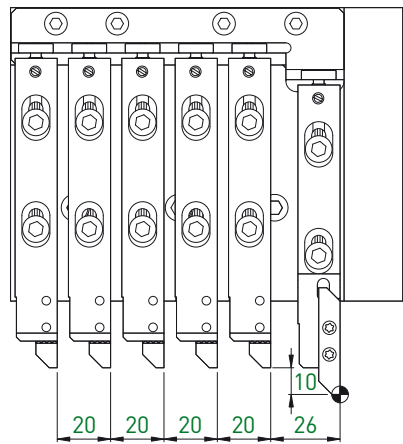
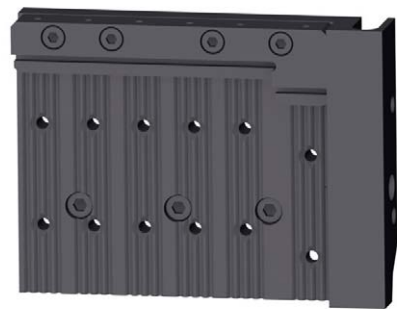


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-CITIZEN-L20	ML16	> 14.77	-	ML16-JET-7/16	14.98

ML16

- + 1 outil (max 6)
- + 1 Werkzeug (max 6)
- + 1 tool (max 6)

L20E-1M8
Citizen L20X-1M10
L20-2M8/2M12

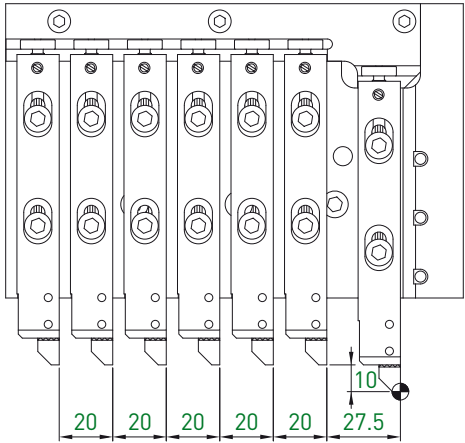
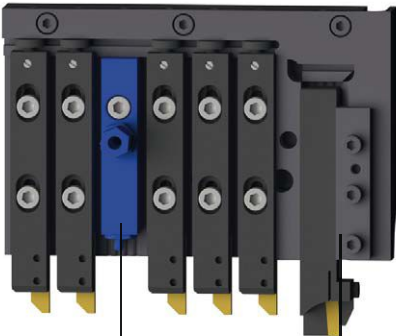


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-CITIZEN-L20E	ML16	> 14.77	-	ML16-JET-7/16	14.98

Citizen L20E-3M

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML16



Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

- 1 serrage ML16-FIX-16 pour outil $\varnothing$ 16 mm inclus
- 1 Spannung ML16-FIX-16 für Werkzeug $\varnothing$ 16 mm inbegriffen
- 1 clamping ML16-FIX-16 for tool $\varnothing$ 16 mm included



			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-L20E-GTF7812	ML16	> 14.77	-	ML16-JET-7/16	14.98

Hanwha

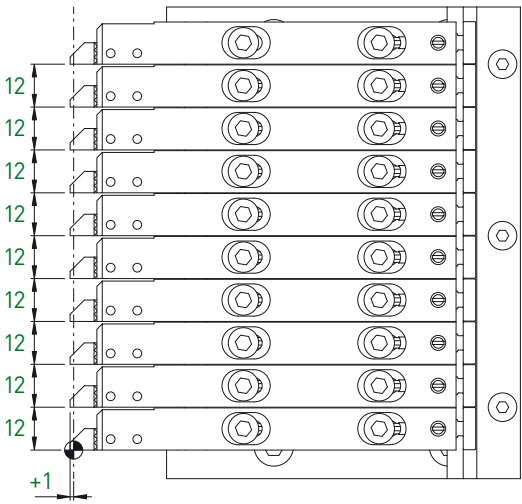
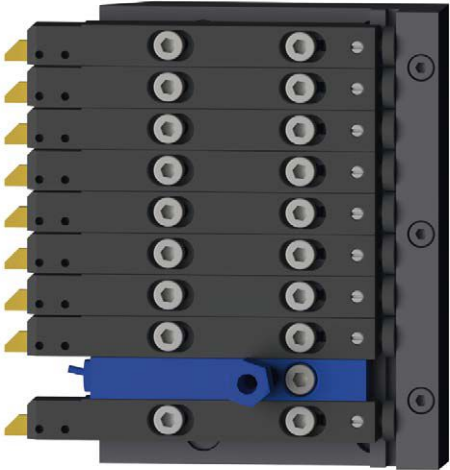
Adaptations disponibles pour les machines suivantes
Verfügbare Anpassungen für folgende Maschinen
Available adapters for the following machines

Hanwha			
Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
XD10	ML12-HANWHA-XD10	ML12	14.21
XD20M	ML12-HANWHA-XD20M		14.22
SL12/16	ML16-HANWHA-SL12/16	ML16	14.23

Hanwha XD10

- + 4 outils (max 10)
- + 4 Werkzeuge (max 10)
- + 4 tools (max 10)

ML12

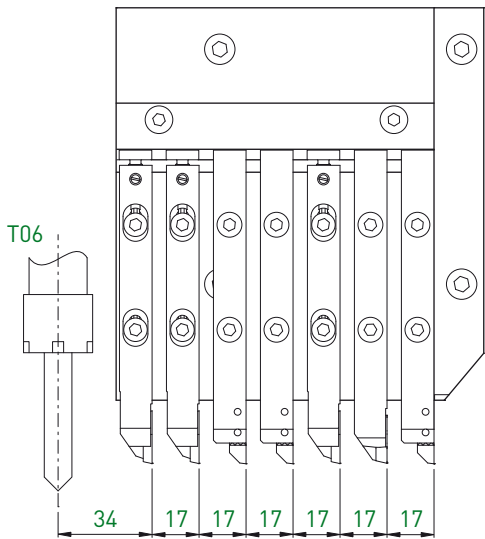


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-HANWHA-XD10	ML12	> 14.77	-	ML12-JET-5/16	14.98

ML12

- + 2 outils (max 7)
- + 2 Werkzeuge (max 7)
- + 2 tools (max 7)

Hanwha XD20M

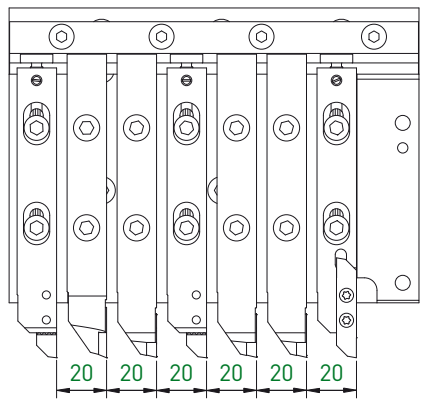


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-HANWHA-XD20M	ML12	> 14.77	-	ML12-JET-5/16	14.98

Hanwha SL12 / 16

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML16

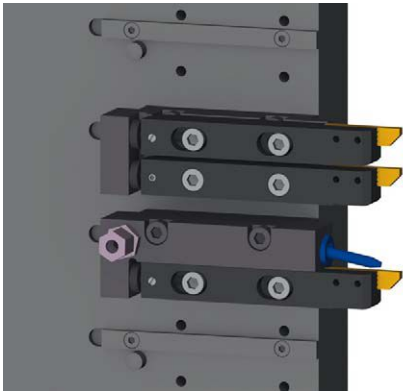


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-HANWHA-SL12/16	ML16	> 14.77	-	ML16-JET-7/16	14.98

Manurhin

Adaptations disponibles pour les machines suivantes
Verfügbare Anpassungen für folgende Maschinen
Available adapters for the following machines

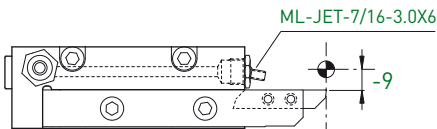
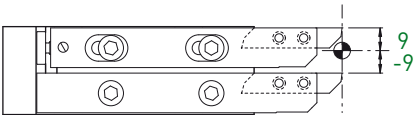
Manurhin			
Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
KMX 426/526/626/ Swingg 20-26 MM	ML16-KMX26-JET	ML16	14.25
	ML16-KMX26-DUO		



JET



DUO



JET



DUO

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	ML16-KMX26-JET	ML16	> 14.77	-	ML-JET-7/16...	14.98
DUO	ML16-KMX26-DUO				ML16-JET-7/16	

Metafil

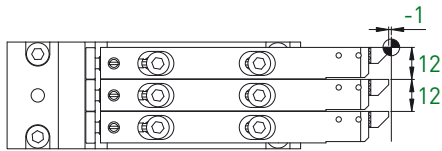
Adaptations disponibles pour les machines suivantes
Verfügbare Anpassungen für folgende Maschinen
Available adapters for the following machines

Metafil			
Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
D3/D10/D13	ML12-D10-3T	ML12	14.27

D3
Metafil D10
D13

+ 1 outil (max 3)
+ 1 Werkzeug (max 3)
+ 1 tool (max 3)

ML12



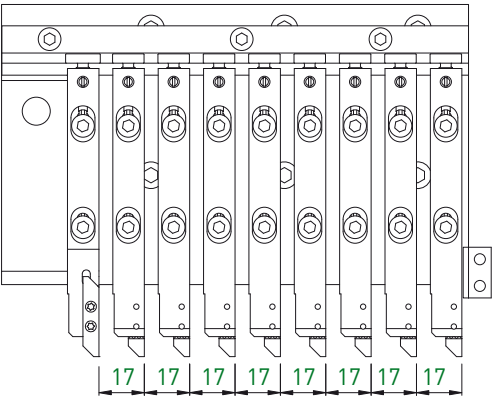
			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-D10-3T	ML12	> 14.77	-	ML12-JET-5/16	14.98

Star			
Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
SB-12RG	ML12-STAR-SB-12RG	ML12	14.29
SL7/10	ML12-STAR-SL7/10		14.30
SR-10J	ML12-STAR-SR-10J		14.31
SW-12RII	ML12-STAR-SW-12RII-2T		14.32
	ML12-STAR-SW-12RII-8T		
SA-12/SA-16/SA-16R	ML16-STAR-SA-16	ML16	14.33
SB-16	ML16-STAR-SB-16		14.34
SB-16/20RG	ML16-STAR-SB-16/20RG		14.35
SB-20C/E	ML16-STAR-SB-20C/E		14.36
SR-16R/SR-20R/SR-20RII	ML16-STAR-SR-20R		14.37
SR-20J/SR-20RIII	ML16-STAR-SR-20J		14.38
	ML16-STAR-SR-20RIII		
SR-20JII-A/B	ML16-STAR-SR-20JII-A/B		14.39
SR-20RIV	ML16-STAR-SR-20RIV-2T		14.40
	ML16-STAR-SR-20RIV-6T		
SR-32J	ML16-STAR-SR-32J		14.41
SV-12/20	ML16-STAR-SV-12/20		14.42
SV-20R	ML16-STAR-SV-20R		14.43
SW-20	ML16-STAR-SW-20-2T		14.44
	ML16-STAR-SW-20-6T		

Star SB-12RG

- + 2 outils (max 9)
- + 2 Werkzeuge (max 9)
- + 2 tools (max 9)

ML12

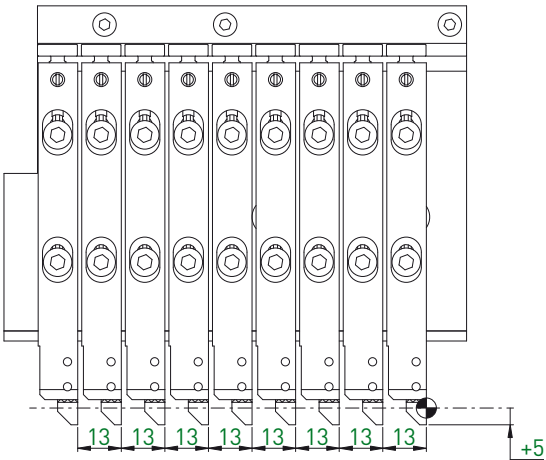
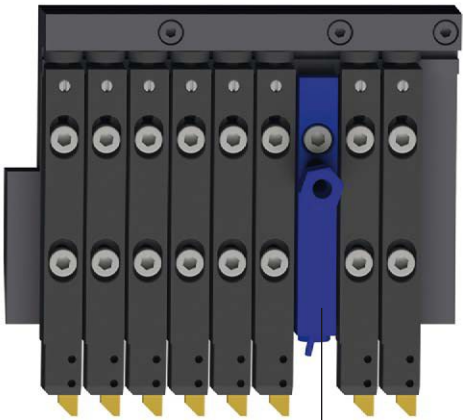


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-STAR-SB-12RG	ML12	> 14.77	-	ML12-JET-5/16	14.98

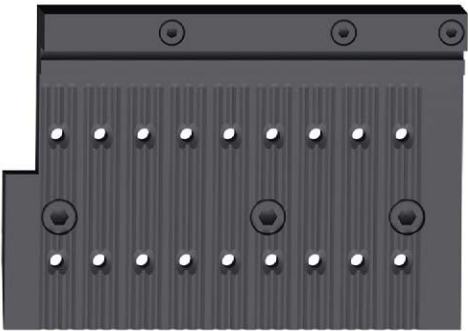
ML12

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

Star SL7/10



Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

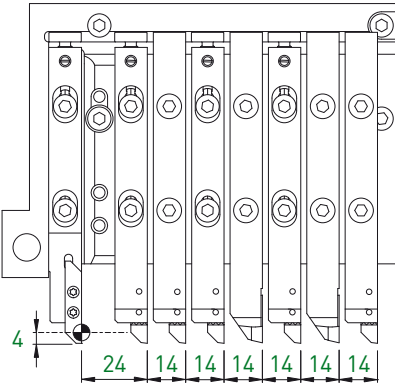


				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
9T	ML12-STAR-SL7/10	ML12	> 14.77	-	ML12-JET-5/16	14.98

Star SR-10J

- + 2 outils (max 8)
- + 2 Werkzeuge (max 8)
- + 2 tools (max 8)

ML12



- 1 serrage ML12-FIX-12 pour outil 12 mm inclus
- 1 Spannung ML12-FIX-12 für Werkzeug 12 mm inbegriffen
- 1 clamping ML12-FIX-12 for tool 12 mm included

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

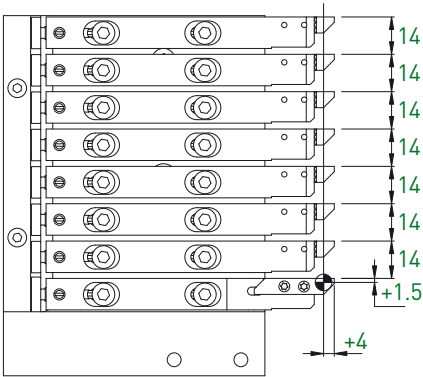
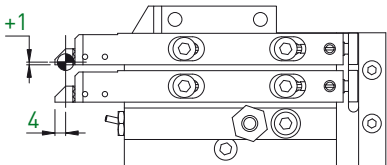
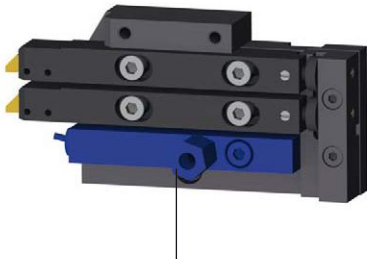


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML12-STAR-SR-10J	ML12	> 14.77	ML12-FIX-12/14	ML12-JET-5/16	14.98

ML12

- + 2 outils (max 10)
- + 2 Werkzeuge (max 10)
- + 2 tools (max 10)

Star SW-12RII



Position uniquement utilisable avec module d'arrosage, en option
Position nur mit Kühlmittelzufuhrelement verwendbar, optional
Position only with coolant supply unit usable, optional



ML12-STAR-SW-12RII-8T



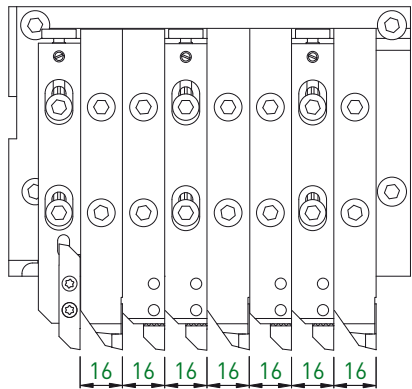
ML12-STAR-SW-12RII-2T

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	ML12-STAR-SW-12RII-2T	ML12	> 14.77	-	ML12-JET-5/16	14.98
8T	ML12-STAR-SW-12RII-8T					

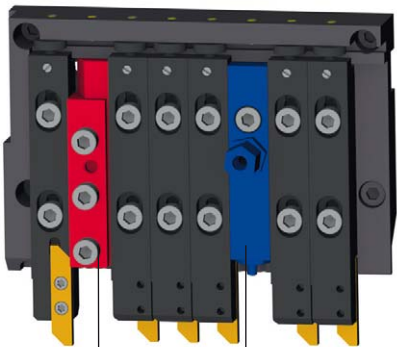
Star SA-12
SA-16
SA-16R

+ 2 outils (max 8)
+ 2 Werkzeuge (max 8)
+ 2 tools (max 8)

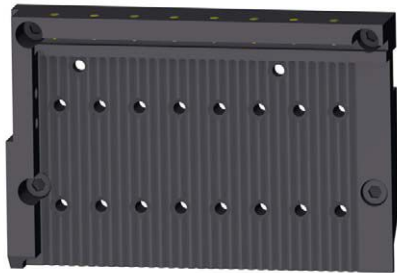
ML16



Outil 16 mm possible avec module de serrage
Werkzeug 16 mm mit Spannelement möglich
Tool 16 mm possible with clamping unit



Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

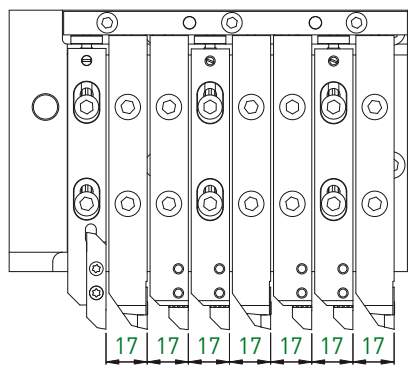


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SA-16	ML16	> 14.77	ML16-FIX-16/16	ML16-JET-7/16	14.98

ML16

- + 3 outils (max 8)
- + 3 Werkzeuge (max 8)
- + 3 tools (max 8)

Star SB-16



Outil 17 mm possible avec module de serrage
Werkzeug 17 mm mit Spannelement möglich
Tool 17 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

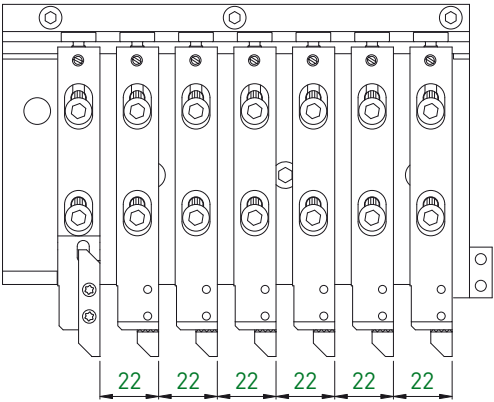


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SB-16	ML16	> 14.77	ML16-FIX-16/17	ML16-JET-7/16	14.98

Star SB-16/20RG

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML16



Outil 16 mm possible avec module de serrage
Werkzeug 16 mm mit Spannelement möglich
Tool 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

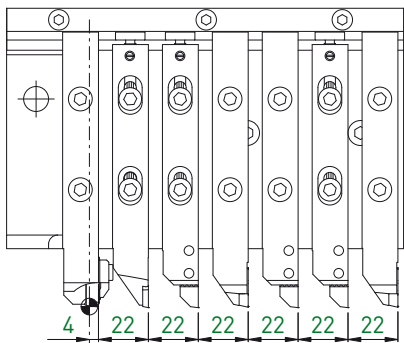


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SB-16/20RG	ML16	> 14.77	ML16-FIX-16/22	ML16-JET-7/16	14.98

ML16

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

Star SB-20C/E



Outil 16 mm possible avec module de serrage
Werkzeug 16 mm mit Spannelement möglich
Tool 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

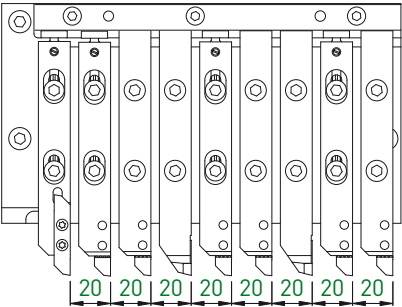


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SB20C/E	ML16	> 14.77	ML16-FIX-16/22	ML16-JET-7/16	14.98

Star SR-16R
SR-20R
SR-20RII

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

ML16



Outil 16 mm possible avec module de serrage
Werkzeug 16 mm mit Spannelement möglich
Tool 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

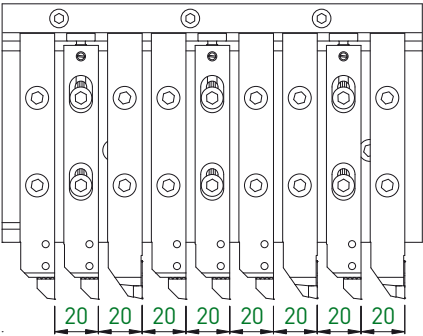
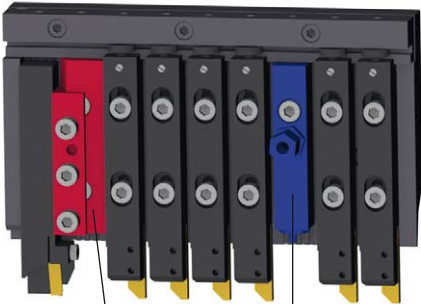


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-20R	ML16	> 14.77	ML16-FIX-16/20	ML16-JET-7/16	14.98

ML16

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

Star SR-20RIII
SR-20J



Outil 16 mm possible avec module de serrage
Werkzeug 16 mm mit Spannelement möglich
Tool 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

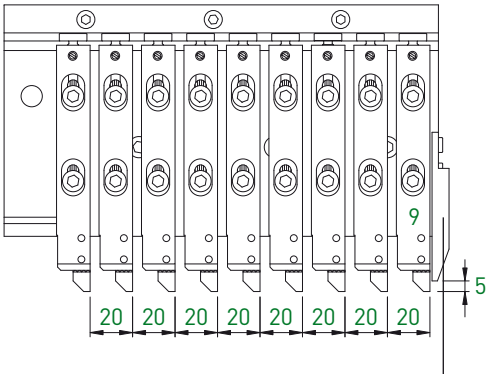


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-20RIII	ML16	> 14.77	ML16-FIX-16/20	ML16-JET-7/16	14.98
ML16-STAR-SR-20J					

Star SR20JII type A/B

- + 3 outils (max 9)
- + 3 Werkzeuge (max 9)
- + 3 tools (max 9)

ML16



Risque de collision avec outil n° 9
Kollisionsrisiko mit Werkzeug Nr. 9
Collision risk with tool no. 9

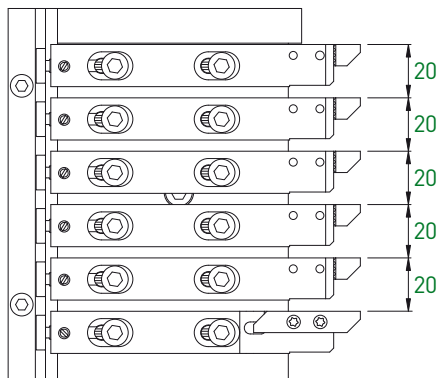
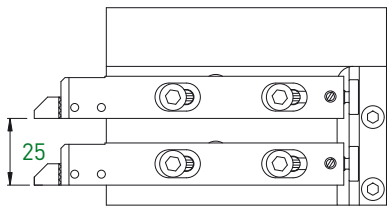


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-20JII-A/B	ML16	> 14.77	ML16-FIX-16/20	ML16-JET-7/16	14.98

ML16

- + 1 outil (max 8)
- + 1 Werkzeug (max 8)
- + 1 tool (max 8)

Star SR-20RIV



ML16-STAR-SR-20RIV-6T

ML16-STAR-SR-20RIV-2T

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	ML16-STAR-SR-20RIV-2T	ML16	> 14.77	-	ML16-JET-7/16	14.98
6T	ML16-STAR-SR-20RIV-6T					

Star SR-32J

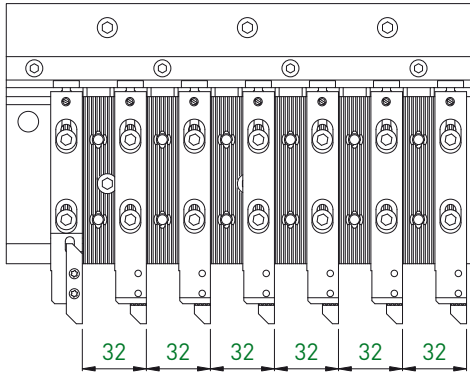
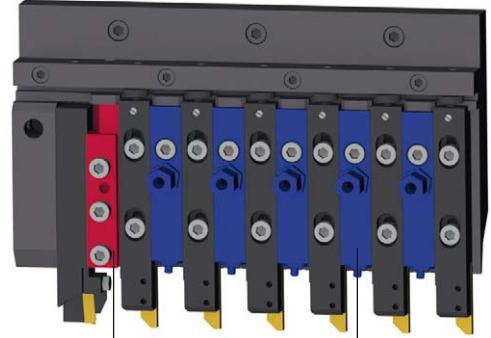
Ø max
32 mm

+ 1 outil (max 7)
+ 1 Werkzeug (max 7)
+ 1 tool (max 7)

Ø max
16 mm

+ 7 outils (max 13)
+ 7 Werkzeuge (max 13)
+ 7 tools (max 13)

ML16



Outil 16 mm possible avec module de serrage
Werkzeug 16 mm mit Spannelement möglich
Tool 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

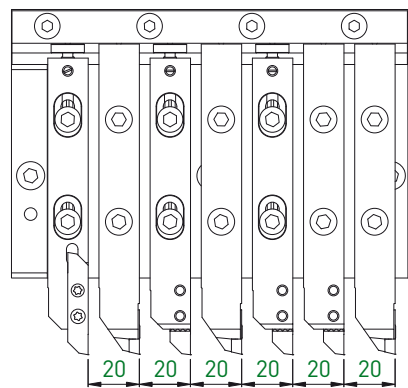


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SR-32J	ML16	> 14.77	ML16-FIX-16/16	ML16-JET-7/16	14.98

ML16

+ 2 outils (max 7)
+ 2 Werkzeuge (max 7)
+ 2 tools (max 7)

Star SV-12 / 20



Outil 16 mm possible avec module de serrage
Werkzeug 16 mm mit Spannelement möglich
Tool 16 mm possible with clamping unit

Module d'arrosage (prend la place d'un outil)
Kühlmittelzufuhrelement (nimmt den Platz eines Werkzeuges)
Coolant supply unit (takes the place of one tool)

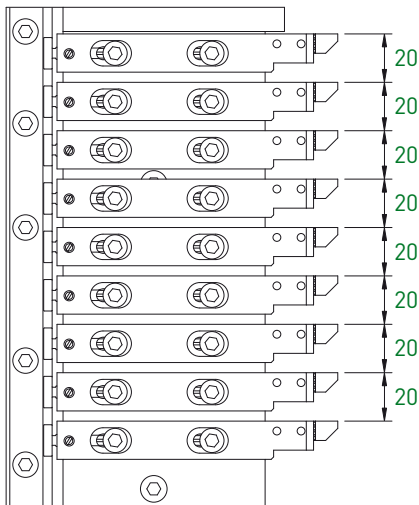


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SV-12/20	ML16	> 14.77	ML16-FIX-16/20	ML16-JET-7/16	14.98

Star SV-20R

- + 2 outils (max 9)
- + 2 Werkzeuge (max 9)
- + 2 tools (max 9)

ML16

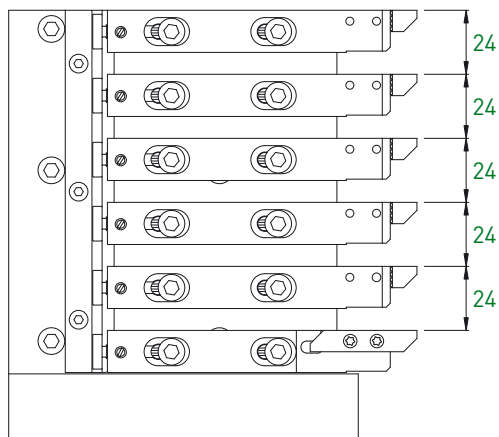
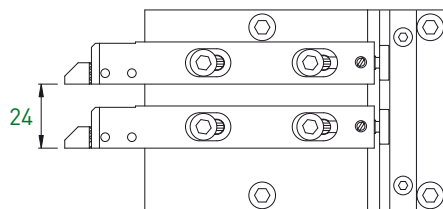


			Accessoires Zubehöre Accessories		
Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
ML16-STAR-SV-20R	ML16	> 14.77	ML16-FIX-16/20	ML16-JET-7/16	14.98

ML16

- + 1 outil (max 8)
- + 1 Werkzeug (max 8)
- + 1 tool (max 8)

Star SW-20



ML16-STAR-SW-20-6T



ML16-STAR-SW-20-2T

Star SW-20

- + 1 outil (max 8)
- + 1 Werkzeug (max 8)
- + 1 tool (max 8)

ML16



ML16-STAR-SW-20-6T



ML16-STAR-SW-20-2T

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	ML16-STAR-SW-20-2T	ML16	> 62	-	ML16-JET-7/16	14.98
6T	ML16-STAR-SW-20-6T			ML16-FIX-16/24		

Tornos

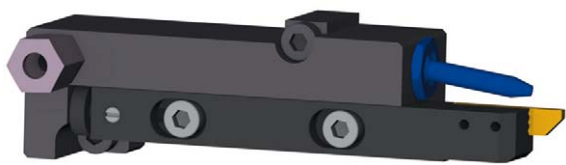
Adaptations disponibles pour les machines suivantes

Verfügbare Anpassungen für folgende Maschinen

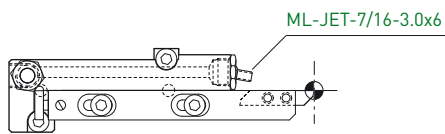
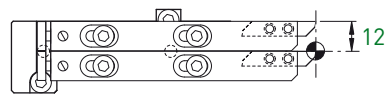
Available adapters for the following machines

Tornos			
Machine Maschine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
DEC07/10 - EvoDECO 10	ML12-DECO10-DUO	ML12	14.47
	ML12-DECO10-JET		
SWISS-NANO /SWISS-NANO 7	ML12-SWISS-NANO-2T		14.50
	ML12-SWISS-NANO-3T		
	ML12-SWISS-NANO-6T		
SWISS-NANO 7	ML12-SWISS-NANO-7-4T		14.48
DT13	ML-DT13-2052104-9T		14.51
	ML12-DT13-2020206-9T		
CT20	ML12-CT20-2020019-7T		14.52
GT13	ML12-GT13-389104-3T		14.53
	ML12-GT13-390224-5T		
	ML12-GT13-390223-7T		
GT26	ML16-GT26-386210-5T	ML16	14.54
	ML16-GT26-386209-6T		
GT32	ML16-GT32-389210-4T		14.56
	ML16-GT32-389209-5T		
DEC013- EvoDEC016	ML16-DEC013-DUO		14.58
	ML16-DEC013-JET		
DEC020/26 - EvoDEC020/32	ML16-DEC020-DUO		14.60
	ML16-DEC020-JET		
SIGMA20/32	ML16-S20-DUO		14.61
	ML16-S20-JET		
SWISS ST26	ML16-SWISS-ST26-DUO		14.62
	ML16-SWISS-ST26-JET		
DT26	ML16-DT26-2020206-7T		14.63
	ML16-DT26-2052096-5T		

JET



DUO



JET



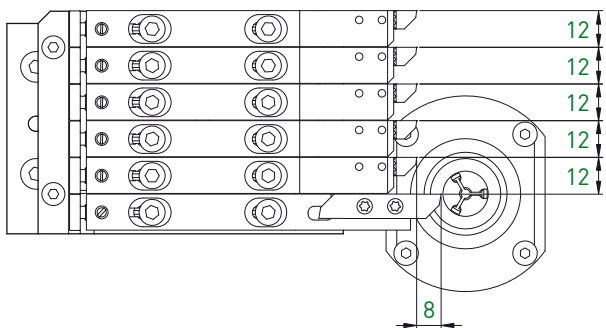
DUO

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	ML12-DEC010-JET	ML12	> 14.77	-	ML-JET-7/16...	14.98
DUO	ML12-DEC010-DUO				ML12-JET-5/16	

ML12

- + 2 outils (max 6)
- + 2 Werkzeuge (max 6)
- + 2 tools (max 6)

Tornos SwissNano
SwissNano 7



6T

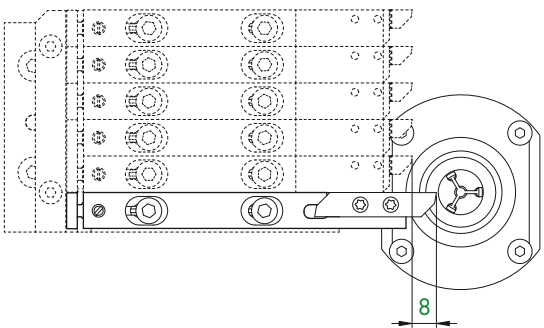


6T

				Accessoires Zubehöre Accessories		
Type Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
6T	ML12-SWISS-NANO-6T	ML12	> 14.77	-	ML12-JET-5/16	14.98

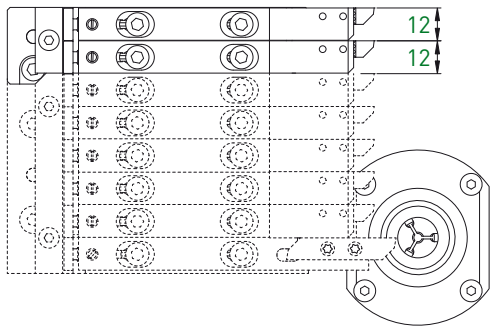
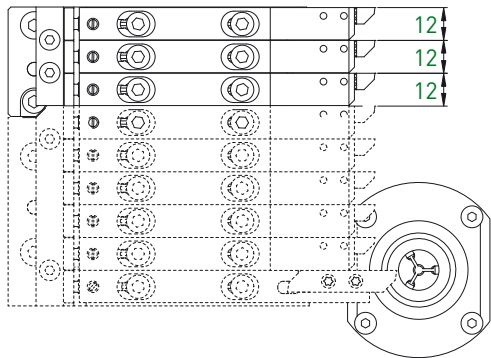
ML12

Tornos SwissNano
SwissNano 7

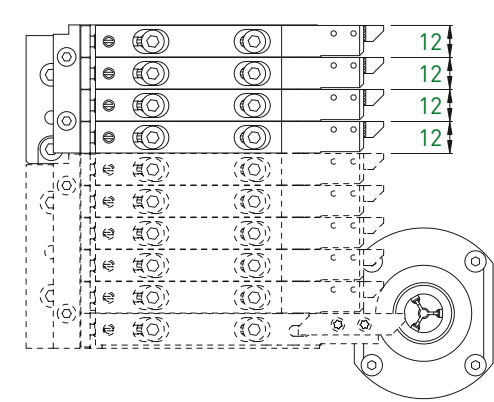


avec canon mit Führungsbuchse with guide bush	avec pince mit Spannzange with collet
<p>ML12A-730RC-Swiss-Nano</p> <p>Ligne d'outil Werkzeugnullpunkt Tool ref. line</p>	
<p>ML12A-750RC-Swiss-Nano</p> <p>Ligne d'outil Werkzeugnullpunkt Tool ref. line</p>	
<p>ML12A-740-C-Swiss-Nano</p> <p>Ligne d'outil Werkzeugnullpunkt Tool ref. line</p>	
<p>ML12A-770RC-Swiss-Nano</p> <p>Ligne d'outil Werkzeugnullpunkt Tool ref. line</p>	

Type de machine Maschinen-Typ Type of machine	Porte-outils Halter Holders	Art. N°	Plaquettes Wendeplatten Inserts	Pages Seiten Pages
SwissNano	ML12	ML12A-730RC-SWISS-NANO	731R... / 731RSF	> TOP-Line TOP-Watch
		ML12A-750RC-SWISS-NANO	751R... / 751RDSF	
		ML12A-740-C-SWISS-NANO	741... / 741SF	
		ML12A-770RC-SWISS-NANO	771R...	> TOP-Line



				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
2T	ML12-SWISS-NANO-2T	ML12	> 14.77	-	ML12-JET-5/16	14.98
3T	ML12-SWISS-NANO-3T					

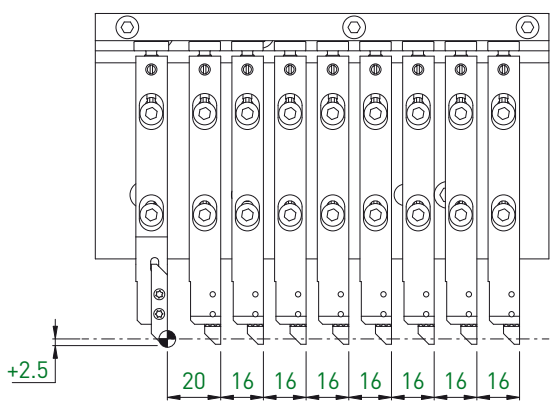


				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
4T	ML12-SWISS-NANO-7-4T	ML12	> 14.77	-	ML12-JET-5/16	14.98

ML12

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

Tornos DT 13
DT 13 (S-HP)

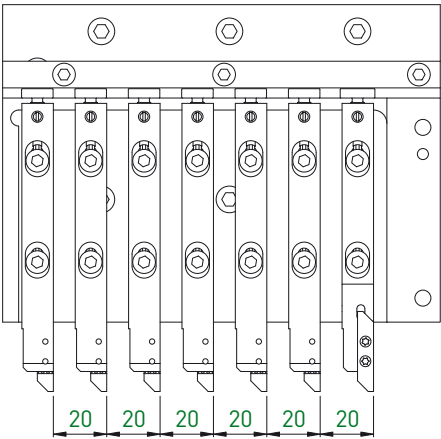


				Accessoires Zubehöre Accessories			
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit	Page Seite Page	Type machine Maschinentyp Machine type
9T	ML12-DT13-2020206-9T	ML12	> 14.77	-	ML12-JET-5/16	14.98	DT 13
9T	ML12-DT13-2052104-9T	ML12	> 14.77	-	ML12-JET-5/16	14.98	DT 13 (S-HP)

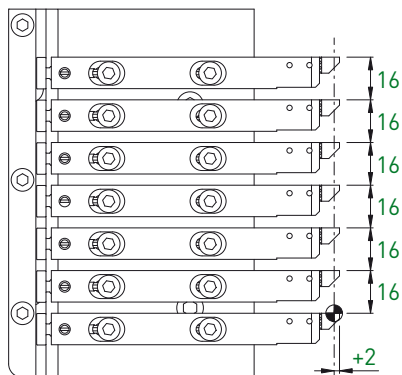
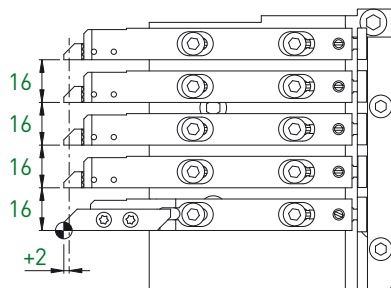
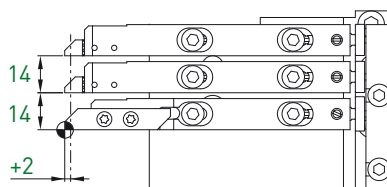
Tornos CT 20

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

ML12



				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
7T	ML12-CT20-2020019-7T	ML12	> 14.77	-	ML12-JET-5/16	14.98





ML12-GT13-390223-7T

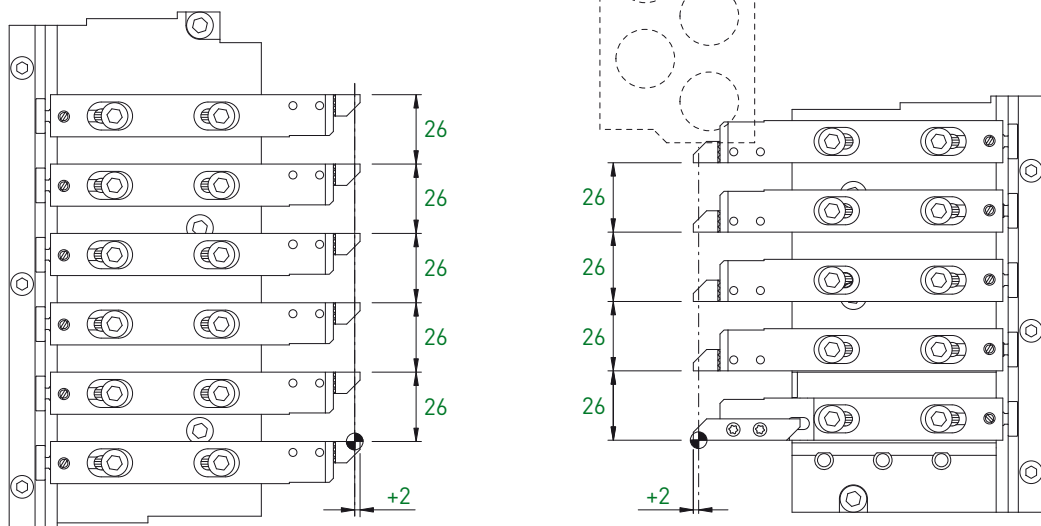


ML12-GT13-390224-5T



ML12-GT13-389104-3T

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
3T	ML12-GT13-389104-3T	ML12	> 14.77	-	ML12-JET-5/16	14.98
5T	ML12-GT13-390224-5T					
7T	ML12-GT13-390223-7T					



1 serrage ML16-FIX-16 pour outil $\varnothing$ 16 mm inclus
1 Spannung ML16-FIX-16 für Werkzeug $\varnothing$ 16 mm inbegriffen
1 clamping ML16-FIX-16 for tool $\varnothing$ 16 mm included

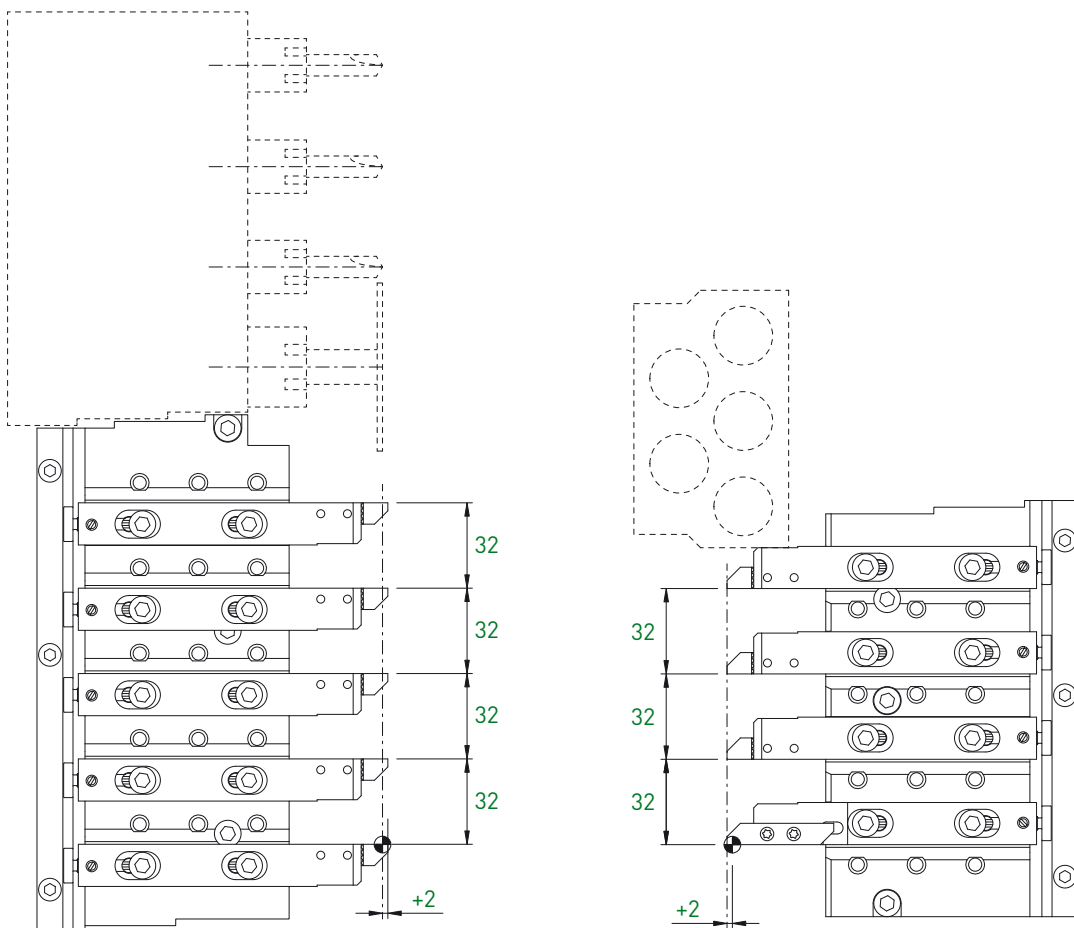


ML16-GT26-386209-6T

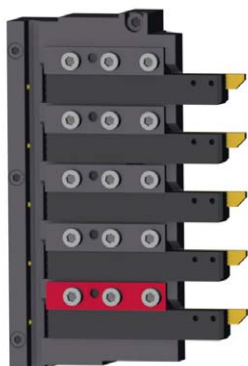


ML16-GT26-386210-5T

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	ML16-GT26-386210-5T	ML16	> 14.77	-	ML16-JET-7/16	14.98
6T	ML16-GT26-386209-6T					



Holder ML16



Holder □16



Holder ML16



Holder □16

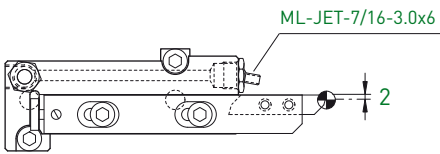
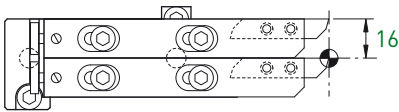


ML16-GT32-386209-5T



ML16-GT32-386210-4T

				Accessoires Zubehöre Accessories			
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit		Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Pages Seiten Pages
4T	ML16-GT32-386210-4T	ML16	> 14.77	1x inclus 1x inbegriffen 1x included	Option ML16-FIX-16	ML16-JET-7/16	14.98
5T	ML16-GT32-386209-5T						



JET



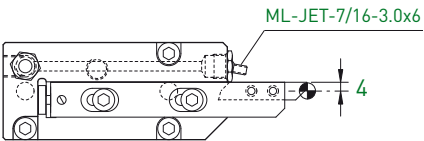
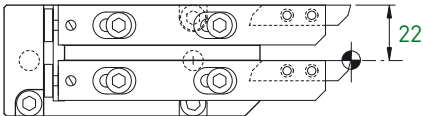
DUO

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	ML16-DEC013-JET	ML16	> 14.77	-	ML-JET-7/16...	14.98
DUO	ML16-DEC013-DUO				ML16-JET-7/16	14.98

JET



DUO



JET



DUO

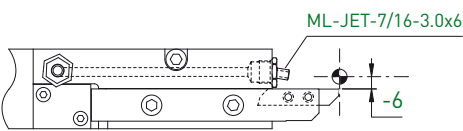
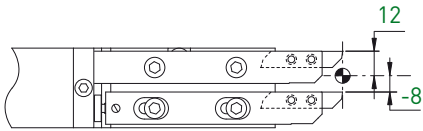


				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	ML16-DEC020-JET	ML16	> 14.77	-	ML-JET-7/16...	14.98
DUO	ML16-DEC020-DUO				ML16-JET-7/16	14.98

JET



DUO

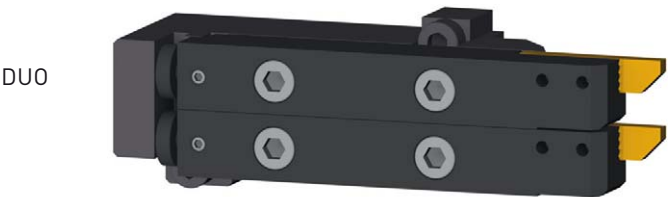
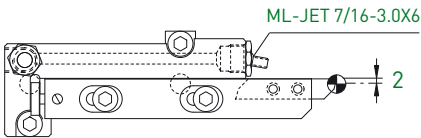
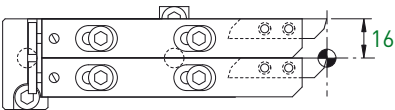


JET



DUO

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	ML16-S20-JET	ML16	> 14.77	-	ML-JET-7/16...	14.98
DUO	ML16-S20-DUO				ML16-JET-7/16	14.98



JET



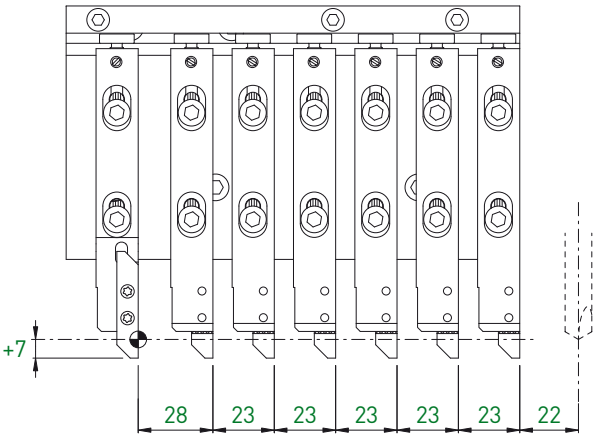
DUO

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
JET	ML16-SWISS-ST26-JET	ML16	> 14.77	-	ML-JET-7/16...	14.98
DUO	ML16-SWISS-ST26-DUO				ML16-JET-7/16	14.98

ML16

- + 1 outil (max 7)
- + 1 Werkzeug (max 7)
- + 1 tool (max 7)

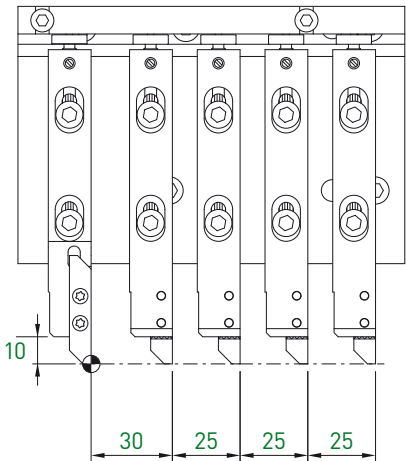
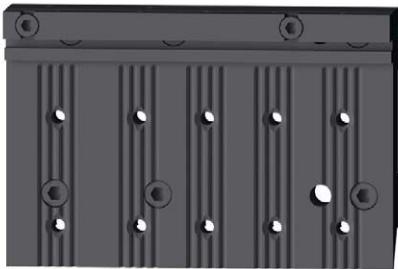
Tornos DT 26



				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
7T	ML16-DT26-2020206-7T	ML16	> 14.77	-	ML16-JET-7/16	14.98

Tornos DT 26

ML16



Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Accessoires Zubehöre Accessories		
				Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
5T	ML16-DT26-2052096-5T	ML16	> 14.77	-	ML16-JET-7/16	14.98

Tsugami

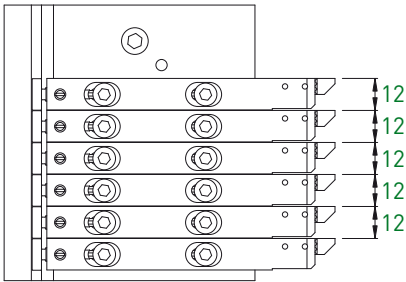
Adaptations disponibles pour les machines suivantes
Verfügbare Anpassungen für folgende Maschinen
Available adapters for the following machines

Tsugami			
Machine Machine Machine	Adaptations Anpassungen Adapters	Type Typ Type	Page Seite Page
B074	ML12-B074-1-6T	ML12	14.67
B075	ML12-B075-1-8T		14.68
P034	ML12-P034-1-5T		14.69
	ML12-P034-1-7T		14.70
	ML12-P034-2-4T		14.69
	ML12-P034-2-10T		14.70
P034-P036	0400-ML12-R0000C-3T		14.72
	0400-ML12-R0000C-5T		14.73

Tsugami B074

- + 3 outils (max 6)
- + 3 Werkzeuge (max 6)
- + 3 tools (max 6)

ML12

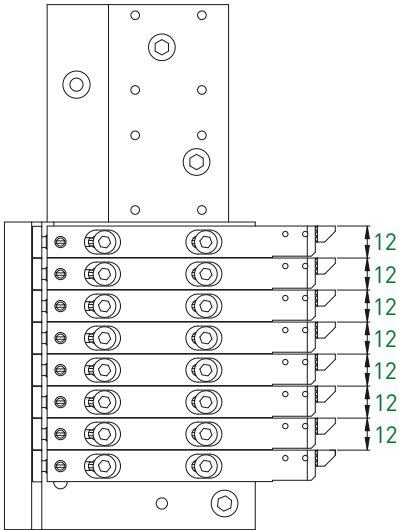


				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelezufuhrelement Coolant supply unit	Page Seite Page
6T	ML12-B074-1-6T	ML12	> 14.77	-	ML12-JET-5/16	14.98

ML12

- + 5 outils (max 8)
- + 5 Werkzeuge (max 8)
- + 5 tools (max 8)

Tsugami B075

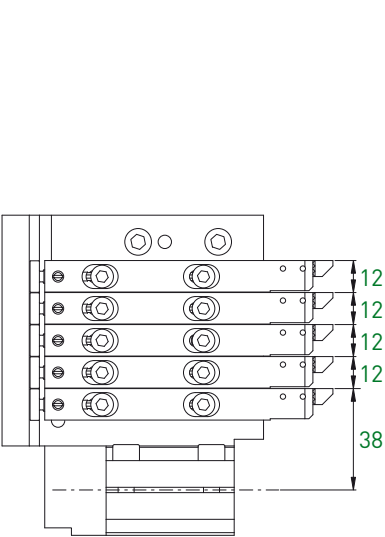
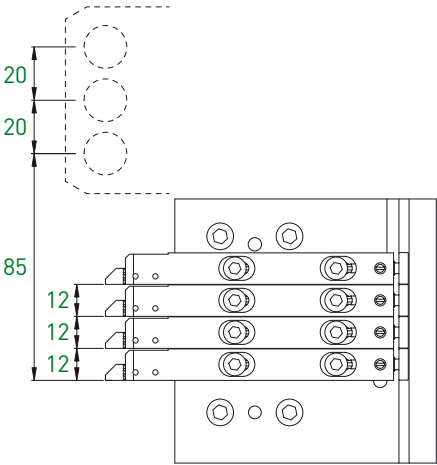


				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
8T	ML12-B075-1-8T	ML12	> 14.77	-	ML12-JET-5/16	14.98

Tsugami P034

+ 3 outils (max 9)
+ 3 Werkzeuge (max 9)
+ 3 tools (max 9)

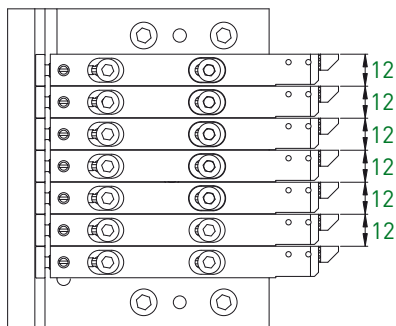
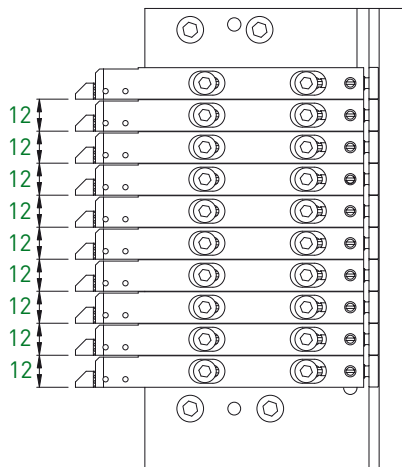
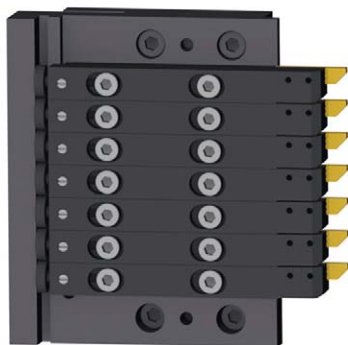
ML12



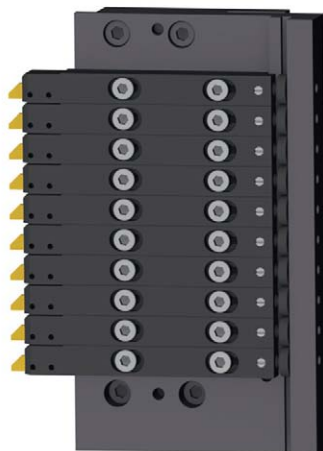
ML12-P034-1-5T

ML12-P034-2-4T

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
4T	ML12-P034-2-4T	ML12	> 14.77	-	ML12-JET-5/16	14.98
5T	ML12-P034-1-5T					



ML12-P034-1-7T



ML12-P034-2-10T



ML12-P034-1-7T



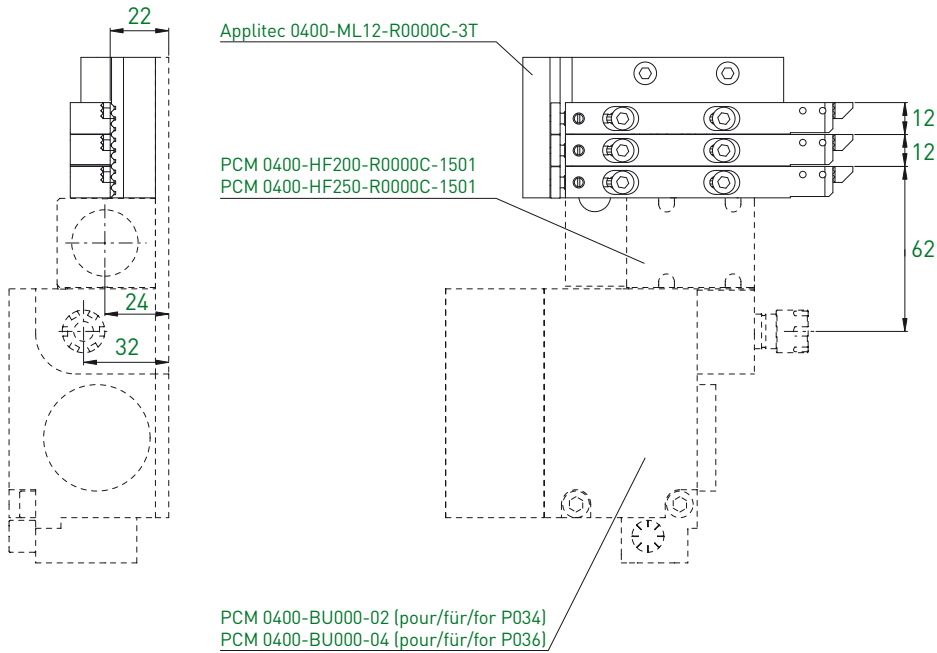
ML12-P034-2-10T

				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
7T	ML12-P034-1-7T	ML12	> 14.77	-	ML12-JET-5/16	14.98
10T	ML12-P034-2-10T					

ML12

Adaptation compatible aux modules PCM
Kompatible Anpassung für die PCM-Module
Compatible adaptation to the PCM modules

+ 1 outil
+ 1 Werkzeug
+ 1 tool
Tsugami P034-P036



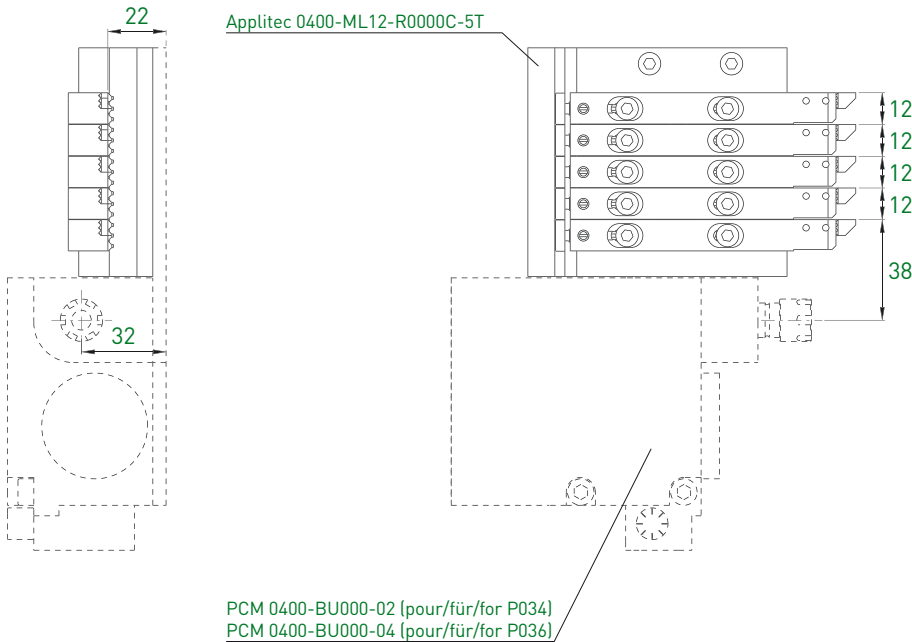
				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelzufuhrelement Coolant supply unit	Page Seite Page
3T	0400-ML12-R0000C-3T	ML12	> 14.77	-	ML12-JET-5/16	14.98

Tsugami P034-P036

Adaptation compatible aux modules PCM
Kompatible Anpassung für die PCM-Module
Compatible adaptation to the PCM modules

+ 1 outil
+ 1 Werkzeug
+ 1 tool

ML12



				Accessoires Zubehöre Accessories		
Type Typ Type	Art. N°	Porte-outils Halter Holders	Pages Seiten Pages	Module de serrage Spannelement Clamping unit	Module d'arrosage Kühlmittelfzufuhrelement Coolant supply unit	Page Seite Page
5T	0400-ML12-R0000C-5T	ML12	> 14.77	-	ML12-JET-5/16	14.98

Les différents types de porte-outils ML12 / ML16
Die verschiedenen Haltertypen ML12 / ML16
The various types of holders ML12 / ML16

Type Standard

ML...A-740



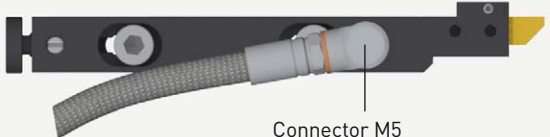
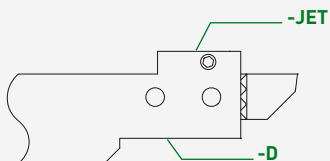
Type -D

ML...A-740-D



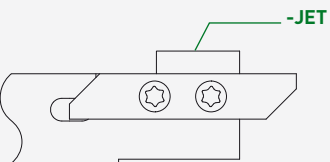
Type -JET-D

ML...A-740-JET-D



Type -JET

ML...A-740-JET

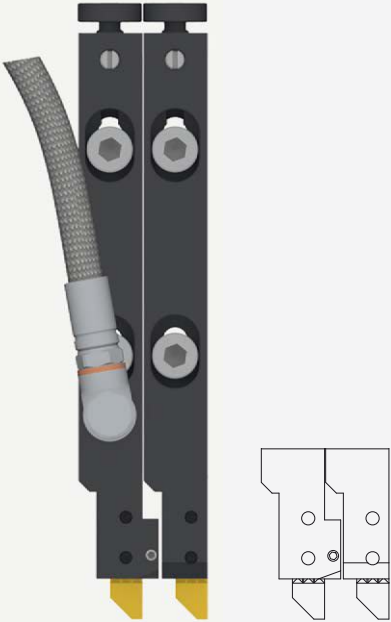
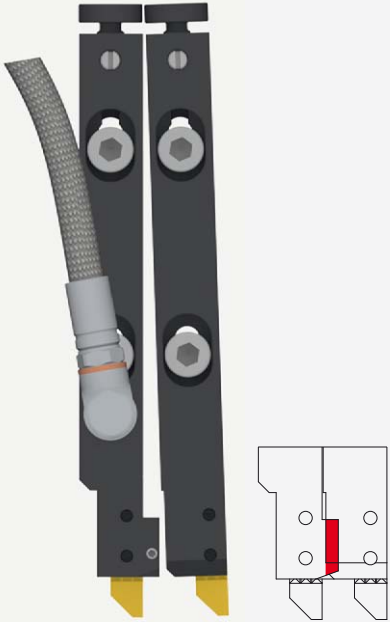
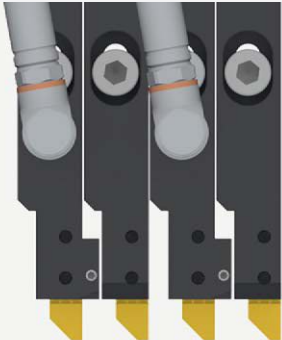


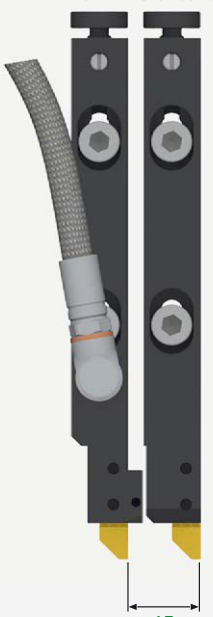
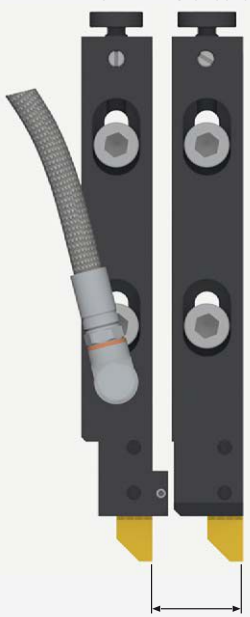
Porte-outils

Halter
Holders

Informations techniques

Technische Informationen
Technical information

Compatibilité Kompatibilität Compatibility	
OK	NOT OK
<p>-JET-D -D ✓</p> 	<p>-JET-D -Standard ✗</p> 
MIX	TYPE D
<p>-Standard -JET-D -D ✓</p> 	<p>-JET-D -D -JET-D -D ✓</p> 

Exceptions Ausnahmen Exceptions	
Exception ML12	Exception ML16
<p>-JET-D -JET -Standard</p>  <p>15</p> <p>≥ 15 mm = Total compatibility</p>	<p>-JET-D -JET -Standard</p>  <p>20</p> <p>≥ 20 mm = Total compatibility</p>

JET-Line:

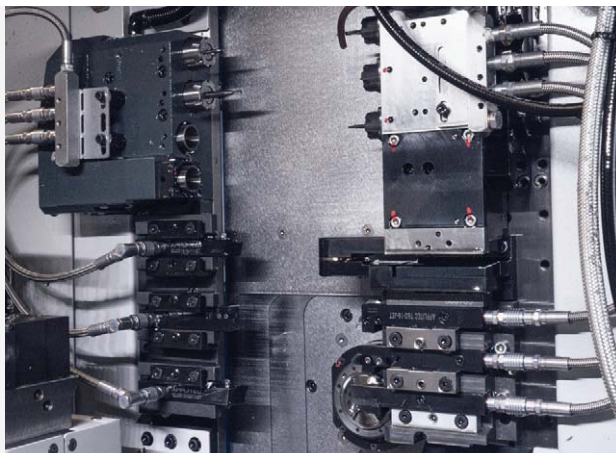
Système de distribution du liquide de refroidissement pour haute pression
Voir chapitre JET-Line

JET-Line:

Kühlmittelverteilungssystem für hohen Druck
Siehe Kapitel JET-Line

JET-Line:

Coolant distribution system for high pressure
See chapter JET-Line



Porte-outils

Halter
Holders

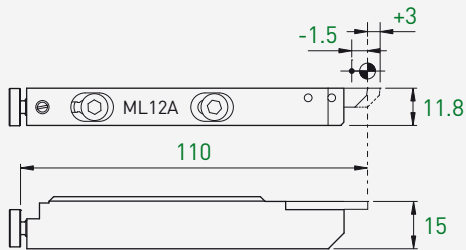
ML12 / ML16

Système de fixation
Befestigungssystem
Clamping system

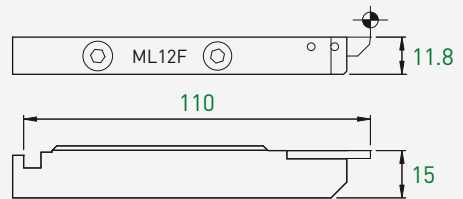
A = réglable
einstellbar
adjustable

F = longueur fixe
fixlänge
fixed length

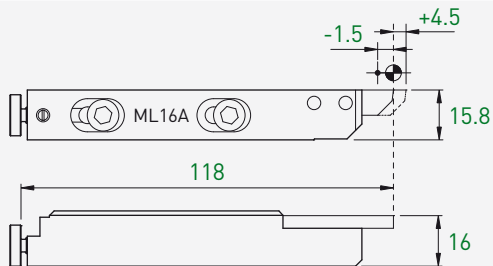
ML12A



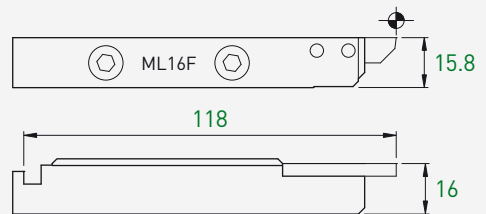
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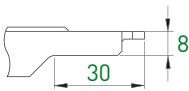


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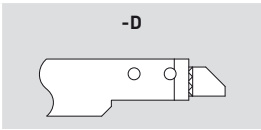


ML16F

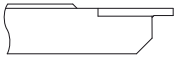




TOP-Line
731-737

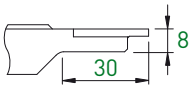


Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
-	ML12A-730-C-D	-



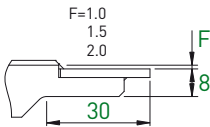
TOP-Line
741-747

Standard	-D	-JET-D
ML12	ML12	ML12
ML12A-740	ML12A-740-D	ML12A-740-JET-D
ML12F-740	ML12F-740-D	-
ML16	ML16	ML16
ML16A-740	ML16A-740-D	ML16A-740-JET-D
ML16F-740	-	-



TOP-Line
741-747

ML12	ML12	ML12
ML12A-740-C	ML12A-740-C-D	ML12A-740-C-JET-D
ML12F-740-C	ML12F-740-C-D	-

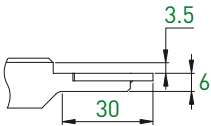


TOP-Line
741-747

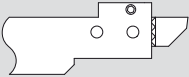
ML12	ML12	ML12
ML12A-740-ZD1.0-C	-	-
ML12A-740-ZD1.5-C	-	-
ML12A-740-ZD2.0-C	-	-

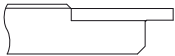
Porte-plaquettes
WSP-Halter
Insert holders

TOP-Line



TOP-Line
741

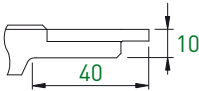
Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-740-C-R04	-	-
ML12A-740-C-SWISS-NANO	-	-



TOP-Line
761-767

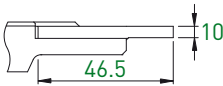
ML12	ML12	ML12
ML12A-760	ML12A-760-D	ML12A-760-JET-D
ML12F-760	ML12F-760-D	-

ML16	ML16	ML16
ML16A-760	ML16A-760-D	ML16A-760-JET-D
ML16F-760	-	-



TOP-Line
761-767

ML16	ML16	ML16
ML16A-760-C	ML16A-760-C-D	-
ML16F-760-C	-	-

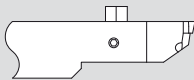


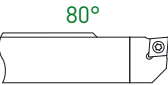
TOP-Line
781

ML16	ML16	ML16
-	ML16A-780-C-D	-

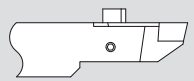


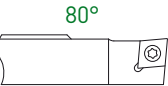
TURN-Line
347-349

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-340	ML12A-340-D	ML12A-340-JET-D
ML12F-340	ML12F-340-D	-
ML16	ML16	ML16
ML16A-340	ML16A-340-D	ML16A-340-JET-D
ML16F-340	-	-

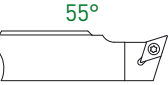


ISO-Line
CC...-0602..

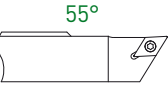
Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-SCLCR06	ML12A-SCLCR06-D	ML12A-SCLCR06-JET-D
ML12F-SCLCR06	ML12F-SCLCR06-D	-
ML16	ML16	ML16
ML16A-SCLCR06	ML16A-SCLCR06-D	ML16A-SCLCR06-JET-D
ML16F-SCLCR06	ML16F-SCLCR06-D	-



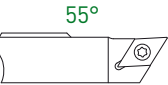
ISO-Line
CC...09T3..



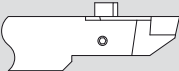
ISO-Line
DC...0702..



ISO-Line
DC...0702..



ISO-Line
DC...11T3..

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-SCLCR09	ML12A-SCLCR09-D	ML12A-SCLCR09-JET-D
ML12F-SCLCR09	ML12F-SCLCR09-D	-
ML16	ML16	ML16
ML16A-SCLCR09	ML16A-SCLCR09-D	ML16A-SCLCR09-JET-D
ML16F-SCLCR09	ML16F-SCLCR09-D	-

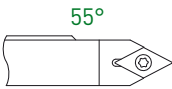
ML16	ML16	ML16
ML16A-SDHCR07	-	ML16A-SDHCR07-JET-D

ML12	ML12	ML12
ML12A-SDJCR07	ML12A-SDJCR07-D	ML12A-SDJCR07-JET-D
ML12F-SDJCR07	ML12F-SDJCR07-D	-

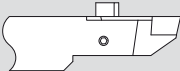
ML16	ML16	ML16
ML16A-SDJCR07	ML16A-SDJCR07-D	ML16A-SDJCR07-JET-D
ML16F-SDJCR07	ML16F-SDJCR07-D	-

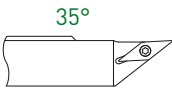
ML12	ML12	ML12
ML12A-SDJCR11	ML12A-SDJCR11-D	ML12A-SDJCR11-JET-D
ML12F-SDJCR11	ML12F-SDJCR11-D	-

ML16	ML16	ML16
ML16A-SDJCR11	ML16A-SDJCR11-D	ML16A-SDJCR11-JET-D
ML16F-SDJCR11	ML16F-SDJCR11-D	-



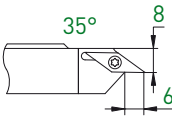
ISO-Line
DC...11T3..

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-SDNCN11	ML12A-SDNCN11-D	-
ML12F-SDNCN11	ML12F-SDNCN11-D	-
ML16	ML16	ML16
ML16A-SDNCN11	ML16A-SDNCN11-D	-
ML16F-SDNCN11	ML16F-SDNCN11-D	-



ISO-Line
VC...1103..

ML12	ML12	ML12
ML12A-SVJCR11	ML12A-SVJCR11-D	ML12A-SVJCR11-JET-D
ML12F-SVJCR11	ML12F-SVJCR11-D	-
ML16	ML16	ML16
ML16A-SVJCR11	ML16A-SVJCR11-D	ML16A-SVJCR11-JET-D
ML16F-SVJCR11	ML16F-SVJCR11-D	-

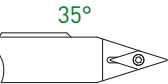


ISO-Line
VC...1103..

ML12	ML12	ML12
ML12A-SV-CR11	ML12A-SV-CR11-D	-
ML16	ML16	ML16
ML16A-SV-CR11	ML16A-SV-CR11-D	ML16A-SV-CR11-JET-D

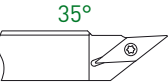
Porte-plaquettes
WSP-Halter
Insert holders

ISO-Line



ISO-Line
VC...-1103..

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-SVVCN11	ML12A-SVVCN11-D	ML12A-SVVCN11-JET-D
ML12F-SVVCN11	ML12F-SVVCN11-D	-
ML16	ML16	ML16
ML16A-SVVCN11	ML16A-SVVCN11-D	ML16A-SVVCN11-JET-D
ML16F-SVVCN11	ML16F-SVVCN11-D	-

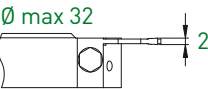


ISO-Line
VC...-1303..

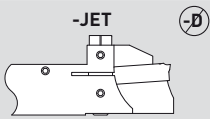
ML12	ML12	ML12
-	ML12A-SVJCR13-D	-
ML16	ML16	ML16
-	ML16A-SVJCR13-D	ML16A-SVJCR13-JET-D

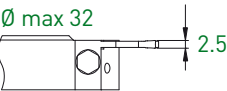
Porte-plaquettes
WSP-Halter
Insert holders

EVOCUT-Line

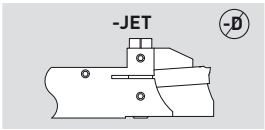


EVOCUT-Line
ET20..

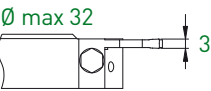
		
Art. N°	Art. N°	Art. N°
ML16	ML16	ML16
-	-	ML16A-ET20-JET32



EVOCUT-Line
ET25..

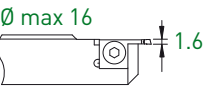


Art. N°	Art. N°	Art. N°
ML16	ML16	ML16
-	-	ML16A-ET25-JET32



EVOCUT-Line
ET30..

ML16	ML16	ML16
-	-	ML16A-ET30-JET32



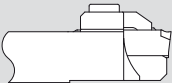
CUT-Line
CUT16..

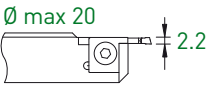
Standard		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-CUT16	-	-
ML12F-CUT16	-	-
ML16	ML16	ML16
ML16A-CUT16	-	-
ML16F-CUT16	-	-

Porte-plaquettes

WSP-Halter
Insert holders

CUT-Line

Standard		
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-CUT22	-	-
ML12F-CUT22	-	-
ML16	ML16	ML16
ML16A-CUT22	-	-
ML16F-CUT22	-	-



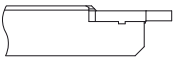
CUT-Line
CUT22..

Porte-plaquettes

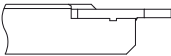
WSP-Halter
Insert holders

PRO-Line

	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
-	ML12A-640-D	ML12A-640-JET-D
ML16	ML16	ML16
-	ML16A-640-D	ML16A-640-JET-D



PRO-Line
642-647



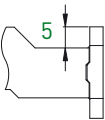
PRO-Line
661

	-D	-JET-D
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
-	ML12A-660-D	ML12A-660-JET-D
ML16	ML16	ML16
-	ML16A-660-D	ML16A-660-JET-D



ECO-Line
261-266

Standard	-D	-JET-D
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-260	ML12A-260-D	ML12A-260-JET-D
ML12F-260	ML12F-260-D	-
ML16	ML16	ML16
ML16A-260	ML16A-260-D	ML16A-260-JET-D
ML16F-260	-	-
ML12	ML12	ML12
ML12A-250RFG	-	-

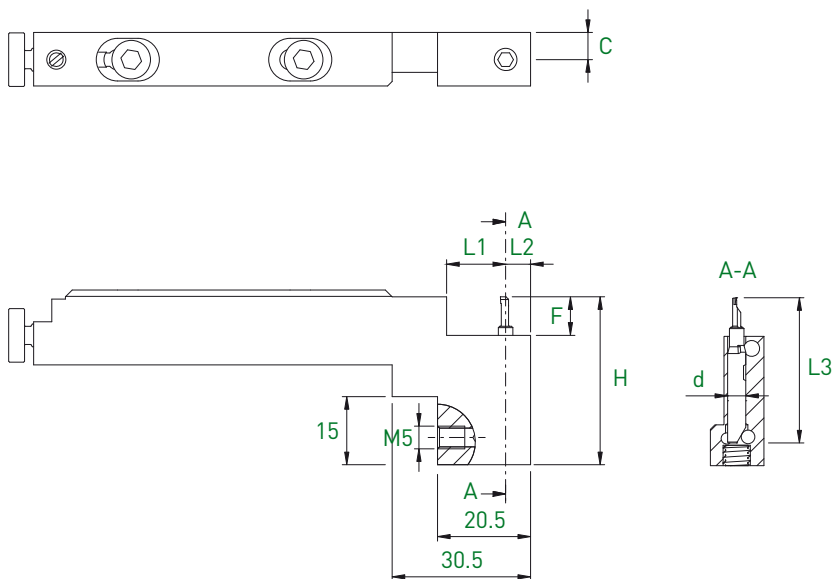


ECO-Line
251RFG

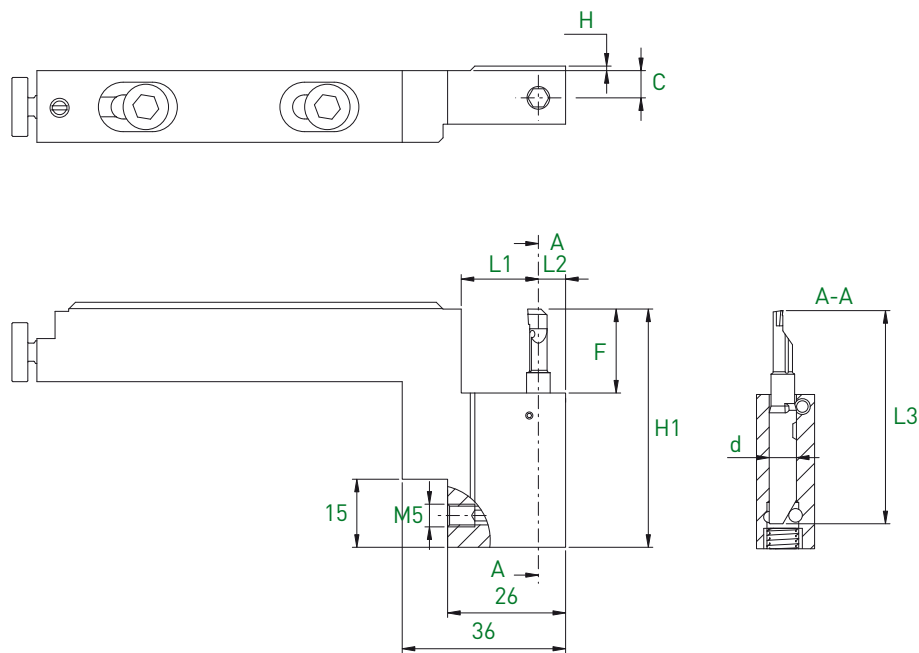
Porte-outils

Halter
Holders

IN-Line



								ML12
d	Compatible bars	L3	F	H	C	L1	L2	Art. N°
4	BB4R... BF4R...	32	8.5	37	6	13	5.5	ML12A-BHK4N-32R-D
		37	13.5	42	6	13	5.5	ML12A-BHK4N-37R-D
		42	18.5	47	6	13	5.5	ML12A-BHK4N-42R-D



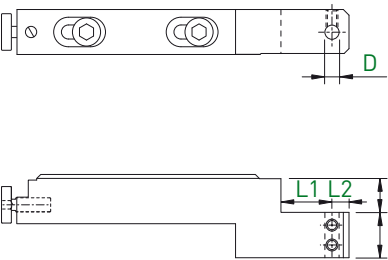
									ML16
d	Compatible bars	L3	F	H1	C	H	L1	L2	Art. N°
4	BB4R... BF4R...	32	8.5	37	6	-	17.5	5.5	ML16A-BHK4N-32R-D
		37	13.5	42	6	-	17.5	5.5	ML16A-BHK4N-37R-D
		42	18.5	47	6	-	17.5	5.5	ML16A-BHK4N-42R-D

									ML16
d	Compatible bars	L3	F	H1	C	H	L1	L2	Art. N°
6	BB4R... BF4R...	47	18.5	52.5	6	1	17	6	ML16A-BHK6N-47R-D
		57	28.5	62.5	6	1	17	6	ML16A-BHK6N-57R-D

Porte-outils

Halter
Holders

TOOLING-Line



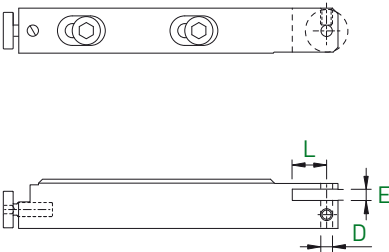
					ML12
F	D	E	L1	L2	Art. N°
8	3	12	13	6	ML12A-2440-8-3
8	4	12	13	6	ML12A-2440-8-4
8	5	12	13	6	ML12A-2440-8-5
12	6	12	13	6	ML12A-2440-12-6

					ML16
F	D	E	L1	L2	Art. N°
12	3	16	18	6	ML16A-2440-12-3
12	4	16	18	6	ML16A-2440-12-4
12	5	16	18	6	ML16A-2440-12-5
12	6	16	18	6	ML16A-2440-12-6
18	8	16	18	6	ML16A-2440-18-8

Porte-molettes

Rändelhalter
Knurl holders

TOOLING-Line



			ML12
E	D	L	Art. N°
4	4	8	ML12A-2402-44

			ML16
E	D	L	Art. N°
4	4	11	ML16A-2402-44

MODU-Line

Porte-plaquettes – Coupe déportée & contre-opération

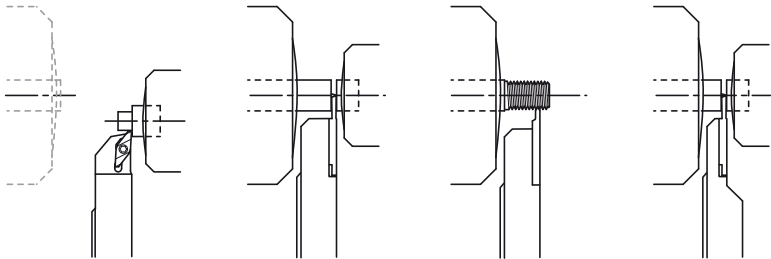
WSP-Halter – Versetztes Schneiden & Gegenspindel

Insert holders – Cut off line & cut on subspindle

Coupe à droite déportée ou usinage
à gauche sur contre-broche

Rechtsschneidend versetzt oder
linksschneidend auf Gegenspindel

Right hand cut off line or left hand
cut on subspindle



TURN-Line
ISO-Line

TOP-Line
EVOCUT-Line
CUT-Line
PRO-Line
ECO-Line

TOP-Line
EVOCUT-Line
CUT-Line
PRO-Line
ECO-Line

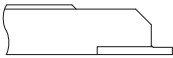
TOP-Line
PRO-Line
ECO-Line

TOP-Line

Porte-plaquettes – Coupe déportée & contre-opération

WSP-Halter – Versetztes Schneiden & Gegenspindel

Insert holders – Cut off line & cut on subspindle



TOP-Line
731-737

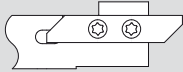
Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-730-V	ML12A-730-V-D	ML12A-730-V-JET-D
ML16	ML16	ML16
ML16A-730-V	ML16A-730-V-D	ML16A-730-V-JET-D

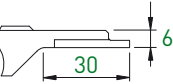
Porte-plaquettes – Coupe déportée & contre-opération

WSP-Halter – Versetztes Schneiden & Gegenspindel

Insert holders – Cut off line & cut on subspindle

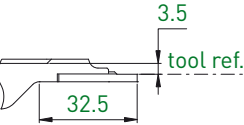
TOP-Line

Standard	-D	-JET 
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-730RC	-	ML12A-730RC-JET



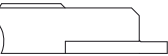
TOP-Line
731R

		-JET-D 
		
ML16	ML16	ML16
ML16A-730RC	ML16A-730RC-D	ML16A-730RC-JET-D



TOP-Line
731R

ML12	ML12	ML12
ML12A-730RC-R04	-	-
ML12A-730RC-SWISS-NANO	-	-



TOP-Line
751-757

ML12	ML12	ML12
ML12A-750-V	ML12A-750-V-D	ML12A-750-V-JET-D
ML16	ML16	ML16
ML16A-750-V	ML16A-750-V-D	ML16A-750-V-JET-D



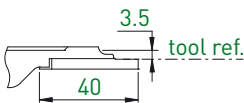
TOP-Line
751R

ML12	ML12	ML12 
ML12A-750RC	-	ML12A-750RC-JET
ML16	ML16	ML16
ML16A-750RC	ML16A-750RC-D	ML16A-750RC-JET-D

Porte-plaquettes – Coupe déportée & contre-opération

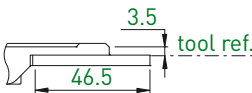
WSP-Halter – Versetztes Schneiden & Gegenspindel

Insert holders – Cut off line & cut on subspindle



TOP-Line
751R

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-750RC-R04	-	-
ML12A-750RC-SWISS-NANO	-	-



TOP-Line
771R

ML12	ML12	ML12
ML12A-770RC-SWISS-NANO	-	-



TOP-Line
770

ML16	ML16	ML16
-	-	ML16A-770-V-JET-D

Porte-plaquettes – Contre-opération

WSP-Halter – Gegenspindel

Insert holders – Cut on subspindle



TURN-Line
337-339

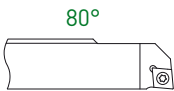
Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-330-V	ML12A-330-V-D	ML12A-330-V-JET-D
ML16	ML16	ML16
ML16A-330-V	ML16A-330-V-D	ML16A-330-V-JET-D

Porte-plaquettes – Contre-opération

WSP-Halter – Gegenspindel

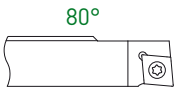
Insert holders – Cut on subspindle

ISO-Line



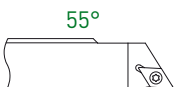
ISO-Line
CC...-0602..

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
-	ML12A-SCLCL06-V-D	ML12A-SCLCL06-V-JET-D
ML16	ML16	ML16
-	ML16A-SCLCL06-V-D	ML16A-SCLCL06-V-JET-D



ISO-Line
CC...-9T3..

ML12	ML12	ML12
-	ML12A-SCLCL09-V-D	ML12A-SCLCL09-V-JET-D
ML16	ML16	ML16
-	ML16A-SCLCL09-V-D	ML16A-SCLCL09-V-JET-D



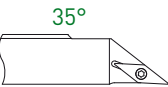
ISO-Line
DC...-0702..

ML12	ML12	ML12
-	ML12A-SDJCL07-V-D	ML12A-SDJCL07-V-JET-D
ML16	ML16	ML16
-	ML16A-SDJCL07-V-D	ML16A-SDJCL07-V-JET-D

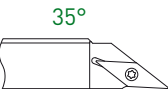


ISO-Line
DC...-11T3..

ML12	ML12	ML12
ML12A-SDJCL11-V	ML12A-SDJCL11-V-D	ML12A-SDJCL11-V-JET-D
ML16	ML16	ML16
ML16A-SDJCL11-V	ML16A-SDJCL11-V-D	ML16A-SDJCL11-V-JET-D



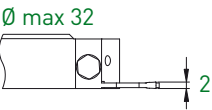
ISO-Line
VC..-1103..



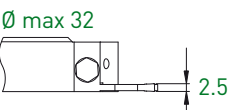
ISO-Line
VC..-1303..

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-SVJCL11-V	ML12A-SVJCL11-V-D	ML12A-SVJCL11-V-JET-D
ML16	ML16	ML16
ML16A-SVJCL11-V	ML16A-SVJCL11-V-D	ML16A-SVJCL11-V-JET-D

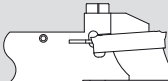
ML12	ML12	ML12
-	ML12A-SVJCL13-V-D	-
ML16	ML16	ML16
-	ML16A-SVJCL13-V-D	ML16A-SVJCL13-V-JET-D



EVOCUT-Line
ET20



EVOCUT-Line
ET25


Art. N°
ML16
ML16A-ET20-V-JET32

Art. N°	Art. N°	Art. N°
ML16	ML16	ML16
-	-	ML16A-ET20-V-JET32

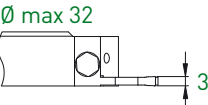
ML16	ML16	ML16
-	-	ML16A-ET25-V-JET32

Porte-plaquettes – Coupe déportée

WSP-Halter – Versetztes Schneiden

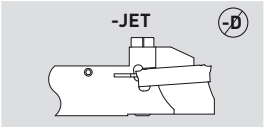
Insert holders – Cut off line

EVOCUT-Line



EVOCUT-Line
ET30

ML16	ML16	ML16
-	-	ML16A-ET30-V-JET32

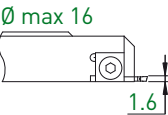


Porte-plaquettes – Coupe déportée

WSP-Halter – Versetztes Schneiden

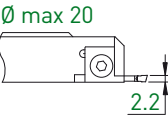
Insert holders – Cut off line

CUT-Line



CUT-Line
CUT16

Standard		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-CUT16-V	-	-
ML12F-CUT16-V	-	-
ML16	ML16	ML16
ML16A-CUT16-V	-	-
ML16F-CUT16-V	-	-



CUT-Line
CUT22

ML12	ML12	ML12
ML12A-CUT22-V	-	-
ML12F-CUT22-V	-	-
ML16	ML16	ML16
ML16A-CUT22-V	-	-
ML16F-CUT22-V	-	-



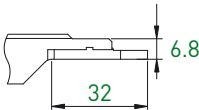
PRO-Line
632-636

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
-	ML12A-630-V-D	ML12A-630-V-JET-D
ML16	ML16	ML16
-	ML16A-630-V-D	ML16A-630-V-JET-D



PRO-Line
651R

ML12	ML12	ML12
-	ML12A-650-V-D	ML12A-650-V-JET-D
ML16	ML16	ML16
-	ML16A-650-V-D	ML16A-650-V-JET-D



PRO-Line
651R

ML12	ML12	ML12
ML12A-650RC	ML12A-650RC-D	-
ML16	ML16	ML16
-	ML16A-650RC-D	ML16A-650RC-JET-D

Porte-plaquettes – Coupe déportée & contre-opération

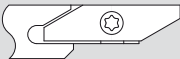
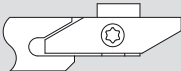
WSP-Halter – Versetztes Schneiden & Gegenspindel

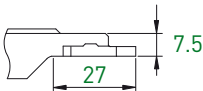
Insert holders – Cut off line & cut on subspindle

ECO-Line



ECO-Line
251-261

Standard	-D	-JET-D
		
Art. N°	Art. N°	Art. N°
ML12	ML12	ML12
ML12A-250-V	ML12A-250-V-D	ML12A-250-V-JET-D
ML16	ML16	ML16
ML16A-250-V	ML16A-250-V-D	ML16A-250-V-JET-D



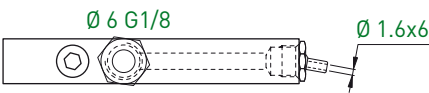
ECO-Line
251R

ML12	ML12	ML12
-	ML12A-250RC-D	-
ML16	ML16	ML16
-	ML16A-250RC-D	-

ML12 / ML16

Modules d'arrosage
Kühlmittelfzufuhrelemente
Coolant supply units

ML12



Raccord Anschluss Connection	Buses d'arrosage Kühlmitteldüse Coolant nozzles	ML12
		Art. N°
$\varnothing 6\text{ G1/8}$	5/16"	ML12-JET-5/16

ML16

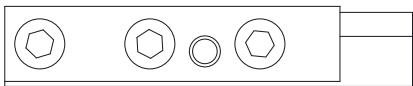
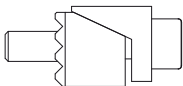


Raccord Anschluss Connection	Buses d'arrosage Kühlmitteldüse Coolant nozzles	ML16
		Art. N°
$\varnothing 6\text{ G1/8}$	7/16"	ML16-JET-7/16

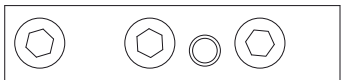
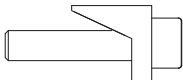
buses optionnelles voir page 14.99
zusätzliche Düsen siehe Seite 14.99
optional nozzles see page 14.99

ML12 / ML16

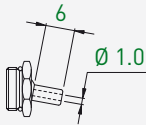
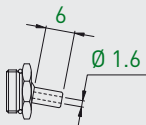
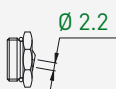
Modules de serrage
Spannelemente
Clamping units

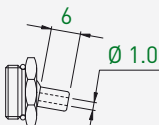
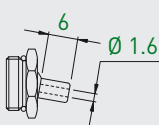
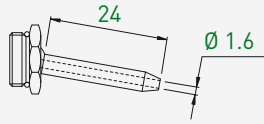
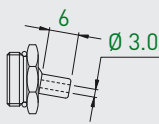


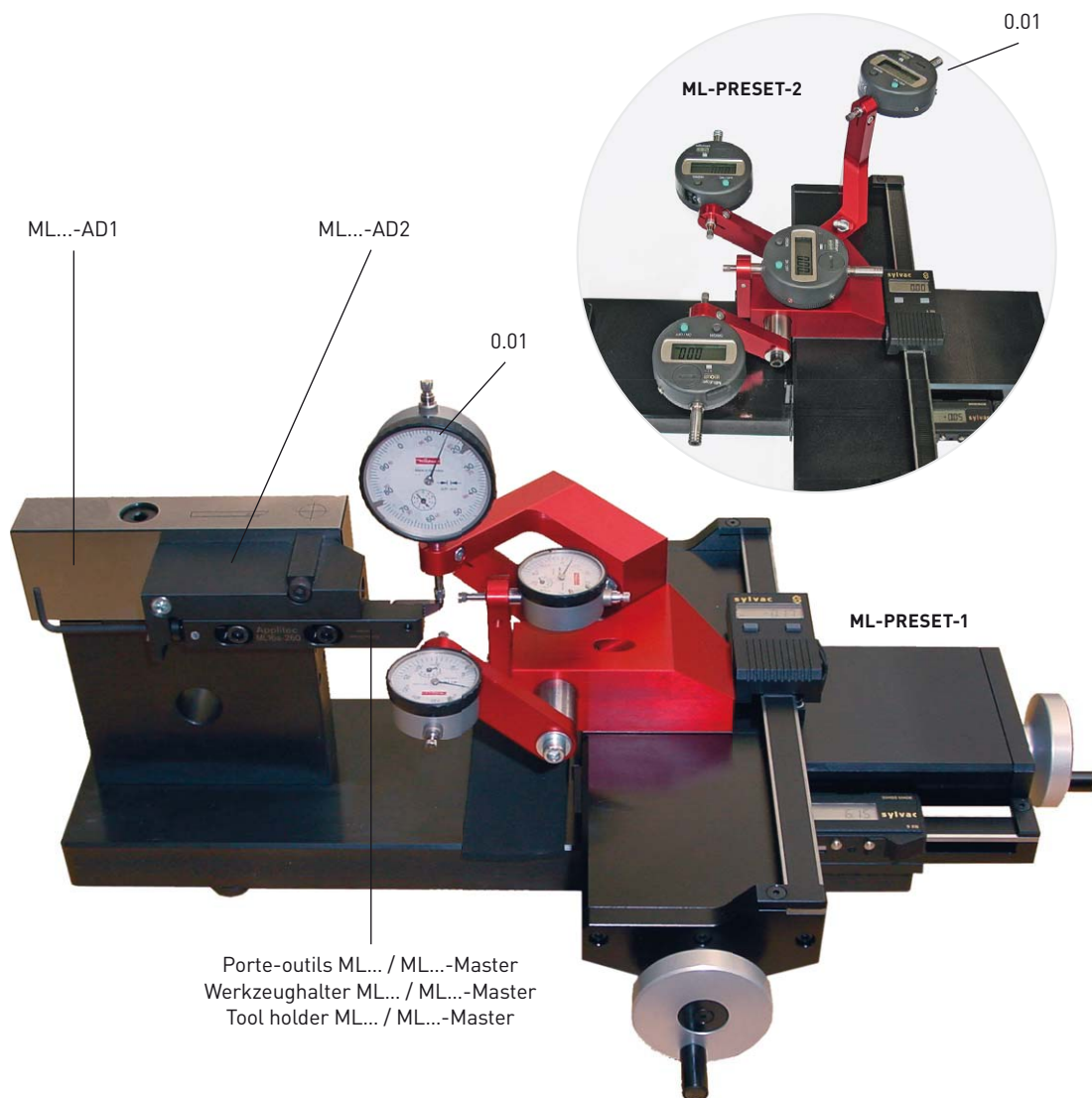
ML12	ML16
Art. N°	Art. N°
ML12-FIX-12/14	ML16-FIX-16/16
-	ML16-FIX-16/16.5
-	ML16-FIX-16/17
-	ML16-FIX-16/20
-	ML16-FIX-16/22
-	ML16-FIX-16/24



ML12	ML16
Art. N°	Art. N°
ML12-FIX-12	ML16-FIX-16

5/16"	Art. N°	Références compatibles Kompatible Artikeln Compatible items
	ML-JET-5/16-1.0X6	ML12-JET-5/1.6
	ML-JET-5/16-1.6X6	une buse ML-JET-5/16-1.6x6 est comprise eine Düse ML-JET-5/16-1.6x6 ist inbegriffen a nozzle ML-JET-5/16-1.6x6 is included
	ML-JET-5/16-2.2X0	

7/16"	Art. N°	Références compatibles Kompatible Artikeln Compatible items
	ML-JET-7/16-1.0X6	ML16-KMX26-JET ML16-JET-7/16 ML12-DEC010-JET ML16-DEC013-JET ML16-DEC020-JET ML16-S20-JET ML16-SWISS-ST26-JET
	ML-JET-7/16-1.6X6	
	ML-JET-7/16-1.6X24	une buse ML-JET-7/16-3.0x6 est comprise avec chaque article ci-dessus eine Düse ML-JET-7/16-3.0x6 ist mit jedem vorstehenden Artikel inbegriffen
	ML-JET-7/16-3.0X6	a nozzle ML-JET-7/16-3.0x6 is included with each above item



Art. N°

ML-PRESET-1

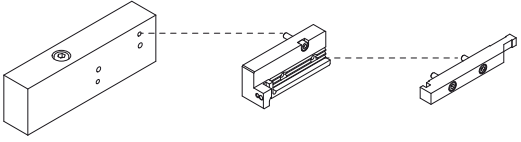
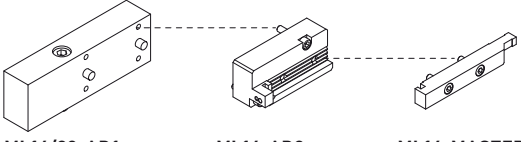
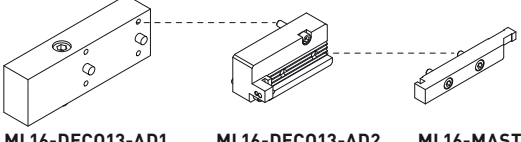
ML-PRESET-2

Bancs de préréglage

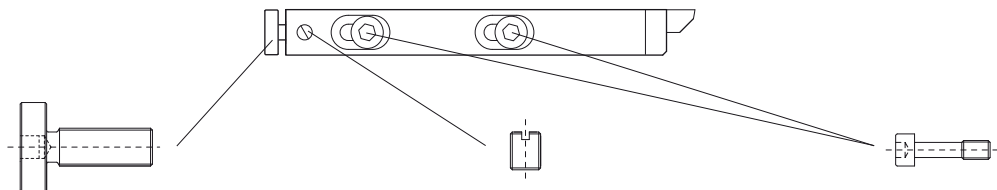
Voreinstellgeräte

Presetting devices

ML12 / ML16

Type Typ Type	Fabricant Hersteller Manufacturer	Machines Maschinen Machines	Adaptateurs et jauges d'étalement Adapter und Einstelllehre Adaptators and master gauges
ML12	CITIZEN	C12/C16	 <p>ML12-AD1 ML12-AD2 ML12-MASTER</p>
		L12-1M7	
		L12-2M10	
		M16 V/VIII	
		R04	
		R07	
	HANWHA	XD10	
		XD20M	
	METAFIL	D3/D10/D13	
	STAR	SB-12RG	
		SL-7/10	
		SR10-J	
		SW-12RII	
	TORNOS	DECO7/10 - EvoDECO 10	
		SwissNano/SwissNano 7	
		DT13	
		CT20	
	TSUGAMI	GT13	
		B074	
		B075	
		P034	
		P034-P036	
ML16	CITIZEN	K12/K16/K12E/K16E	 <p>ML16/20-AD1 ML16-AD2 ML16-MASTER</p>
		L20E-1M8/L20X-1M10/L20-2M8/2M12	
		L20E-3M	
	HANWHA	SL12/16	
	MANUHRIN	KMX 426/526/626/Swing 20-26 MM	
		SA-12/SA-16/SA-16R	
		SB-16	
		SB-16/20RG	
		SB-20C/E	
		SR-16R/SR-20R/SR-20RII	
		SR-20J/SR-20RIII	
		SR-20JII-A/B	
		SR-20RIII/SR-20J	
		SR-20RIV	
		SR-32J	
		SV-12/20/ SV-20R	
		SW-20	
		DECO20/26 - EvoDECO20/32	
		SIGMA20/32	
	TORNOS	DT26	
		GT26	
		GT32	
ML16	TORNOS	DECO13-EvoDECO16	 <p>ML16-DECO13-AD1 ML16-DECO13-AD2 ML16-MASTER</p>
		Swiss ST26	

ML12



Vis de réglage
Einstellungsschraube
Setting screw

Art. N°

ML12A-M5X0.5

Vis de blocage
Blockierschraube
Locking screw

Art. N°

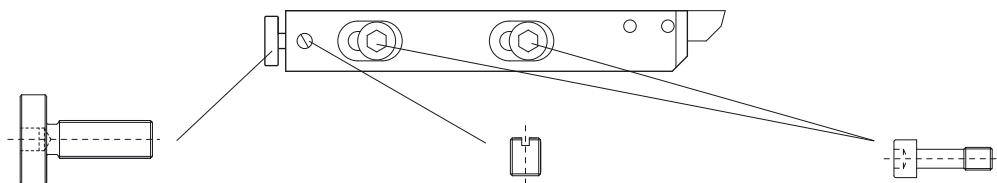
ML-M4X4-T

Vis de fixation
Befestigungsschraube
Fixing screw

Art. N°

ML12-M5XL20

ML16



Vis de réglage
Einstellungsschraube
Setting screw

Art. N°

ML16A-M5X0.5

Vis de blocage
Blockierschraube
Locking screw

Art. N°

ML-M4X4-T

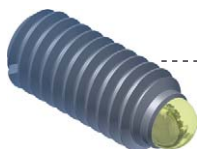
Vis de fixation
Befestigungsschraube
Fixing screw

Art. N°

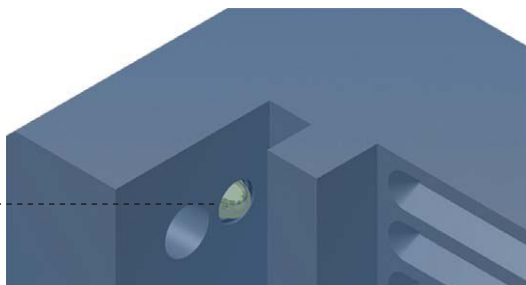
ML16/20-M6XL20

Art. N°

ML-205004



Butée à ressort
Federnde Schraube
Spring bumper



Pièces de rechange et accessoires

Ersatzteile und Zubehör

Spare parts and accessories

ML12 / ML16

Porte-outils Halter Holders					Options	
						
ML...250	V-M4X9-T15	-	-	-	-	C-T15
ML...260		-	-	-	-	C-T8
ML...330		-	-	-	-	C-T8
ML...340		-	-	-	-	C-T8
ML...630	V-M4X9-T15	-	-	-	-	C-T15
ML...640		-	-	-	-	C-T15
ML...650		-	-	-	-	C-T15
ML...650RC		-	-	-	-	C-T15
ML...660	V-M4X9-T15	-	-	-	-	C-T15
ML...730	V-M3X7-T8	-	-	-	-	C-T8
ML...730RC	V-M3X5.5-T8	-	-	-	-	C-T8
ML...730RC-R04	V-M3X4.5-T8	-	-	-	-	C-T8
ML...730RC-SWISS-NANO	V-M3X7-T8	-	-	-	-	C-T8
ML...740	V-M3X7-T8	-	-	-	-	C-T8
ML...750	V-M4X9-T15	-	-	-	-	C-T15
ML...750RC	V-M4X7.3-T15	-	-	-	-	C-T15
ML...750RC-R04	V-M4X5.6-T15	-	-	-	-	C-T15
ML...750RC-SWISS-NANO	V-M4X7.3-T15	-	-	-	-	C-T15
ML...760	V-M4X9-T15	-	-	-	-	C-T15
ML...770RC-SWISS-NANO	V-M4X7.3-T15	-	-	-	-	C-T15
ML...780	V-M4X9-T15	-	-	-	-	C-T15
ML...SC...06	V-M2.5X5.8-T8	-	-	-	-	C-T8
ML...SC...09	V-M4X7-T15-ISO	-	-	-	-	C-T15
ML...SD...07	V-M2.5X7.8-T8	-	-	-	-	C-T8
ML...SD...07-D	V-M2.5X5.8-T8	-	-	-	-	C-T8
ML12...-SDJ...11	V-M4X7-T15-ISO	-	-	-	-	C-T15
ML12...-SDN...11	V-M4X9-T15-ISO	-	-	-	-	C-T15
ML16...-SD...11	V-M4X9-T15-ISO	-	-	-	-	C-T15
ML...-SV...11	V-M2.5X7.8-T8	-	-	-	-	C-T8
ML...-SV...13	V-M3X7.3-T8-ISO	-	-	-	-	C-T8
ML...-CUT16	-	-	CUT16RS-SET	-	-	-
ML...-CUT16-V	-	-	CUT16LS-SET	-	-	-
ML...-CUT22	-	-	CUT22RS-SET	-	-	-
ML...-CUT16-V	-	-	CUT22LS-SET	-	-	-
ML16...-ET... JET32	-	-	-	-	-	-
ML16...-ET... V-JET32	-	-	-	V-M5X21-6P7-J	C-6PEX-7.0	-
ML...-BHK	V-BHK-M4X0.5-T8	-	-	-	-	-
ML12A-2440-8-3	-	V-M3X4-BN24	-	-	-	-
ML12A-2440-8-4		V-M4X5-BN24	-	-	-	-
ML12A-2440-8-5		V-M4X5-BN25	-	-	-	-
ML12A-2440-12-6		V-M4X5-BN24	-	-	-	-
ML16A-2440-12-3		V-M3X5-BN24	-	-	-	-
ML16A-2440-12-4		V-M4X6-BN24	-	-	-	-
ML16A-2440-12-5		V-M4X5-BN24	-	-	-	-
ML16A-2440-12-6		V-M4X5-BN24	-	-	-	-
ML16A-2440-18-8		V-M4X5-BN25	-	-	-	-
ML16A-2440-18-8		V-M4X5-BN25	-	-	-	-

TOOLING-Line



APPLITEC
CUTTING TOOLS

Index

Infos et avantages
Infos und Vorteile
Infos and advantages

> **15.03**

Porte-outils
Werkzeughalter
Tool holders

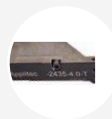
14xx / 24xx



> **15.04**

Porte-outils monoblocs pour machines Tornos
Monoblockwerkzeughalter für Tornos Maschinen
Monobloc tool holders for Tornos machines

2435 / 2436



> **15.18**

Forets à centrer plats
Zentrierflachbohrer
Centering flat drills

1200 / 2200



> **15.20**

Forets à centrer hélicoïdaux
Zentrierspiralbohrer
Centering twist drills

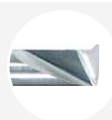
15xx / 25xx



> **15.21**

Burins intérieurs en métal dur
Vollhartmetall Innendrehwerkzeuge
Solid carbide internal turning tools

16xx / 26xx



> **15.22**

Porte-molettes
Rändelhalter
Knurl holders

1402 / 2402



> **15.24**

Molettes en métal dur
Vollhartmetall Rändelrädchen
Solid carbide knurling wheels

1107



> **15.25**

Infos et avantages

Infos und Vorteile

Infos and advantages

**Outils et porte-outils
traditionnels pour le
décolletage et la
mécanique de précision**

- Porte-outils
- Forets à centrer
- Burins intérieurs
- Porte-molettes
- Molettes en métal dur

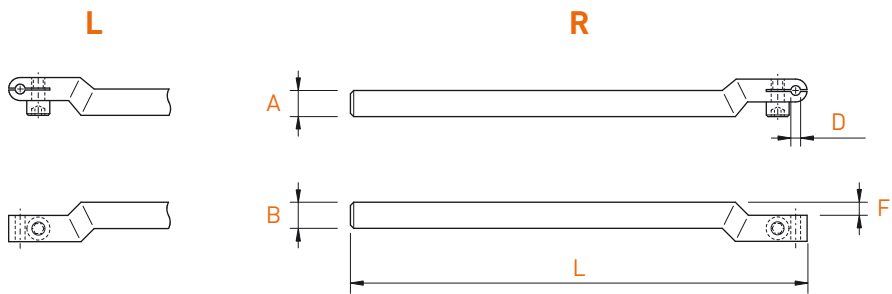
**Übliche Werkzeuge
und Halter für
Decolletage und
Präzisionsmechanik**

- Werkzeughalter
- Zentrierbohrer
- Innendrehwerkzeuge
- Rändelhalter
- Vollhartmetall Rändelrädchen

**Usual tools and
tool holders for
automatic lathes and
precision mechanics**

- Tool holders
- Centring drills
- Internal turning tools
- Knurl holders
- Solid carbide knurling wheels

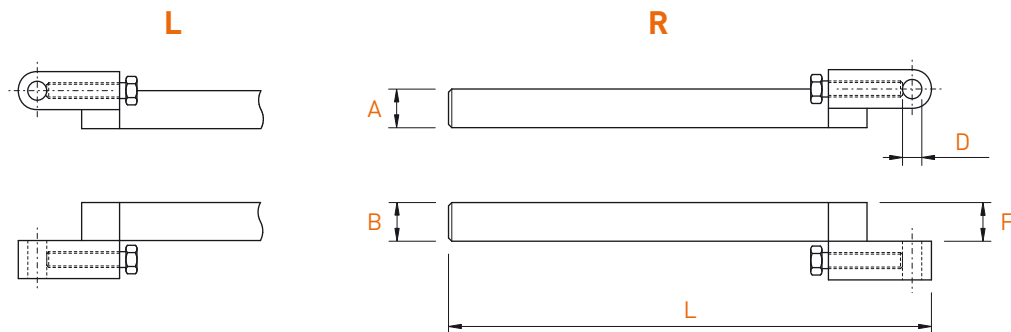
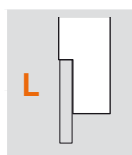
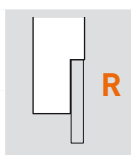




				<div><div>L</div><div>R</div></div>		Pièces de rechange Ersatzteile Spare parts
						 *
A x B	L	F	D	Art. N°	Art. N°	Art. N°
6 x 6	132	3	1.5	1400-J-615	2400-J-615	V-M3X5-BN7
6 x 6	132	3	2.0	1400-J-620	2400-J-620	
6 x 6	132	3	3.0	1400-J-630	2400-J-630	
7 x 7	140	3	1.5	1400-J-715	2400-J-715	V-M4X6-BN7
7 x 7	140	3	2.0	1400-J-720	2400-J-720	
7 x 7	140	3	3.0	1400-J-730	2400-J-730	
8 x 8	140	4	1.5	1400-J-815	2400-J-815	
8 x 8	140	4	2.0	1400-J-820	2400-J-820	
8 x 8	140	4	3.0	1400-J-830	2400-J-830	

Porte-outils
Werkzeughalter
Tool holders

1401-K / 2401-K

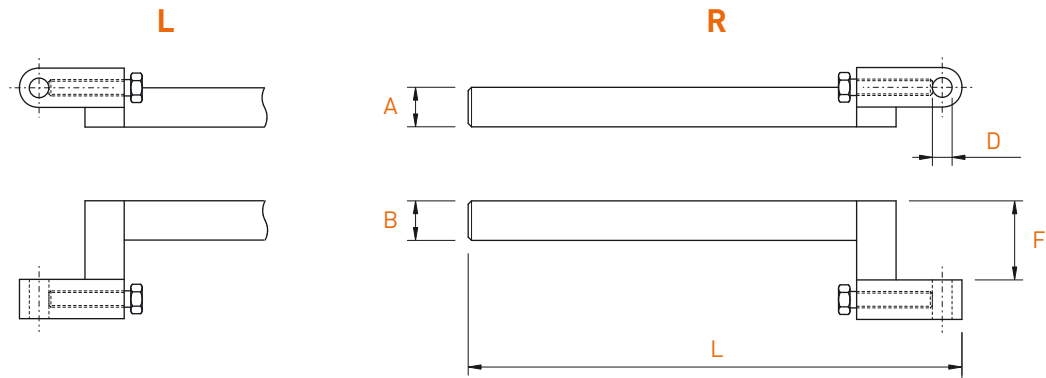
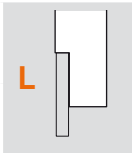
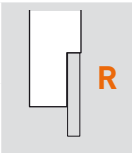


Pièces de rechange
Ersatzteile
Spare parts

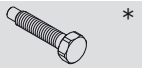


*

A x B	L	F	D	Art. N°	Art. N°	Art. N°
7 x 7	146	7	2.0	1401-K-720	-	V-M4X20-HEX7
7 x 7	146	7	3.0	1401-K-730	2401-K-730	
7 x 7	146	7	4.0	1401-K-740	2401-K-740	
8 x 8	146	8	2.0	1401-K-820	-	
8 x 8	146	8	3.0	1401-K-830	2401-K-830	
8 x 8	146	8	4.0	1401-K-840	2401-K-840	
8 x 8	146	8	5.0	1401-K-850	2401-K-850	
8 x 8	146	8	6.0	1401-K-860	2401-K-860	V-M4X25-HEX7
10 x 10	150	10	3.0	-	2401-K-1030	
10 x 10	150	10	4.0	1401-K-1040	2401-K-1040	
10 x 10	150	10	5.0	1401-K-1050	2401-K-1050	
10 x 10	150	10	6.0	1401-K-1060	2401-K-1060	
10 x 10	150	10	7.0	1401-K-1070	2401-K-1070	
12 x 12	150	12	3.0	-	2401-K-1230	V-M4X30-HEX7
12 x 12	150	12	4.0	1401-K-1240	2401-K-1240	
12 x 12	150	12	5.0	1401-K-1250	2401-K-1250	
12 x 12	150	12	6.0	1401-K-1260	2401-K-1260	
12 x 12	150	12	8.0	1401-K-1280	2401-K-1280	
14 x 14	150	14	4.0	1401-K-1440	2401-K-1440	
14 x 14	150	14	6.0	1401-K-1460	2401-K-1460	
14 x 14	150	14	8.0	1401-K-1480	2401-K-1480	



Pièces de rechange
Ersatzteile
Spare parts



A x B	L	F	D	Art. N°	Art. N°
7 x 7	146	12	4.0	1420-7124	2420-7124
8 x 8	146	12	4.0	1420-8124	2420-8124
8 x 8	146	14	3.0	1420-8143	2420-8143
8 x 8	146	15	5.0	1420-8155	2420-8155
8 x 8	146	20	5.0	1420-8205	2420-8205
10 x 10	150	20	6.0	1420-10206	2420-10206
12 x 12	150	18	6.0	1420-12186	2420-12186
12 x 12	150	18	8.0	1420-12188	-
12 x 12	150	24	8.0	1420-12248	2420-12248
14 x 14	150	20	8.0	1420-14208	2420-14208
14 x 14	150	24	8.0	1420-14248	2420-14248

Art. N°

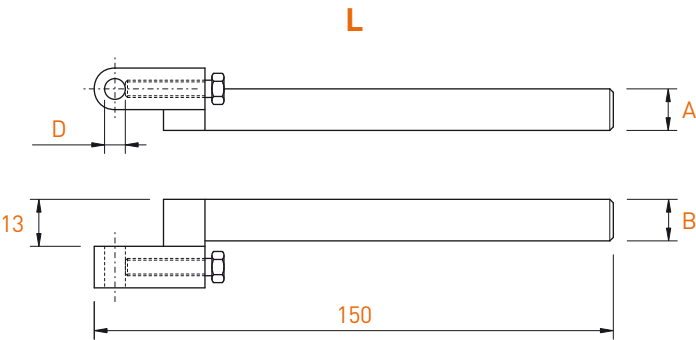
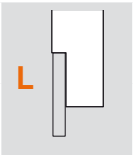
V-M4X20-HEX7

V-M5X25-HEX8

Porte-outils
Werkzeughalter
Tool holders

12 x 12

1460



Pièces de rechange
Ersatzteile
Spare parts

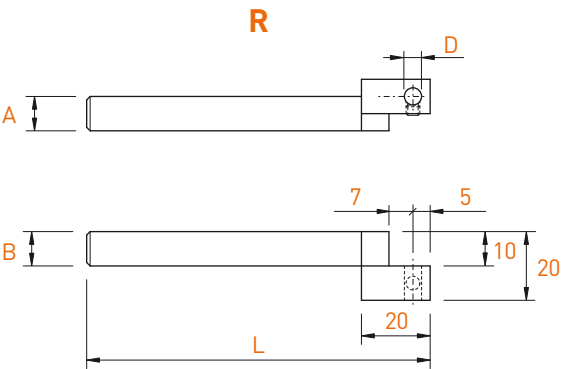
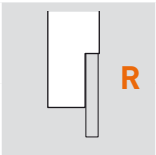


*

A x B	D	Art. N°
12 x 12	4.0	1460-4
12 x 12	5.0	1460-5
12 x 12	6.0	1460-6
12 x 12	8.0	1460-8

Art. N°
V-M5X25-HEX8

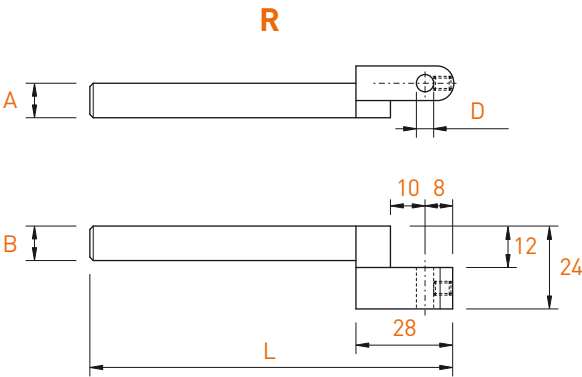
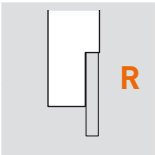
* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder



Pièces de rechange
 Ersatzteile
 Spare parts



A x B	L	D	Art. N°	Art. N°
10 x 10	100	3.0	2450-SP-3	V-M4X4-BN24
10 x 10	100	4.0	2450-SP-4	V-M4X3-BN24
10 x 10	100	5.0	2450-SP-5	V-M4X4-BN24
10 x 10	100	6.0	2450-SP-6	V-M4X3-BN24
10 x 10	120	3.0	2450-SP-3-120	
10 x 10	120	4.0	2450-SP-4-120	V-M4X4-BN24
10 x 10	120	5.0	2450-SP-5-120	
10 x 10	120	6.0	2450-SP-6-120	V-M4X3-BN24

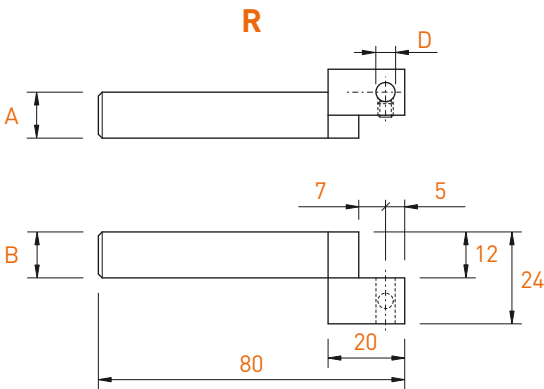
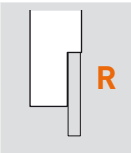


Pièces de rechange
Ersatzteile
Spare parts



*

A x B	L	D	Art. N°	Art. N°
10 x 10	105	3.0	2470-3	V-M4X5-BN24
10 x 10	105	4.0	2470-4	
10 x 10	105	5.0	2470-5	
10 x 10	105	6.0	2470-6	
10 x 10	105	7.0	2470-7	

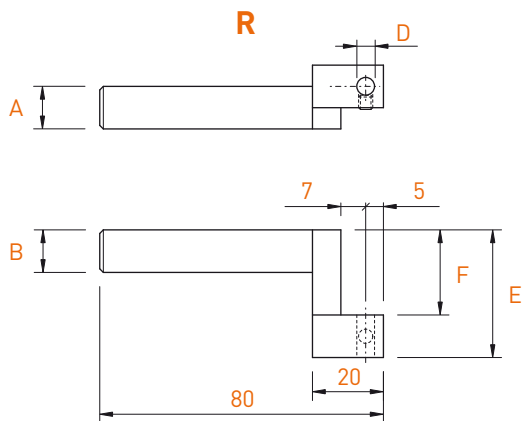
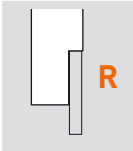


Pièces de rechange
Ersatzteile
Spare parts



*

A x B	D	Art. N°	Art. N°
12 x 12	3.0	2450-3	V-M3X4-BN24
12 x 12	4.0	2450-4	
12 x 12	5.0	2450-5	
12 x 12	6.0	2450-6	V-M4X3-BN24
12 x 12	8.0	2450-8	



Pièces de rechange
Ersatzteile
Spare parts



*

A x B	F	E	D	Art. N°	Art. N°
12 x 12	16	28	4.0	2460-284	V-M3X4-BN24
12 x 12	16	28	6.0	2460-286	V-M4X3-BN24
12 x 12	16	28	8.0	2460-288	V-M3X4-BN24
12 x 12	20	32	4.0	2460-324	V-M3X4-BN24
12 x 12	20	32	6.0	2460-326	V-M4X3-BN24
12 x 12	20	32	8.0	2460-328	V-M4X3-BN24
12 x 12	24	36	4.0	2460-364	V-M3X4-BN24
12 x 12	24	36	6.0	2460-366	V-M3X4-BN24
12 x 12	24	36	8.0	2460-368	V-M4X3-BN24

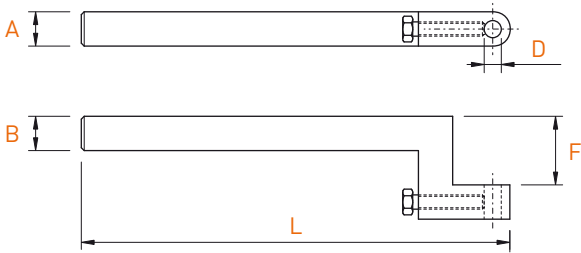


Pièces de rechange
Ersatzteile
Spare parts



*

A x B	L	F	D	Art. N°	Art. N°
8 x 8	120	8	3.0	2405-K-830	V-M4X25-HEX7
8 x 8	120	8	4.0	2405-K-840	
8 x 8	120	8	5.0	2405-K-850	
8 x 8	120	8	6.0	2405-K-860	
10 x 10	100	10	4.0	2405-K-1040	V-M5X25-HEX8
10 x 10	100	10	5.0	2405-K-1050	
10 x 10	100	10	6.0	2405-K-1060	
12 x 12	150	12	4.0	2405-K-1240	V-M5X30-HEX8
12 x 12	150	12	6.0	2405-K-1260	
12 x 12	150	12	8.0	2405-K-1280	

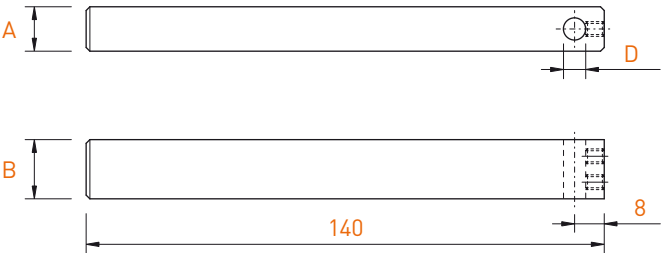


Pièces de rechange
Ersatzteile
Spare parts



*

A x B	L	F	D	Art. N°	Art. N°
8 x 8	120	12	4.0	2425-8124	M4X25-HEX7
8 x 8	120	15	5.0	2425-8155	
8 x 8	120	20	5.0	2425-8205	
10 x 10	100	15	6.0	2425-10156	M5X25-HEX8
10 x 10	100	20	6.0	2425-10206	M5X30-HEX8
12 x 12	150	18	6.0	2425-12186	
12 x 12	150	24	8.0	2425-12248	



Pièces de rechange
 Ersatzteile
 Spare parts

*

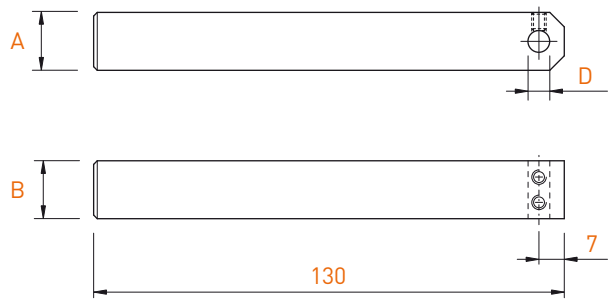
Art. N°
 V-M4X4-BN24

A x B	D	Art. N°
12 x 16	3.0	2441-0-3
12 x 16	4.0	2441-0-4
12 x 16	5.0	2441-0-5
12 x 16	6.0	2441-0-6

Porte-outils
Werkzeughalter
Tool holders

16 x 16

2440-0



Pièces de rechange
Ersatzteile
Spare parts



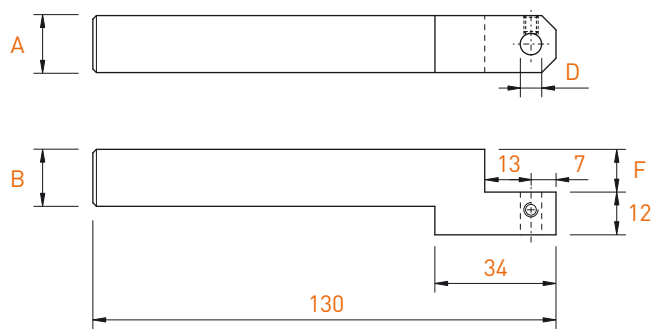
*

A x B	D	Art. N°
16 x 16	3.0	2440-0-3
16 x 16	4.0	2440-0-4
16 x 16	5.0	2440-0-5
16 x 16	6.0	2440-0-6

Art. N°

V-M4X4-BN24

* livré avec chaque porte-outil / mit jedem Halter geliefert / delivered with each holder

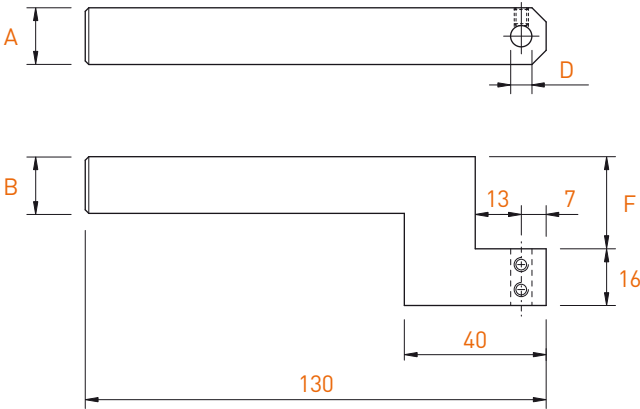


Pièces de rechange
Ersatzteile
Spare parts



*

A x B	F	D	Art. N°	Art. N°
16 x 16	8	3.0	2440-8-3	V-M4X6-BN24
16 x 16	8	4.0	2440-8-4	
16 x 16	8	5.0	2440-8-5	
16 x 16	8	6.0	2440-8-6	
16 x 16	8	8.0	2440-8-8	
16 x 16	12	3.0	2440-12-3	
16 x 16	12	4.0	2440-12-4	
16 x 16	12	5.0	2440-12-5	
16 x 16	12	6.0	2440-12-6	
16 x 16	12	8.0	2440-12-8	



Pièces de rechange
Ersatzteile
Spare parts



*

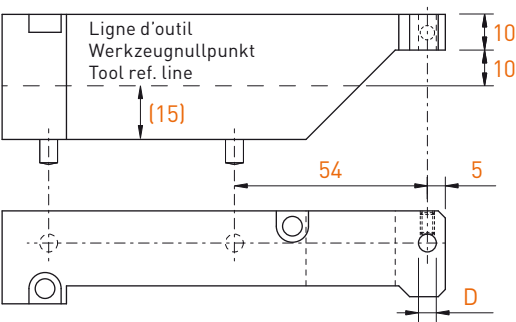
A x B	F	D	Art. N°
16 x 16	18	4.0	2440-18-4
16 x 16	18	5.0	2440-18-5
16 x 16	18	6.0	2440-18-6
16 x 16	18	8.0	2440-18-8
16 x 16	26	4.0	2440-26-4
16 x 16	26	5.0	2440-26-5
16 x 16	26	6.0	2440-26-6
16 x 16	26	8.0	2440-26-8

Art. N°

V-M4X6-BN24

2435 / 2435-T

Porte-outils pour machines Tornos DECO 7/10 / EvoDECO 10
Werkzeughalter für Tornos DECO 7/10 / EvoDECO 10 Maschinen
Tool holders for Tornos DECO 7/10 / EvoDECO 10 machines

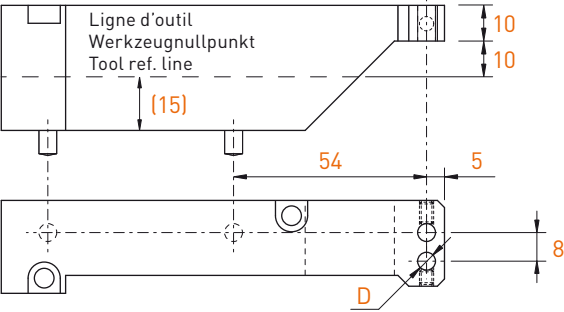


Pièces de rechange
Ersatzteile
Spare parts



*

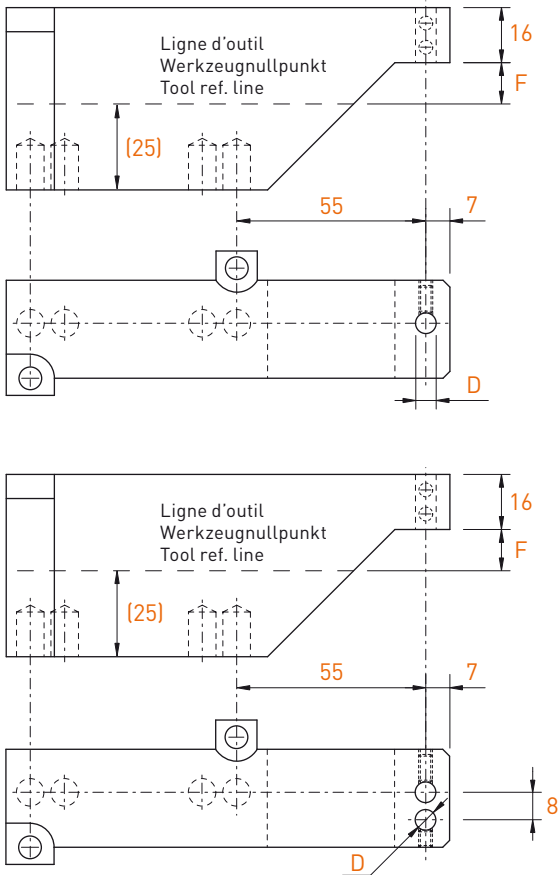
D	Art. N°	Art. N°
3.0	2435-3	V-M4X6-BN24
4.0	2435-4	
5.0	2435-5	
6.0	2435-5	



D	Art. N°	Art. N°
3.0	2435-3-T	V-M4X6-BN24
4.0	2435-4-T	
5.0	2435-5-T	
6.0	2435-6-T	

Porte-outils pour machines Tornos DECO 13 / EvoDECO 16
Werkzeughalter für Tornos DECO 13 / EvoDECO 16 Maschinen
Tool holders for Tornos DECO 13 / EvoDECO 16 machines

2436 / 2436T



Pièces de rechange
Ersatzteile
Spare parts

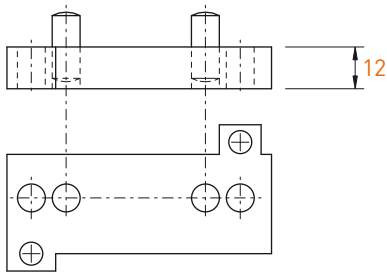


F	D	Art. N°	Art. N°
12	3.0	2436-12-3	V-M4X10-BN24
12	4.0	2436-12-4	
12	5.0	2436-12-5	
12	6.0	2436-12-6	
12	8.0	2436-12-8	
18	3.0	2436-18-3	
18	4.0	2436-18-4	
18	5.0	2436-18-5	
18	6.0	2436-18-6	
18	8.0	2436-18-8	

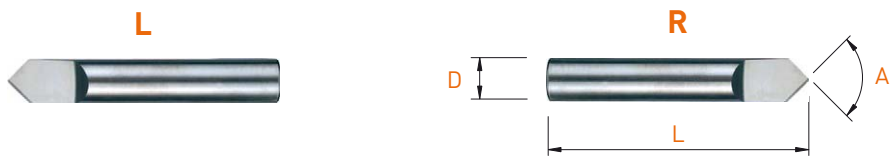
F	D	Art. N°	Art. N°
12	3.0	2436T-12-3	V-M4X5-BN24
12	4.0	2436T-12-4	
12	5.0	2436T-12-5	
12	6.0	2436T-12-6	
18	3.0	2436T-18-3	
18	4.0	2436T-18-4	
18	5.0	2436T-18-5	
18	6.0	2436T-18-6	

Entretoise
Erhöhungsplatte
Spacer

2436-S12



Art. N°
2436-S12



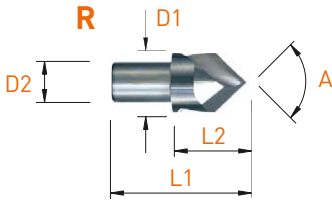
MD VHM HM			L	R
A	D	L	Art. N°	Art. N°
90°	3	17	1200-317	2200-317
90°	3	38	1200-338	2200-338
90°	4	40	1200-440	2200-440
90°	5	50	1200-550	2200-550
90°	6	50	1200-650	2200-650
90°	8	58	1200-858	2200-858
90°	10	66	1200-1066	2200-1066
90°	12	73	1200-1273	2200-1273

Forets à centrer hélicoïdaux

Zentrierspiralbohrer
Centering twist drills

90°

1500 / 2520



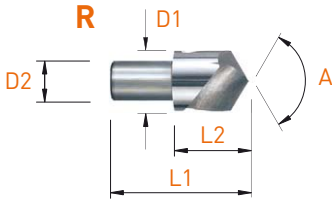
					HSS		MD / VHM / HM	
					L	R	L	R
A	D1	D2	L1	L2	Art. N°	Art. N°	Art. N°	Art. N°
90°	5	4	17	8	1500-5-HSS	2520-5-HSS	1500-5	2520-5
90°	7	5	17	8	1500-7-HSS	2520-7-HSS	1500-7	2520-7
90°	10	6	22	10	1500-10-HSS	2520-10-HSS	1500-10	2520-10
90°	12	8	26	12	1500-12-HSS	2520-12-HSS	1500-12	2520-12

Forets à centrer hélicoïdaux

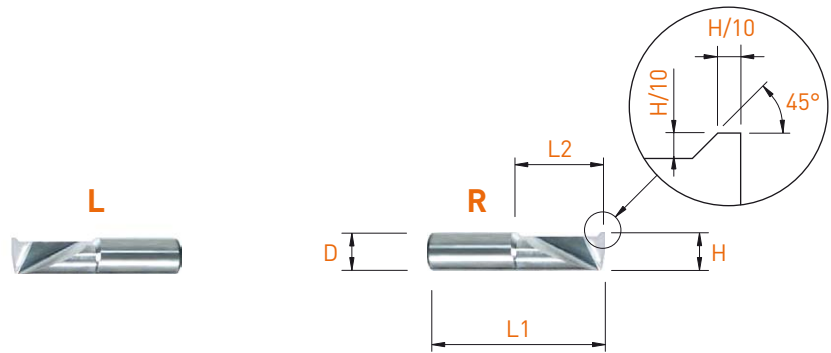
Zentrierspiralbohrer
Centering twist drills

120°

1510 / 2530



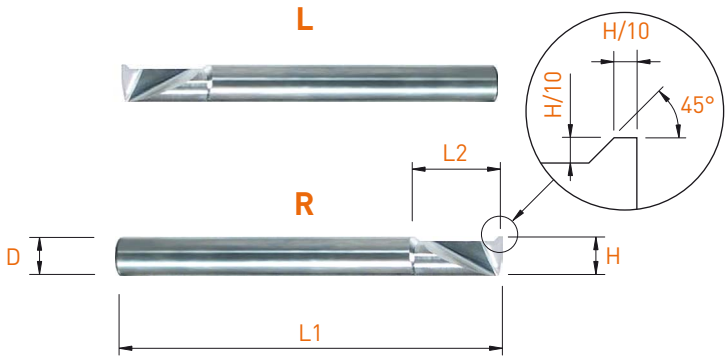
					L	R
A	D1	D2	L1	L2	Art. N°	Art. N°
120°	5	4	17	8	1510-5	2530-5
120°	7	5	17	8	1510-7	2530-7
120°	10	6	22	10	1510-10	2530-10
120°	12	8	26	12	1510-12	2530-12



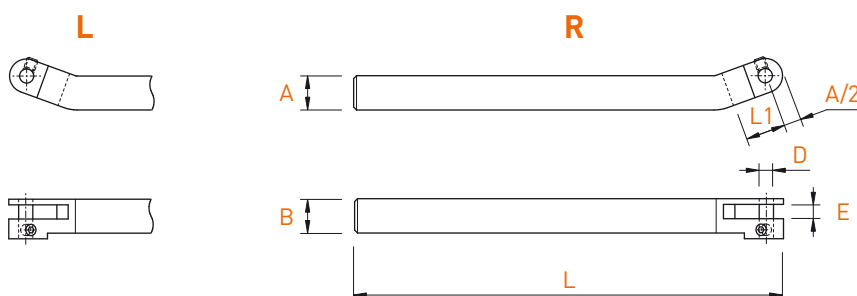
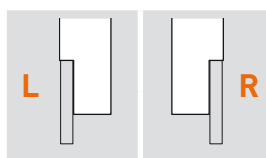
MD VHM HM				L	R
H 0/-0.05	D	L1	L2	Art. N°	Art. N°
2	3	13	4	1600-2-4	2620-2-4
3	3	15	6	1600-3-6	2620-3-6
4	4	17	8	1600-4-8	2620-4-8
4	4	21	12	1600-4-12	2620-4-12
5	5	21	10	1600-5-10	2620-5-10
5	5	26	15	1600-5-15	2620-5-15
6	6	25	12	1600-6-12	2620-6-12
6	6	31	18	1600-6-18	2620-6-18
8	8	32	16	1600-8-16	2620-8-16
8	8	40	24	1600-8-24	2620-8-24

Burins intérieurs en métal dur
 Vollhartmetall Innendrehwerkzeuge
 Solid carbide internal turning tools

1610 / 2630



MD VHM HM					L	R
	H 0/-0.05	D	L1	L2	Art. N°	Art. N°
	2	3	38	4	1610-2-4	2630-2-4
	3	3	38	6	1610-3-6	2630-3-6
	4	4	40	8	1610-4-8	2630-4-8
	4	4	40	12	1610-4-12	2630-4-12
	5	5	50	10	1610-5-10	2630-5-10
	5	5	54	15	1610-5-15	2630-5-15
	6	6	50	12	1610-6-12	2630-6-12
	6	6	57	18	1610-6-18	2630-6-18
	8	8	58	16	1610-8-16	2630-8-16
	8	8	63	24	1610-8-24	2630-8-24
	10	10	72	30	-	2630-10-30
	12	12	83	36	-	2630-12-36

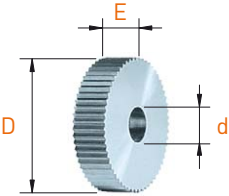

Pièces de rechange
Ersatzteile
Spare parts


*

A x B	L	E	D	L1	A/2	Art. N°	Art. N°	Art. N°
6 x 6	132	2	3	10	3	1402-623	2402-623	GP-3X10-A6H2.5
6 x 6	132	3	3	10	3	1402-633	2402-633	GP-3X10-A6H2.5
7 x 7	140	2	3	10	3.5	1402-723	2402-723	GP-3X12-A6H2.5
7 x 7	140	3	3	10	3.5	1402-733	2402-733	GP-3X12-A6H2.5
7 x 7	140	4	3	10	3.5	1402-743	2402-743	GP-3X12-A6H2.5
7 x 7	140	2	4	10	3.5	1402-724	2402-724	GP-4X12-A6H3.5
7 x 7	140	3	4	10	3.5	1402-734	2402-734	GP-4X12-A6H3.5
7 x 7	140	4	4	10	3.5	1402-744	2402-744	GP-4X12-A6H3.5
8 x 8	140	2	3	10	4	1402-823	2402-823	GP-3X12-A6H2.5
8 x 8	140	3	3	10	4	1402-833	2402-833	GP-3X12-A6H2.5
8 x 8	140	4	3	10	4	1402-843	2402-843	GP-3X12-A6H2.5
8 x 8	140	2	4	10	4	1402-824	2402-824	GP-4X12-A6H3.5
8 x 8	140	3	4	10	4	1402-834	2402-834	GP-4X12-A6H3.5
8 x 8	140	4	4	10	4	1402-844	2402-844	GP-4X12-A6H3.5
10 x 10	150	3	3	10	5	1402-1033	2402-1033	GP-3X14-A8H2.5
10 x 10	150	4	3	10	5	1402-1043	2402-1043	GP-3X14-A8H2.5
10 x 10	150	3	4	10	5	1402-1034	2402-1034	GP-4X14-A8H3.5
10 x 10	150	4	4	10	5	1402-1044	2402-1044	GP-4X14-A8H3.5
10 x 10	150	5	4	10	5	1402-1054	-	GP-4X14-A8H3.5
12 x 12	150	4	4	12	6	1402-1244	2402-1244	GP-4X14-A8H3.5
12 x 12	150	5	4	12	6	1402-1254	2402-1254	GP-4X14-A8H3.5
12 x 12	150	4	5	12	6	1402-1245	2402-1245	GP-5X14-A8H4.5
12 x 12	150	5	5	12	6	1402-1255	2402-1255	GP-5X14-A8H4.5
16 x 16	150	4	4	12	8	1402-1644	2402-1644	GP-4X16-A8H3.5
16 x 16	150	4	5	12	8	-	2402-1645	GP-5X16-A9H4.5
16 x 16	150	5	5	12	8	-	2402-1655	GP-5X16-A9H4.5
16 x 16	150	6	4	12	8	-	2402-1664	GP-4X16-A8H3.5
16 x 16	150	6	6	12	8	-	2402-1666	GP-6X16-A9H5.5
16 x 16	150	8	6	12	8	-	2402-1686	GP-6X16-A9H5.5

Molettes en métal dur
Vollhartmetall Rändelrädchen
Solid carbide knurling wheels

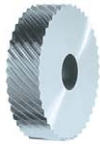
1107



AA



BL



BR



GE

Art. N° ex :
10X2X3-0.2-AA

D	E	d	Pas (tous les 0.1 mm) Teilung (alle 0.1 mm) Pitch (every 0.1 mm)	Molettes standards Standard Rändelrädchen Standard knurls
8	2	3	0.2 - 0.6	AA [0°] BL 15° / BR 15° BL 30° / BR 30° BL 45° / BR 45° GE 30° GE 45°
8	2	4	0.2 - 0.6	
8	3	3	0.2 - 0.6	
8	3	4	0.2 - 0.6	
8	4	3	0.2 - 0.6	
8	4	4	0.2 - 0.6	
10	2	3	0.2 - 0.8	
10	2	4	0.2 - 0.8	
10	3	3	0.2 - 0.8	
10	3	4	0.2 - 0.8	
10	4	3	0.2 - 0.8	
10	4	4	0.2 - 0.8	
12	4	4	0.3 - 1.0	
15	4	4	0.4 - 1.0	
15	4	5	0.4 - 1.0	
15	5	4	0.4 - 1.0	
15	5	5	0.4 - 1.0	
20	4	5	0.5 - 1.2	
20	5	5	0.5 - 1.2	
20	6	6	0.5 - 1.2	
20	8	6	0.5 - 1.2	

Art. N° ex :
8.9X2.5X4-0.2-AA-Q

D	E	d	Pas (tous les 0.1 mm) Teilung (alle 0.1 mm) Pitch (every 0.1 mm)	Molettes "Quick" "Quick"-Rändelrädchen "Quick"-knurling wheels
8.9	2.5	4	0.2 - 0.8	AA [0°]
14.5	3	5	0.4 - 1.0	BL 15° / BR 15°
21.5	5	8	0.5 - 1.2	BL 30° / BR 30°

MICRO-Line



APPLITEC
CUTTING TOOLS

Nuances
Sorten
Grades

> **16.03**

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



> **16.06**

Fraises en bout / Fraises à angler
Schaftfräser / Kegelsenker
End mills / Chamfering tools



> **16.52**

Outils pour machine WM 701S
Werkzeuge für Maschine WM 701S
Executions for machine WM 701S



> **16.96**

Fraises à graver
Gravierfräser
Engraving mills



> **16.108**

Micro-forets et forets à centrer
Mikrobohrer und Zentrierbohrer
Micro drills and centering drills



> **16.115**

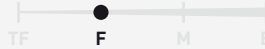
Informations techniques et symboles
Technische Informationen und Symbole
Technical information and symbols

> **16.136**

TiAlN**Revêtement PVD à couche mince**

Dünnschicht PVD Beschichtung

Thin PVD coating



P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- revêtement de dernière génération couche mince et lisse
- idéal pour tous les aciers et aciers inoxydables
- bonne condition pour les grades de titane et les alliages de nickel
- excellente variante universelle pour un fraisage en finition ou ébauche
- très bonne résistance à la température

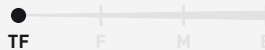
- neuesten Generation Beschichtung, dünne und glatte Schicht
- hervorragend für alle Stähle und rostfreie Stähle
- guter Zustand für Titan- und Nickellegierungssorten
- ausgezeichnete Universalsorte zum Schlicht- oder Schrappfräsen
- sehr gute Temperaturbeständigkeit

- latest generation coating thin and smooth layer
- specially adapted for our tools. Ideal for all basic steels and stainless steels
- good condition for titanium grades and nickel alloys
- excellent universal variant for finishing or rough milling
- very good temperature resistance

STF**Revêtement PVD à couche mince**

Dünnschicht PVD Beschichtung

Thin PVD coating



P	★★★★★
M	★★★★★
N	★★★★★
S	★★★★★

- revêtement de haute performance
- 1^{er} choix pour les alliages de chrome/nickel, inox, titane, zirconium
- spécialement adapté aux matières extrêmes en général

- hochleistungsbeschichtung
- erste Wahl für Chrom/Nickel, rostfreiem Stahl, Titan, Zirkoniumlegierungen
- speziell angepasst für extreme Materialien im Allgemeinen

- high performance coating
- first choice for chrome/nickel, stainless steel, titanium, zirconium alloys
- specially adapted to extreme materials in general

Nuances

Sorten

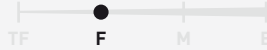
Grades

TiCN



Revêtement PVD à couche mince

Dünnschicht PVD Beschichtung
Thin PVD coating

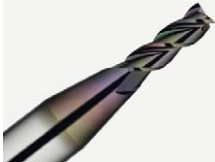


- revêtement de dernière génération offrant une excellente adhérence, avec une couche mince et lisse
- idéal pour le fraisage en finition de tous les aciers et aciers inoxydables
- excellente nuance pour les outils de petits diamètres (0.02-0.90 mm)

- Beschichtung der neuesten Generation mit ausgezeichneter Haftung, dünner und glatter Schicht
- hervorragend für Schlichtfräsen aller Stähle und rostfreien Stähle
- ausgezeichnete Sorte für Werkzeuge mit kleinem Durchmesser (0.02-0.90 mm)

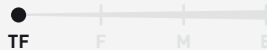
- latest generation coating with excellent adhesion, thin and smooth layer
- ideal for finish milling for all steels and stainless steels
- specially adapted for small diameters (0.02-0.90 mm)

DLC



Revêtement DLC à couche mince

Dünnschicht DLC Beschichtung
Thin DLC coating



- revêtement de très haute performance et à couche extra-mince
- très faible coefficient de frottement
- 1^{er} choix pour toutes les matières précieuses, non ferreuses et abrasives, telles que l'or, l'argent, le laiton sans plomb, le cuivre, l'aluminium, la fibre de carbone, la nacre et divers polymères...
- angles de coupe à finition poli miroir, offrant une excellente acuité d'arête
- durée de vie de l'outil considérablement prolongée

- hochleistungsbeschichtung mit extra-feiner Schicht
- sehr geringer Reibwert
- erste Wahl für alle edlen, nicht eisenhaltig und abrasiven Materialien wie Gold, Silber, bleifreies Messing, Kupfer, Aluminium, Kohlefaser, Perlmutt und diverse Polymere...
- Schneidkanten mit hochglanzpolierte Oberfläche, die eine hervorragende Schneidkanten-schärfe bieten
- deutlich verlängerte Lebensdauer des Werkzeugs

- very high-performance coating with extra-thin layer
- very low friction ratio
- first choice for all precious, non-ferrous and abrasive materials, such as gold, silver, lead-free brass, copper, aluminum, carbon fiber, mother-of-pearl and various polymers...
- cutting edges with mirror-polished finish, offering excellent edge sharpness
- significantly extended tool life

N



Non revêtu
Unbeschichtet
Uncoated



- carbures de haute qualité, adaptés aux différents groupes de produits
- tous les carbures ont une excellente dureté et une bonne résistance à la déformation
- acuité d'arête maximale grâce à une finition super polie
- idéal pour l'usinage en super finition de matières non ferreuses ou faiblement alliées

- hochwertige und spezifische Hartmetalle gemäss den Produktgruppen
- alle Hartmetalle haben eine ausgezeichnete Härte und eine gute Verformungsbeständigkeit
- maximale Kantenschärfe durch hochpoliertes Finish
- ideal für superfinish Bearbeitung von Nichteisen- oder niedriglegierten Materialien

- high-quality and specific carbides according to the product groups in our catalog
- all carbides have excellent hardness and good resistance to deformation
- maximum edge sharpness thanks to a super polished tool finish
- ideal for super-finish machining of non-ferrous or low-alloy materials

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

> 16.07

Z	λ	L2	D1	D2	Type	Corner	page
Z=1	0°	2x D1	Ø0.20 - 3.00	Ø3 h4 / Ø4 h5	3170-2		> 16.08
		2x D1	Ø0.20 - 3.00	Ø3 h4 / Ø4 h5	3170R-2		> 16.09
		3x D1	Ø0.20 - 3.00	Ø3 h4 / Ø4 h5	3170R-3		> 16.10
		4x D1	Ø0.30 - 3.00	Ø3 h4 / Ø4 h5	3170R-4		> 16.11
Z=2	30°	0.75x D1	Ø0.20 - 2.00	Ø3 h4	3271-0.75		> 16.12
		1x D1	Ø0.30 - 2.50	Ø3 h4	3271-1		> 16.13
		1.5x D1	Ø0.10 - 2.00	Ø3 h4	3271-1.5		> 16.14
		2x D1	Ø0.10 - 2.00	Ø3 h4	3271-2		> 16.15
		3x D1	Ø0.10 - 2.90	Ø3 h4	3271-3		> 16.16
		5x D1	Ø0.30 - 2.50	Ø3 h4	3271-5		> 16.17
		8x D1	Ø0.40 - 2.50	Ø3 h4 / Ø4 h5	3271-8		> 16.18
		2x D1	Ø0.20 - 3.00	Ø3 h4 / Ø6 h5	3270S-3X		> 16.19
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	3270S-6X		> 16.20
		2x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	3270S-9X		> 16.21
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	3279T-3X		> 16.22
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	3279T-6X		> 16.23
		2x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	3279T-9X		> 16.24
Z=3	30°	1.3x D1	Ø0.30 - 2.90	Ø3 h4	3371-1.3		> 16.25
		2x D1	Ø0.30 - 2.90	Ø3 h4	3371-2		> 16.26
		3x D1	Ø0.30 - 2.90	Ø3 h4	3371-3		> 16.27
		4x D1	Ø0.30 - 2.90	Ø3 h4	3371-4		> 16.28
		5x D1	Ø0.50 - 2.50	Ø3 h4	3371-5		> 16.29
	45°	8x D1	Ø0.50 - 2.50	Ø3 h4 / Ø4 h5	3371-8		> 16.30
		2.5x D1	Ø0.30 - 2.90	Ø3 h4	3375-2.5		> 16.31
		1.5x D1	Ø0.30 - 2.50	Ø3 h4	DHD3371-1.5		> 16.32
	36°-38°-40°	3x D1	Ø0.30 - 2.50	Ø3 h4	DHD3371-3		> 16.33
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	3370S-3X		> 16.34
	30°	2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	3370S-6X		> 16.35
		2x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	3370S-9X		> 16.36
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	3379T-3X		> 16.37
		2x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	3379T-6X		> 16.38
		2x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	3379T-9X		> 16.39
Z=4	30°	1.5x D1	Ø0.30 - 2.90	Ø3 h4	3471-1.5		> 16.40
		3x D1	Ø0.30 - 2.90	Ø3 h4	3471-3		> 16.41
	40°	2x D1	Ø0.30 - 2.90	Ø3 h4	3472-2		> 16.42
		4x D1	Ø0.40 - 2.90	Ø3 h4	3472-4		> 16.43
	35°-38°	3x D1	Ø0.50 - 2.50	Ø3 h4	DHP3471-3		> 16.44
Z=2	30°	0.75x D1	Ø0.20 - 2.50	Ø3 h4	3278-0.75		> 16.45
		1x D1	Ø0.20 - 2.90	Ø3 h4	3278-1		> 16.46
		1.5x D1	Ø0.20 - 2.90	Ø3 h4	3278-1.5		> 16.47
		3x D1	Ø0.20 - 2.90	Ø3 h4	3278-3		> 16.48
		1.5x D1	Ø0.20 - 3.00	Ø3 h4 / Ø6 h5	3278H-3X		> 16.49
		1.5x D1	Ø0.30 - 3.00	Ø3 h4 / Ø6 h5	3278H-6X		> 16.50
		1.5x D1	Ø0.40 - 3.00	Ø3 h4 / Ø6 h5	3278H-9X		> 16.51

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Matière Werkstoff Material		VC	0.10 - 0.50	0.60 - 1.50	1.60 - 2.90	N	TiAlN	STF	TiCN	DLC
		(m/min)	fz (mm)	fz (mm)	fz (mm)					
Acier de décolletage Automatenstahl Free-cutting steel	P	80 - 130	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	***	***	**	-
Acier Stahl Steel	< 600 N/mm ² P	70 - 100	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	***	***	**	-
Acier Stahl Steel	< 800 N/mm ² P	70 - 100	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	***	***	**	-
Acier Stahl Steel	> 800 N/mm ² P	50 - 80	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	***	***	**	-
Acier trempé Gehärteter Stahl -55HRC Hardened steel	H	60 - 90	0.001 - 0.002	0.003 - 0.005	0.007 - 0.010	-	***	***	*	-
Acier trempé Gehärteter Stahl +55HRC Hardened steel	H	40 - 70	0.001 - 0.002	0.003 - 0.005	0.007 - 0.010	-	***	***	*	-
Inox Rostfreistahl Stainless steel	M	40 - 80	0.003 - 0.005	0.006 - 0.010	0.013 - 0.020	-	***	***	**	-
Aluminium	N	200 - 300	0.002 - 0.005	0.005 - 0.010	0.010 - 0.030	***	-	-	**	***
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	100 - 200	0.001 - 0.005	0.006 - 0.010	0.010 - 0.015	***	**	**	**	***
Matière synthétique Synthetisches Material Synthetic material	N	200 - 700	0.002 - 0.004	0.006 - 0.015	0.015 - 0.050	***	**	**	**	***
Métaux précieux Edelmetalle Precious metals	N	90 - 140	0.002 - 0.003	0.004 - 0.012	0.012 - 0.025	***	**	**	*	***
Titane Titan Titanium	S	25 - 70	0.001 - 0.003	0.004 - 0.010	0.006 - 0.015	-	***	***	**	-
Alliage de nickel Nickel-Legierung Nickel alloy	S	40 - 70	0.001 - 0.003	0.004 - 0.008	0.008 - 0.012	-	***	***	**	-
Matière exotique Exotisches material Exotic material	O	15 - 25	0.001 - 0.002	0.003 - 0.005	0.006 - 0.010	-	***	***	**	***

Avec revêtement, augmenter les valeurs de 20-30%

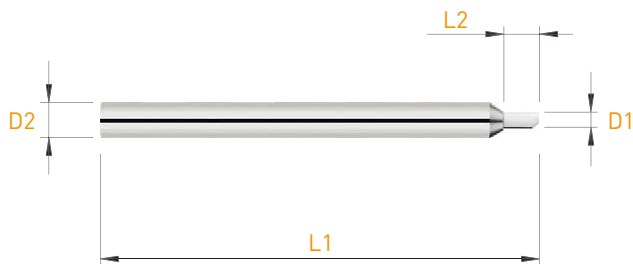
Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

* Bien / Gut / Good

** Très bien / Sehr gut / Very good

*** Excellent / Ausgezeichnet / Excellent



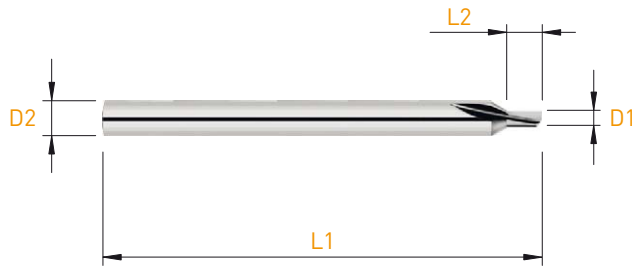
D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.20	0.40	3.00	39	3170-2-0.20	•				
0.30	0.60	3.00	39	3170-2-0.30	•	•	•	•	•
0.40	0.80	3.00	39	3170-2-0.40	•	•	•	•	•
0.50	1.00	3.00	39	3170-2-0.50	•	•	•	•	•
0.60	1.20	3.00	39	3170-2-0.60	•	•	•	•	•
0.70	1.40	3.00	39	3170-2-0.70	•	•	•	•	•
0.80	1.60	3.00	39	3170-2-0.80	•	•	•	•	•
0.90	1.80	3.00	39	3170-2-0.90	•	•	•	•	•
1.00	2.00	3.00	39	3170-2-1.00	•	•	•	•	•
1.10	2.20	3.00	39	3170-2-1.10	•	•	•	•	•
1.20	2.40	3.00	39	3170-2-1.20	•	•	•	•	•
1.30	2.60	3.00	39	3170-2-1.30	•	•	•	•	•
1.40	2.80	3.00	39	3170-2-1.40	•	•	•	•	•
1.50	3.00	3.00	39	3170-2-1.50	•	•	•	•	•
1.60	3.20	3.00	39	3170-2-1.60	•	•	•	•	•
1.70	3.40	3.00	39	3170-2-1.70	•	•	•	•	•
1.80	3.60	3.00	39	3170-2-1.80	•	•	•	•	•
1.90	3.80	3.00	39	3170-2-1.90	•	•	•	•	•
2.00	4.00	3.00	39	3170-2-2.00	•	•	•	•	•
2.10	4.20	3.00	39	3170-2-2.10	•	•	•	•	•
2.20	4.40	3.00	39	3170-2-2.20	•	•	•	•	•
2.30	4.60	3.00	39	3170-2-2.30	•	•	•	•	•
2.40	4.80	3.00	39	3170-2-2.40	•	•	•	•	•
2.50	5.00	3.00	39	3170-2-2.50	•	•	•	•	•
2.60	5.20	3.00	39	3170-2-2.60	•	•	•	•	•
2.70	5.40	3.00	39	3170-2-2.70	•	•	•	•	•
2.80	5.60	3.00	39	3170-2-2.80	•	•	•	•	•
2.90	5.80	3.00	39	3170-2-2.90	•	•	•	•	•
3.00	6.00	4.00	40	3170-2-3.00	•	•	•	•	•

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3170R-2



D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.20	0.40	3.00	39	3170R-2-0.20	•				
0.30	0.60	3.00	39	3170R-2-0.30	•	•	•	•	•
0.40	0.80	3.00	39	3170R-2-0.40	•	•	•	•	•
0.50	1.00	3.00	39	3170R-2-0.50	•	•	•	•	•
0.60	1.20	3.00	39	3170R-2-0.60	•	•	•	•	•
0.70	1.40	3.00	39	3170R-2-0.70	•	•	•	•	•
0.80	1.60	3.00	39	3170R-2-0.80	•	•	•	•	•
0.90	1.80	3.00	39	3170R-2-0.90	•	•	•	•	•
1.00	2.00	3.00	39	3170R-2-1.00	•	•	•	•	•
1.10	2.20	3.00	39	3170R-2-1.10	•	•	•	•	•
1.20	2.40	3.00	39	3170R-2-1.20	•	•	•	•	•
1.30	2.60	3.00	39	3170R-2-1.30	•	•	•	•	•
1.40	2.80	3.00	39	3170R-2-1.40	•	•	•	•	•
1.50	3.00	3.00	39	3170R-2-1.50	•	•	•	•	•
1.60	3.20	3.00	39	3170R-2-1.60	•	•	•	•	•
1.70	3.40	3.00	39	3170R-2-1.70	•	•	•	•	•
1.80	3.60	3.00	39	3170R-2-1.80	•	•	•	•	•
1.90	3.80	3.00	39	3170R-2-1.90	•	•	•	•	•
2.00	4.00	3.00	39	3170R-2-2.00	•	•	•	•	•
2.10	4.10	3.00	39	3170R-2-2.10	•	•	•	•	•
2.20	4.40	3.00	39	3170R-2-2.20	•	•	•	•	•
2.30	4.60	3.00	39	3170R-2-2.30	•	•	•	•	•
2.40	4.80	3.00	39	3170R-2-2.40	•	•	•	•	•
2.50	5.00	3.00	39	3170R-2-2.50	•	•	•	•	•
2.60	5.20	3.00	39	3170R-2-2.60	•	•	•	•	•
2.70	5.40	3.00	39	3170R-2-2.70	•	•	•	•	•
2.80	5.60	3.00	39	3170R-2-2.80	•	•	•	•	•
2.90	5.80	3.00	39	3170R-2-2.90	•	•	•	•	•
3.00	6.00	4.00	40	3170R-2-3.00	•	•	•	•	•

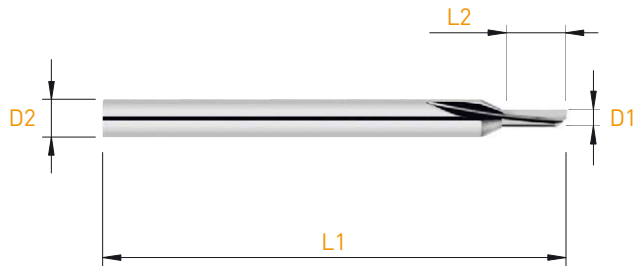


D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	Z	TiAIN	STF	TiCN	DLC
0.20	0.60	3.00	39	3170R-3-0.20	●				
0.30	0.90	3.00	39	3170R-3-0.30	●	●	●	●	●
0.40	1.20	3.00	39	3170R-3-0.40	●	●	●	●	●
0.50	1.50	3.00	39	3170R-3-0.50	●	●	●	●	●
0.60	1.80	3.00	39	3170R-3-0.60	●	●	●	●	●
0.70	2.10	3.00	39	3170R-3-0.70	●	●	●	●	●
0.80	2.40	3.00	39	3170R-3-0.80	●	●	●	●	●
0.90	2.70	3.00	39	3170R-3-0.90	●	●	●	●	●
1.00	3.00	3.00	39	3170R-3-1.00	●	●	●	●	●
1.10	3.30	3.00	39	3170R-3-1.10	●	●	●	●	●
1.20	3.60	3.00	39	3170R-3-1.20	●	●	●	●	●
1.30	3.90	3.00	39	3170R-3-1.30	●	●	●	●	●
1.40	4.20	3.00	39	3170R-3-1.40	●	●	●	●	●
1.50	4.50	3.00	39	3170R-3-1.50	●	●	●	●	●
2.00	6.00	3.00	39	3170R-3-2.00	●	●	●	●	●
2.50	7.50	3.00	39	3170R-3-2.50	●	●	●	●	●
3.00	9.00	4.00	40	3170R-3-3.00	●	●	●	●	●

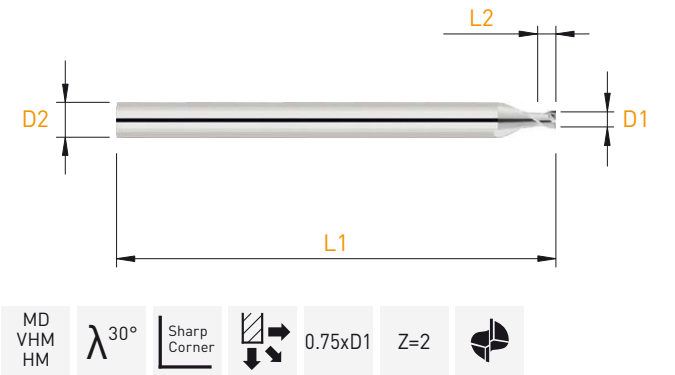
Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3170R-4

D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	1.20	3.00	39	3170R-4-0.30	•	•	•	•	•
0.40	1.60	3.00	39	3170R-4-0.40	•	•	•	•	•
0.50	2.00	3.00	39	3170R-4-0.50	•	•	•	•	•
0.60	2.40	3.00	39	3170R-4-0.60	•	•	•	•	•
0.70	2.80	3.00	39	3170R-4-0.70	•	•	•	•	•
0.80	3.20	3.00	39	3170R-4-0.80	•	•	•	•	•
0.90	3.60	3.00	39	3170R-4-0.90	•	•	•	•	•
1.00	4.00	3.00	39	3170R-4-1.00	•	•	•	•	•
1.10	4.40	3.00	39	3170R-4-1.10	•	•	•	•	•
1.20	4.80	3.00	39	3170R-4-1.20	•	•	•	•	•
1.30	5.20	3.00	39	3170R-4-1.30	•	•	•	•	•
1.40	5.60	3.00	39	3170R-4-1.40	•	•	•	•	•
1.50	6.00	3.00	39	3170R-4-1.50	•	•	•	•	•
2.00	8.00	3.00	39	3170R-4-2.00	•	•	•	•	•
2.50	10.00	3.00	39	3170R-4-2.50	•	•	•	•	•
3.00	12.00	4.00	40	3170R-4-3.00	•	•	•	•	•

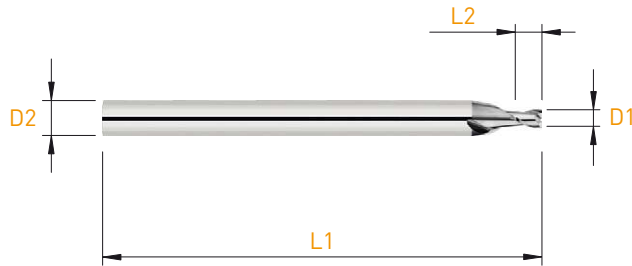


D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.20	0.15	3.00	39	3271-0.75-0.20	●				
0.30	0.25	3.00	39	3271-0.75-0.30	●	●	●	●	●
0.40	0.30	3.00	39	3271-0.75-0.40	●	●	●	●	●
0.50	0.37	3.00	39	3271-0.75-0.50	●	●	●	●	●
0.60	0.45	3.00	39	3271-0.75-0.60	●	●	●	●	●
0.70	0.53	3.00	39	3271-0.75-0.70	●	●	●	●	●
0.80	0.60	3.00	39	3271-0.75-0.80	●	●	●	●	●
0.90	0.70	3.00	39	3271-0.75-0.90	●	●	●	●	●
1.00	0.75	3.00	39	3271-0.75-1.00	●	●	●	●	●
1.10	0.90	3.00	39	3271-0.75-1.10	●	●	●	●	●
1.20	0.90	3.00	39	3271-0.75-1.20	●	●	●	●	●
1.30	1.00	3.00	39	3271-0.75-1.30	●	●	●	●	●
1.40	1.10	3.00	39	3271-0.75-1.40	●	●	●	●	●
1.50	1.15	3.00	39	3271-0.75-1.50	●	●	●	●	●
1.60	1.20	3.00	39	3271-0.75-1.60	●	●	●	●	●
1.70	1.30	3.00	39	3271-0.75-1.70	●	●	●	●	●
1.80	1.40	3.00	39	3271-0.75-1.80	●	●	●	●	●
1.90	1.45	3.00	39	3271-0.75-1.90	●	●	●	●	●
2.00	1.50	3.00	39	3271-0.75-2.00	●	●	●	●	●

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3271-1

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TAIN	STF	TiCN	DLC
0.30	0.30	3.00	39	3271-1-0.30	•	•	•	•	•
0.40	0.40	3.00	39	3271-1-0.40	•	•	•	•	•
0.50	0.50	3.00	39	3271-1-0.50	•	•	•	•	•
0.60	0.60	3.00	39	3271-1-0.60	•	•	•	•	•
0.70	0.70	3.00	39	3271-1-0.70	•	•	•	•	•
0.80	0.80	3.00	39	3271-1-0.80	•	•	•	•	•
0.90	0.90	3.00	39	3271-1-0.90	•	•	•	•	•
1.00	1.00	3.00	39	3271-1-1.00	•	•	•	•	•
1.10	1.10	3.00	39	3271-1-1.10	•	•	•	•	•
1.20	1.20	3.00	39	3271-1-1.20	•	•	•	•	•
1.30	1.30	3.00	39	3271-1-1.30	•	•	•	•	•
1.40	1.40	3.00	39	3271-1-1.40	•	•	•	•	•
1.50	1.50	3.00	39	3271-1-1.50	•	•	•	•	•
1.60	1.60	3.00	39	3271-1-1.60	•	•	•	•	•
1.70	1.70	3.00	39	3271-1-1.70	•	•	•	•	•
1.80	1.80	3.00	39	3271-1-1.80	•	•	•	•	•
1.90	1.90	3.00	39	3271-1-1.90	•	•	•	•	•
2.00	2.00	3.00	39	3271-1-2.00	•	•	•	•	•
2.50	2.50	3.00	39	3271-1-2.50	•	•	•	•	•



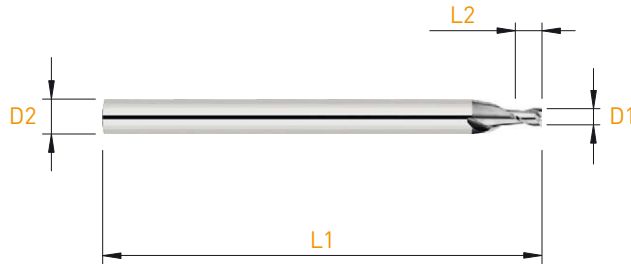
D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.10	0.15	3.00	39	3271-1.5-0.10	●				
0.15	0.20	3.00	39	3271-1.5-0.15	●				
0.20	0.30	3.00	39	3271-1.5-0.20	●				
0.25	0.35	3.00	39	3271-1.5-0.25	●				
0.30	0.45	3.00	39	3271-1.5-0.30	●	●	●	●	●
0.40	0.60	3.00	39	3271-1.5-0.40	●	●	●	●	●
0.45	0.70	3.00	39	3271-1.5-0.45	●	●	●	●	●
0.50	0.75	3.00	39	3271-1.5-0.50	●	●	●	●	●
0.60	0.90	3.00	39	3271-1.5-0.60	●	●	●	●	●
0.70	1.05	3.00	39	3271-1.5-0.70	●	●	●	●	●
0.80	1.20	3.00	39	3271-1.5-0.80	●	●	●	●	●
0.90	1.35	3.00	39	3271-1.5-0.90	●	●	●	●	●
1.00	1.50	3.00	39	3271-1.5-1.00	●	●	●	●	●
1.10	1.65	3.00	39	3271-1.5-1.10	●	●	●	●	●
1.20	1.80	3.00	39	3271-1.5-1.20	●	●	●	●	●
1.30	1.95	3.00	39	3271-1.5-1.30	●	●	●	●	●
1.40	2.10	3.00	39	3271-1.5-1.40	●	●	●	●	●
1.50	2.25	3.00	39	3271-1.5-1.50	●	●	●	●	●
1.60	2.40	3.00	39	3271-1.5-1.60	●	●	●	●	●
1.70	2.55	3.00	39	3271-1.5-1.70	●	●	●	●	●
1.80	2.70	3.00	39	3271-1.5-1.80	●	●	●	●	●
1.90	2.85	3.00	39	3271-1.5-1.90	●	●	●	●	●
2.00	3.00	3.00	39	3271-1.5-2.00	●	●	●	●	●

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

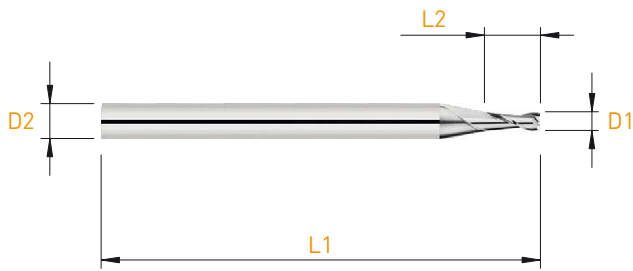
3271-2



D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAIN	STF	TiCN	DLC
0.10	0.20	3.00	39	3271-2-0.10	●				
0.15	0.30	3.00	39	3271-2-0.15	●				
0.20	0.40	3.00	39	3271-2-0.20	●				
0.25	0.50	3.00	39	3271-2-0.25	●				
0.30	0.60	3.00	39	3271-2-0.30	●	●	●	●	●
0.40	0.80	3.00	39	3271-2-0.40	●	●	●	●	●
0.50	1.00	3.00	39	3271-2-0.50	●	●	●	●	●
0.60	1.20	3.00	39	3271-2-0.60	●	●	●	●	●
0.70	1.40	3.00	39	3271-2-0.70	●	●	●	●	●
0.80	1.60	3.00	39	3271-2-0.80	●	●	●	●	●
0.90	1.80	3.00	39	3271-2-0.90	●	●	●	●	●
1.00	2.00	3.00	39	3271-2-1.00	●	●	●	●	●
1.10	2.20	3.00	39	3271-2-1.10	●	●	●	●	●
1.20	2.40	3.00	39	3271-2-1.20	●	●	●	●	●
1.30	2.60	3.00	39	3271-2-1.30	●	●	●	●	●
1.40	2.80	3.00	39	3271-2-1.40	●	●	●	●	●
1.50	3.00	3.00	39	3271-2-1.50	●	●	●	●	●
1.60	3.20	3.00	39	3271-2-1.60	●	●	●	●	●
1.70	3.40	3.00	39	3271-2-1.70	●	●	●	●	●
1.80	3.60	3.00	39	3271-2-1.80	●	●	●	●	●
1.90	3.80	3.00	39	3271-2-1.90	●	●	●	●	●
2.00	4.00	3.00	39	3271-2-2.00	●	●	●	●	●

3271-3

Micro-fraises de précision
Mikropräzisionsfräser
Precision micro end mills



MD
VHM
HM

λ 30°

Sharp
Corner

3xD1

Z=2

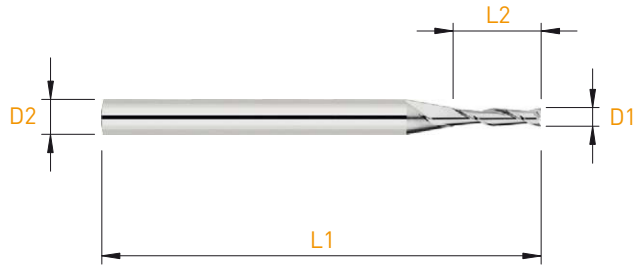
D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.10	0.25	3.00	39	3271-3-0.10	●				
0.15	0.45	3.00	39	3271-3-0.15	●				
0.20	0.50	3.00	39	3271-3-0.20	●				
0.25	0.75	3.00	39	3271-3-0.25	●				
0.30	1.00	3.00	39	3271-3-0.30	●	●	●	●	●
0.35	1.10	3.00	39	3271-3-0.35	●	●	●	●	●
0.40	1.20	3.00	39	3271-3-0.40	●	●	●	●	●
0.50	1.50	3.00	39	3271-3-0.50	●	●	●	●	●
0.60	2.00	3.00	39	3271-3-0.60	●	●	●	●	●
0.65	2.00	3.00	39	3271-3-0.65	●	●	●	●	●
0.70	2.00	3.00	39	3271-3-0.70	●	●	●	●	●
0.75	2.00	3.00	39	3271-3-0.75	●	●	●	●	●
0.80	2.50	3.00	39	3271-3-0.80	●	●	●	●	●
0.90	2.50	3.00	39	3271-3-0.90	●	●	●	●	●
0.95	3.00	3.00	39	3271-3-0.95	●	●	●	●	●
1.00	3.00	3.00	39	3271-3-1.00	●	●	●	●	●
1.05	3.00	3.00	39	3271-3-1.05	●	●	●	●	●
1.10	3.00	3.00	39	3271-3-1.10	●	●	●	●	●
1.15	3.50	3.00	39	3271-3-1.15	●	●	●	●	●
1.20	4.00	3.00	39	3271-3-1.20	●	●	●	●	●
1.30	4.00	3.00	39	3271-3-1.30	●	●	●	●	●
1.35	4.00	3.00	39	3271-3-1.35	●	●	●	●	●
1.40	4.00	3.00	39	3271-3-1.40	●	●	●	●	●
1.45	4.40	3.00	39	3271-3-1.45	●	●	●	●	●
1.50	4.50	3.00	39	3271-3-1.50	●	●	●	●	●
1.55	4.50	3.00	39	3271-3-1.55	●	●	●	●	●
1.60	4.50	3.00	39	3271-3-1.60	●	●	●	●	●
1.65	5.00	3.00	39	3271-3-1.65	●	●	●	●	●
1.70	5.00	3.00	39	3271-3-1.70	●	●	●	●	●
1.75	5.30	3.00	39	3271-3-1.75	●	●	●	●	●

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
1.80	6.00	3.00	39	3271-3-1.80	●	●	●	●	●
1.85	6.00	3.00	39	3271-3-1.85	●	●	●	●	●
1.90	6.00	3.00	39	3271-3-1.90	●	●	●	●	●
1.95	6.00	3.00	39	3271-3-1.95	●	●	●	●	●
2.00	6.00	3.00	39	3271-3-2.00	●	●	●	●	●
2.10	6.00	3.00	39	3271-3-2.10	●	●	●	●	●
2.20	6.50	3.00	39	3271-3-2.20	●	●	●	●	●
2.30	7.00	3.00	39	3271-3-2.30	●	●	●	●	●
2.40	7.00	3.00	39	3271-3-2.40	●	●	●	●	●
2.50	7.50	3.00	39	3271-3-2.50	●	●	●	●	●
2.60	7.50	3.00	39	3271-3-2.60	●	●	●	●	●
2.70	8.00	3.00	39	3271-3-2.70	●	●	●	●	●
2.80	8.00	3.00	39	3271-3-2.80	●	●	●	●	●
2.90	8.00	3.00	39	3271-3-2.90	●	●	●	●	●

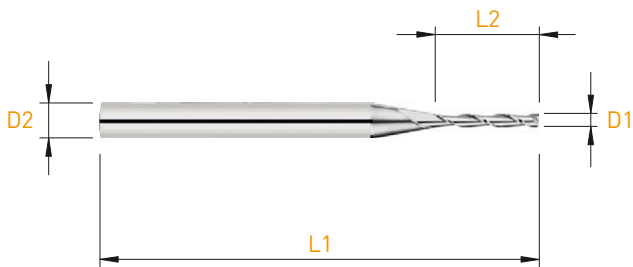
Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3271-5

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TAIN	STF	TiCN	DLC
0.30	1.50	3.00	39	3271-5-0.30	•	•	•	•	•
0.35	1.80	3.00	39	3271-5-0.35	•	•	•	•	•
0.40	2.00	3.00	39	3271-5-0.40	•	•	•	•	•
0.50	2.50	3.00	39	3271-5-0.50	•	•	•	•	•
0.55	2.80	3.00	39	3271-5-0.55	•	•	•	•	•
0.60	3.00	3.00	39	3271-5-0.60	•	•	•	•	•
0.65	3.30	3.00	39	3271-5-0.65	•	•	•	•	•
0.70	3.50	3.00	39	3271-5-0.70	•	•	•	•	•
0.75	3.80	3.00	39	3271-5-0.75	•	•	•	•	•
0.80	4.00	3.00	39	3271-5-0.80	•	•	•	•	•
0.85	4.30	3.00	39	3271-5-0.85	•	•	•	•	•
0.90	4.50	3.00	39	3271-5-0.90	•	•	•	•	•
0.95	4.80	3.00	39	3271-5-0.95	•	•	•	•	•
1.00	5.00	3.00	39	3271-5-1.00	•	•	•	•	•
1.10	5.50	3.00	39	3271-5-1.10	•	•	•	•	•
1.20	6.00	3.00	39	3271-5-1.20	•	•	•	•	•
1.50	7.50	3.00	39	3271-5-1.50	•	•	•	•	•
2.00	10.00	3.00	39	3271-5-2.00	•	•	•	•	•
2.50	12.50	3.00	39	3271-5-2.50	•	•	•	•	•



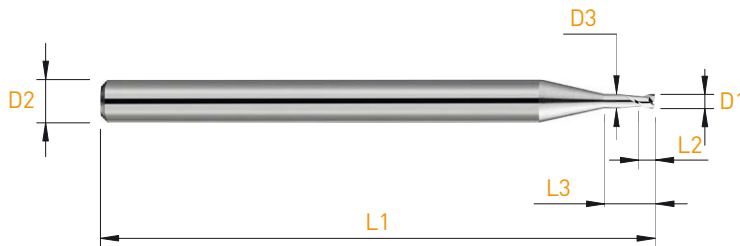
D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.40	3.20	3.00	39	3271-8-0.40	●	●	●	●	●
0.50	4.00	3.00	39	3271-8-0.50	●	●	●	●	●
0.60	5.00	3.00	39	3271-8-0.60	●	●	●	●	●
0.70	5.60	3.00	39	3271-8-0.70	●	●	●	●	●
0.80	6.00	3.00	39	3271-8-0.80	●	●	●	●	●
0.90	7.20	3.00	39	3271-8-0.90	●	●	●	●	●
1.00	8.00	3.00	39	3271-8-1.00	●	●	●	●	●
1.20	9.00	3.00	39	3271-8-1.20	●	●	●	●	●
1.50	12.00	4.00	50	3271-8-1.50	●	●	●	●	●
2.00	16.00	4.00	50	3271-8-2.00	●	●	●	●	●
2.50	20.00	4.00	50	3271-8-2.50	●	●	●	●	●

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3270S-3X



D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.20	0.40	0.60	0.17	3.00	39	3270S-3X-0.20	●				
0.30	0.60	0.90	0.27	3.00	39	3270S-3X-0.30	●	●	●	●	●
0.40	0.80	1.20	0.37	3.00	39	3270S-3X-0.40	●	●	●	●	●
0.50	1.00	1.50	0.45	3.00	39	3270S-3X-0.50	●	●	●	●	●
0.60	1.20	1.80	0.55	3.00	39	3270S-3X-0.60	●	●	●	●	●
0.70	1.40	2.10	0.65	3.00	39	3270S-3X-0.70	●	●	●	●	●
0.80	1.60	2.40	0.75	3.00	39	3270S-3X-0.80	●	●	●	●	●
0.90	1.80	2.70	0.85	3.00	39	3270S-3X-0.90	●	●	●	●	●
1.00	2.00	3.00	0.95	3.00	39	3270S-3X-1.00	●	●	●	●	●
1.10	2.20	3.30	1.05	3.00	39	3270S-3X-1.10	●	●	●	●	●
1.20	2.40	3.60	1.15	3.00	39	3270S-3X-1.20	●	●	●	●	●
1.30	2.60	3.90	1.25	3.00	39	3270S-3X-1.30	●	●	●	●	●
1.40	2.80	4.20	1.35	3.00	39	3270S-3X-1.40	●	●	●	●	●
1.50	3.00	4.50	1.45	3.00	39	3270S-3X-1.50	●	●	●	●	●
1.60	3.20	4.80	1.55	3.00	39	3270S-3X-1.60	●	●	●	●	●
1.70	3.40	5.10	1.65	3.00	39	3270S-3X-1.70	●	●	●	●	●
1.80	3.60	5.40	1.75	3.00	39	3270S-3X-1.80	●	●	●	●	●
1.90	3.80	5.70	1.85	3.00	39	3270S-3X-1.90	●	●	●	●	●
2.00	4.00	6.00	1.95	6.00	50	3270S-3X-2.00	●	●	●	●	●
2.10	4.20	6.30	2.05	6.00	50	3270S-3X-2.10	●	●	●	●	●
2.20	4.40	6.60	2.15	6.00	50	3270S-3X-2.20	●	●	●	●	●
2.30	4.60	6.90	2.25	6.00	50	3270S-3X-2.30	●	●	●	●	●
2.40	4.80	7.20	2.35	6.00	50	3270S-3X-2.40	●	●	●	●	●
2.50	5.00	7.50	2.45	6.00	50	3270S-3X-2.50	●	●	●	●	●
3.00	6.00	9.00	2.95	6.00	50	3270S-3X-3.00	●	●	●	●	●



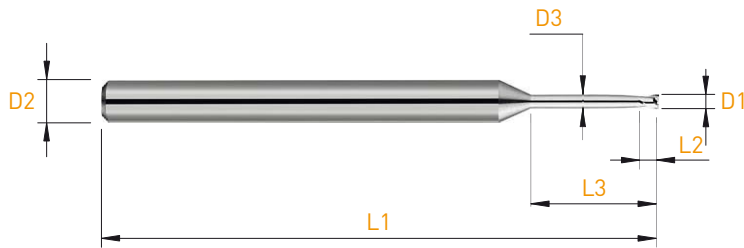
D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.60	1.80	0.27	3.00	39	3270S-6X-0.30	•	•	•	•	•
0.40	0.80	2.40	0.37	3.00	39	3270S-6X-0.40	•	•	•	•	•
0.50	1.00	3.00	0.45	3.00	39	3270S-6X-0.50	•	•	•	•	•
0.60	1.20	3.60	0.55	3.00	39	3270S-6X-0.60	•	•	•	•	•
0.70	1.40	4.20	0.65	3.00	39	3270S-6X-0.70	•	•	•	•	•
0.80	1.60	4.80	0.75	3.00	39	3270S-6X-0.80	•	•	•	•	•
0.90	1.80	5.40	0.85	3.00	39	3270S-6X-0.90	•	•	•	•	•
1.00	2.00	6.00	0.95	3.00	39	3270S-6X-1.00	•	•	•	•	•
1.10	2.20	6.60	1.05	3.00	39	3270S-6X-1.10	•	•	•	•	•
1.20	2.40	7.20	1.15	3.00	39	3270S-6X-1.20	•	•	•	•	•
1.30	2.60	7.80	1.25	3.00	39	3270S-6X-1.30	•	•	•	•	•
1.40	2.80	8.40	1.35	3.00	39	3270S-6X-1.40	•	•	•	•	•
1.50	3.00	9.00	1.45	3.00	39	3270S-6X-1.50	•	•	•	•	•
1.60	3.20	9.60	1.55	3.00	39	3270S-6X-1.60	•	•	•	•	•
1.70	3.40	10.20	1.65	3.00	39	3270S-6X-1.70	•	•	•	•	•
1.80	3.60	10.80	1.75	3.00	39	3270S-6X-1.80	•	•	•	•	•
1.90	3.80	11.40	1.85	3.00	39	3270S-6X-1.90	•	•	•	•	•
2.00	4.00	12.00	1.95	6.00	50	3270S-6X-2.00	•	•	•	•	•
2.10	4.20	12.60	2.05	6.00	50	3270S-6X-2.10	•	•	•	•	•
2.20	4.40	13.20	2.15	6.00	50	3270S-6X-2.20	•	•	•	•	•
2.30	4.60	13.80	2.25	6.00	50	3270S-6X-2.30	•	•	•	•	•
2.40	4.80	14.40	2.35	6.00	50	3270S-6X-2.40	•	•	•	•	•
2.50	5.00	15.00	2.45	6.00	50	3270S-6X-2.50	•	•	•	•	•
3.00	6.00	18.00	2.95	6.00	50	3270S-6X-3.00	•	•	•	•	•

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3270S-9X



D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.40	0.80	3.60	0.37	3.00	39	3270S-9X-0.40	●	●	●	●	●
0.50	1.00	4.50	0.45	3.00	39	3270S-9X-0.50	●	●	●	●	●
0.60	1.20	5.40	0.55	3.00	39	3270S-9X-0.60	●	●	●	●	●
0.70	1.40	6.30	0.65	3.00	39	3270S-9X-0.70	●	●	●	●	●
0.80	1.60	7.20	0.75	3.00	39	3270S-9X-0.80	●	●	●	●	●
0.90	1.80	8.10	0.85	3.00	39	3270S-9X-0.90	●	●	●	●	●
1.00	2.00	9.00	0.95	3.00	39	3270S-9X-1.00	●	●	●	●	●
1.10	2.20	9.90	1.05	3.00	39	3270S-9X-1.10	●	●	●	●	●
1.20	2.40	10.80	1.15	3.00	39	3270S-9X-1.20	●	●	●	●	●
1.30	2.60	11.70	1.25	3.00	39	3270S-9X-1.30	●	●	●	●	●
1.40	2.80	12.60	1.35	3.00	39	3270S-9X-1.40	●	●	●	●	●
1.50	3.00	13.50	1.45	3.00	39	3270S-9X-1.50	●	●	●	●	●
1.60	3.20	14.40	1.55	3.00	39	3270S-9X-1.60	●	●	●	●	●
1.70	3.40	15.30	1.65	3.00	39	3270S-9X-1.70	●	●	●	●	●
1.80	3.60	16.20	1.75	3.00	39	3270S-9X-1.80	●	●	●	●	●
1.90	3.80	17.10	1.85	3.00	39	3270S-9X-1.90	●	●	●	●	●
2.00	4.00	18.00	1.95	6.00	50	3270S-9X-2.00	●	●	●	●	●
2.10	4.20	18.90	2.05	6.00	50	3270S-9X-2.10	●	●	●	●	●
2.20	4.40	19.80	2.15	6.00	50	3270S-9X-2.20	●	●	●	●	●
2.30	4.60	20.70	2.25	6.00	50	3270S-9X-2.30	●	●	●	●	●
2.40	4.80	21.60	2.35	6.00	50	3270S-9X-2.40	●	●	●	●	●
2.50	5.00	22.50	2.45	6.00	50	3270S-9X-2.50	●	●	●	●	●
3.00	6.00	27.00	2.95	6.00	50	3270S-9X-3.00	●	●	●	●	●



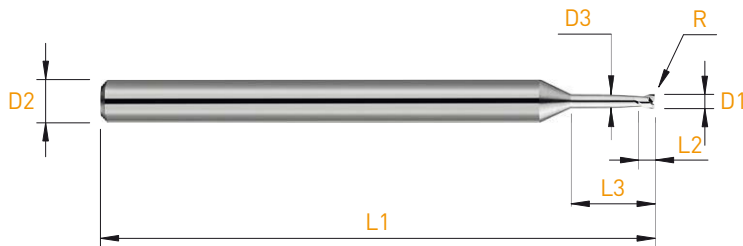
D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	0.90	0.27	3.00	39	3279T-3X-0.30	●	●	●	●	●
0.40	0.05	0.80	1.20	0.37	3.00	39	3279T-3X-0.40	●	●	●	●	●
0.50	0.05	1.00	1.50	0.45	3.00	39	3279T-3X-0.50	●	●	●	●	●
0.60	0.05	1.20	1.80	0.55	3.00	39	3279T-3X-0.60	●	●	●	●	●
0.70	0.05	1.40	2.10	0.65	3.00	39	3279T-3X-0.70	●	●	●	●	●
0.80	0.05	1.60	2.40	0.75	3.00	39	3279T-3X-0.80	●	●	●	●	●
0.90	0.05	1.80	2.70	0.85	3.00	39	3279T-3X-0.90	●	●	●	●	●
1.00	0.10	2.00	3.00	0.95	3.00	39	3279T-3X-1.00	●	●	●	●	●
1.10	0.10	2.20	3.30	1.05	3.00	39	3279T-3X-1.10	●	●	●	●	●
1.20	0.10	2.40	3.60	1.15	3.00	39	3279T-3X-1.20	●	●	●	●	●
1.30	0.10	2.60	3.90	1.25	3.00	39	3279T-3X-1.30	●	●	●	●	●
1.40	0.10	2.80	4.20	1.35	3.00	39	3279T-3X-1.40	●	●	●	●	●
1.50	0.20	3.00	4.50	1.45	3.00	39	3279T-3X-1.50	●	●	●	●	●
1.60	0.20	3.20	4.80	1.55	3.00	39	3279T-3X-1.60	●	●	●	●	●
1.70	0.20	3.40	5.10	1.65	3.00	39	3279T-3X-1.70	●	●	●	●	●
1.80	0.20	3.60	5.40	1.75	3.00	39	3279T-3X-1.80	●	●	●	●	●
1.90	0.20	3.80	5.70	1.85	3.00	39	3279T-3X-1.90	●	●	●	●	●
2.00	0.20	4.00	6.00	1.95	6.00	50	3279T-3X-2.00	●	●	●	●	●
2.10	0.20	4.20	6.30	2.05	6.00	50	3279T-3X-2.10	●	●	●	●	●
2.20	0.20	4.40	6.60	2.15	6.00	50	3279T-3X-2.20	●	●	●	●	●
2.30	0.20	4.60	6.90	2.25	6.00	50	3279T-3X-2.30	●	●	●	●	●
2.40	0.20	4.80	7.20	2.35	6.00	50	3279T-3X-2.40	●	●	●	●	●
2.50	0.20	5.00	7.50	2.45	6.00	50	3279T-3X-2.50	●	●	●	●	●
3.00	0.20	6.00	9.00	2.95	6.00	50	3279T-3X-3.00	●	●	●	●	●

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3279T-6X



D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	1.80	0.27	3.00	39	3279T-6X-0.30	●	●	●	●	●
0.40	0.05	0.80	2.40	0.37	3.00	39	3279T-6X-0.40	●	●	●	●	●
0.50	0.05	1.00	3.00	0.45	3.00	39	3279T-6X-0.50	●	●	●	●	●
0.60	0.05	1.20	3.60	0.55	3.00	39	3279T-6X-0.60	●	●	●	●	●
0.70	0.05	1.40	4.20	0.65	3.00	39	3279T-6X-0.70	●	●	●	●	●
0.80	0.05	1.60	4.80	0.75	3.00	39	3279T-6X-0.80	●	●	●	●	●
0.90	0.05	1.80	5.40	0.85	3.00	39	3279T-6X-0.90	●	●	●	●	●
1.00	0.10	2.00	6.00	0.95	3.00	39	3279T-6X-1.00	●	●	●	●	●
1.10	0.10	2.20	6.60	1.05	3.00	39	3279T-6X-1.10	●	●	●	●	●
1.20	0.10	2.40	7.20	1.15	3.00	39	3279T-6X-1.20	●	●	●	●	●
1.30	0.10	2.60	7.80	1.25	3.00	39	3279T-6X-1.30	●	●	●	●	●
1.40	0.10	2.80	8.40	1.35	3.00	39	3279T-6X-1.40	●	●	●	●	●
1.50	0.20	3.00	9.00	1.45	3.00	39	3279T-6X-1.50	●	●	●	●	●
1.60	0.20	3.20	9.60	1.55	3.00	39	3279T-6X-1.60	●	●	●	●	●
1.70	0.20	3.40	10.20	1.65	3.00	39	3279T-6X-1.70	●	●	●	●	●
1.80	0.20	3.60	10.80	1.75	3.00	39	3279T-6X-1.80	●	●	●	●	●
1.90	0.20	3.80	11.40	1.85	3.00	39	3279T-6X-1.90	●	●	●	●	●
2.00	0.20	4.00	12.00	1.95	6.00	50	3279T-6X-2.00	●	●	●	●	●
2.10	0.20	4.20	12.60	2.05	6.00	50	3279T-6X-2.10	●	●	●	●	●
2.20	0.20	4.40	13.20	2.15	6.00	50	3279T-6X-2.20	●	●	●	●	●
2.30	0.20	4.60	13.80	2.25	6.00	50	3279T-6X-2.30	●	●	●	●	●
2.40	0.20	4.80	14.40	2.35	6.00	50	3279T-6X-2.40	●	●	●	●	●
2.50	0.20	5.00	15.00	2.45	6.00	50	3279T-6X-2.50	●	●	●	●	●
3.00	0.20	6.00	18.00	2.95	6.00	50	3279T-6X-3.00	●	●	●	●	●



D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.40	0.05	0.80	3.60	0.37	3.00	39	3279T-9X-0.40	●	●	●	●	●
0.50	0.05	1.00	4.50	0.45	3.00	39	3279T-9X-0.50	●	●	●	●	●
0.60	0.05	1.20	5.40	0.55	3.00	39	3279T-9X-0.60	●	●	●	●	●
0.70	0.05	1.40	6.30	0.65	3.00	39	3279T-9X-0.70	●	●	●	●	●
0.80	0.05	1.60	7.20	0.75	3.00	39	3279T-9X-0.80	●	●	●	●	●
0.90	0.05	1.80	8.10	0.85	3.00	39	3279T-9X-0.90	●	●	●	●	●
1.00	0.10	2.00	9.00	0.95	3.00	39	3279T-9X-1.00	●	●	●	●	●
1.10	0.10	2.20	9.90	1.05	3.00	39	3279T-9X-1.10	●	●	●	●	●
1.20	0.10	2.40	10.80	1.15	3.00	39	3279T-9X-1.20	●	●	●	●	●
1.30	0.10	2.60	11.70	1.25	3.00	39	3279T-9X-1.30	●	●	●	●	●
1.40	0.10	2.80	12.60	1.35	3.00	39	3279T-9X-1.40	●	●	●	●	●
1.50	0.20	3.00	13.50	1.45	3.00	39	3279T-9X-1.50	●	●	●	●	●
1.60	0.20	3.20	14.40	1.55	3.00	39	3279T-9X-1.60	●	●	●	●	●
1.70	0.20	3.40	15.30	1.65	3.00	39	3279T-9X-1.70	●	●	●	●	●
1.80	0.20	3.60	16.20	1.75	3.00	39	3279T-9X-1.80	●	●	●	●	●
1.90	0.20	3.80	17.10	1.85	3.00	39	3279T-9X-1.90	●	●	●	●	●
2.00	0.20	4.00	18.00	1.95	6.00	50	3279T-9X-2.00	●	●	●	●	●
2.10	0.20	4.20	18.90	2.05	6.00	50	3279T-9X-2.10	●	●	●	●	●
2.20	0.20	4.40	19.80	2.15	6.00	50	3279T-9X-2.20	●	●	●	●	●
2.30	0.20	4.60	20.70	2.25	6.00	50	3279T-9X-2.30	●	●	●	●	●
2.40	0.20	4.80	21.60	2.35	6.00	50	3279T-9X-2.40	●	●	●	●	●
2.50	0.20	5.00	22.50	2.45	6.00	50	3279T-9X-2.50	●	●	●	●	●
3.00	0.20	6.00	27.00	2.95	6.00	50	3279T-9X-3.00	●	●	●	●	●

Micro-fraises de précision

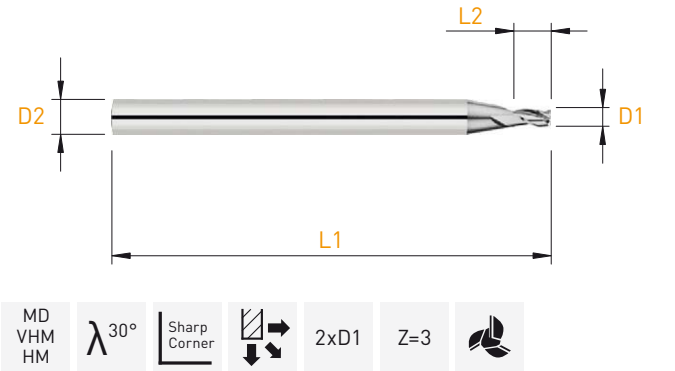
Mikropräzisionsfräser

Precision micro end mills

3371-1.3



D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TAIN	STF	TiCN	DLC
0.30	0.40	3.00	39	3371-1.3-0.30	•	•	•	•	•
0.35	0.50	3.00	39	3371-1.3-0.35	•	•	•	•	•
0.40	0.50	3.00	39	3371-1.3-0.40	•	•	•	•	•
0.45	0.60	3.00	39	3371-1.3-0.45	•	•	•	•	•
0.50	0.70	3.00	39	3371-1.3-0.50	•	•	•	•	•
0.60	0.80	3.00	39	3371-1.3-0.60	•	•	•	•	•
0.70	0.90	3.00	39	3371-1.3-0.70	•	•	•	•	•
0.80	1.00	3.00	39	3371-1.3-0.80	•	•	•	•	•
0.90	1.30	3.00	39	3371-1.3-0.90	•	•	•	•	•
1.00	1.30	3.00	39	3371-1.3-1.00	•	•	•	•	•
1.10	1.50	3.00	39	3371-1.3-1.10	•	•	•	•	•
1.20	1.60	3.00	39	3371-1.3-1.20	•	•	•	•	•
1.30	1.80	3.00	39	3371-1.3-1.30	•	•	•	•	•
1.40	1.80	3.00	39	3371-1.3-1.40	•	•	•	•	•
1.50	2.00	3.00	39	3371-1.3-1.50	•	•	•	•	•
1.55	2.00	3.00	39	3371-1.3-1.55	•	•	•	•	•
1.60	2.00	3.00	39	3371-1.3-1.60	•	•	•	•	•
1.65	2.00	3.00	39	3371-1.3-1.65	•	•	•	•	•
1.70	2.00	3.00	39	3371-1.3-1.70	•	•	•	•	•
1.80	2.40	3.00	39	3371-1.3-1.80	•	•	•	•	•
1.90	2.40	3.00	39	3371-1.3-1.90	•	•	•	•	•
2.00	2.60	3.00	39	3371-1.3-2.00	•	•	•	•	•
2.05	2.70	3.00	39	3371-1.3-2.05	•	•	•	•	•
2.20	3.00	3.00	39	3371-1.3-2.20	•	•	•	•	•
2.50	3.30	3.00	39	3371-1.3-2.50	•	•	•	•	•
2.80	3.50	3.00	39	3371-1.3-2.80	•	•	•	•	•
2.90	3.50	3.00	39	3371-1.3-2.90	•	•	•	•	•



D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.60	3.00	39	3371-2-0.30	●	●	●	●	●
0.35	0.70	3.00	39	3371-2-0.35	●	●	●	●	●
0.40	0.80	3.00	39	3371-2-0.40	●	●	●	●	●
0.45	0.90	3.00	39	3371-2-0.45	●	●	●	●	●
0.50	1.00	3.00	39	3371-2-0.50	●	●	●	●	●
0.60	1.20	3.00	39	3371-2-0.60	●	●	●	●	●
0.70	1.40	3.00	39	3371-2-0.70	●	●	●	●	●
0.75	1.50	3.00	39	3371-2-0.75	●	●	●	●	●
0.80	1.60	3.00	39	3371-2-0.80	●	●	●	●	●
0.90	1.80	3.00	39	3371-2-0.90	●	●	●	●	●
0.95	1.90	3.00	39	3371-2-0.95	●	●	●	●	●
1.00	2.00	3.00	39	3371-2-1.00	●	●	●	●	●
1.10	2.20	3.00	39	3371-2-1.10	●	●	●	●	●
1.20	2.40	3.00	39	3371-2-1.20	●	●	●	●	●
1.30	2.60	3.00	39	3371-2-1.30	●	●	●	●	●
1.40	2.80	3.00	39	3371-2-1.40	●	●	●	●	●
1.50	3.00	3.00	39	3371-2-1.50	●	●	●	●	●
1.60	3.20	3.00	39	3371-2-1.60	●	●	●	●	●
1.70	3.40	3.00	39	3371-2-1.70	●	●	●	●	●
1.80	3.60	3.00	39	3371-2-1.80	●	●	●	●	●
1.90	3.80	3.00	39	3371-2-1.90	●	●	●	●	●
2.00	4.00	3.00	39	3371-2-2.00	●	●	●	●	●
2.10	4.20	3.00	39	3371-2-2.10	●	●	●	●	●
2.20	4.40	3.00	39	3371-2-2.20	●	●	●	●	●
2.30	4.60	3.00	39	3371-2-2.30	●	●	●	●	●
2.40	4.80	3.00	39	3371-2-2.40	●	●	●	●	●
2.50	5.00	3.00	39	3371-2-2.50	●	●	●	●	●
2.60	5.20	3.00	39	3371-2-2.60	●	●	●	●	●
2.70	5.40	3.00	39	3371-2-2.70	●	●	●	●	●
2.80	5.60	3.00	39	3371-2-2.80	●	●	●	●	●
2.90	5.80	3.00	39	3371-2-2.90	●	●	●	●	●

Micro-fraises de précision

Mikropräzisionsfräser

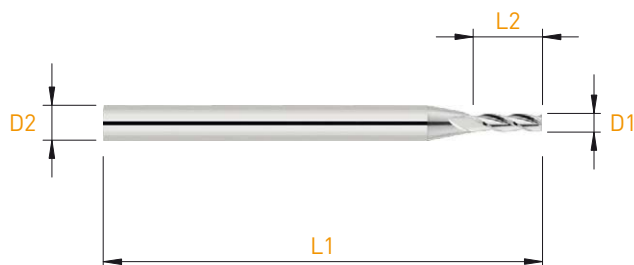
Precision micro end mills

3371-3



D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.90	3.00	39	3371-3-0.30	•	•	•	•	•
0.40	1.20	3.00	39	3371-3-0.40	•	•	•	•	•
0.45	1.40	3.00	39	3371-3-0.45	•	•	•	•	•
0.50	1.50	3.00	39	3371-3-0.50	•	•	•	•	•
0.55	1.80	3.00	39	3371-3-0.55	•	•	•	•	•
0.60	2.00	3.00	39	3371-3-0.60	•	•	•	•	•
0.65	2.00	3.00	39	3371-3-0.65	•	•	•	•	•
0.70	2.00	3.00	39	3371-3-0.70	•	•	•	•	•
0.75	2.00	3.00	39	3371-3-0.75	•	•	•	•	•
0.80	2.50	3.00	39	3371-3-0.80	•	•	•	•	•
0.85	2.50	3.00	39	3371-3-0.85	•	•	•	•	•
0.90	2.50	3.00	39	3371-3-0.90	•	•	•	•	•
0.95	2.90	3.00	39	3371-3-0.95	•	•	•	•	•
1.00	3.00	3.00	39	3371-3-1.00	•	•	•	•	•
1.05	3.20	3.00	39	3371-3-1.05	•	•	•	•	•
1.10	3.30	3.00	39	3371-3-1.10	•	•	•	•	•
1.15	3.50	3.00	39	3371-3-1.15	•	•	•	•	•
1.20	4.00	3.00	39	3371-3-1.20	•	•	•	•	•
1.25	4.00	3.00	39	3371-3-1.25	•	•	•	•	•
1.30	4.00	3.00	39	3371-3-1.30	•	•	•	•	•
1.35	4.00	3.00	39	3371-3-1.35	•	•	•	•	•
1.40	4.00	3.00	39	3371-3-1.40	•	•	•	•	•
1.45	4.50	3.00	39	3371-3-1.45	•	•	•	•	•
1.50	4.50	3.00	39	3371-3-1.50	•	•	•	•	•
1.60	4.50	3.00	39	3371-3-1.60	•	•	•	•	•
1.65	5.00	3.00	39	3371-3-1.65	•	•	•	•	•
1.70	5.00	3.00	39	3371-3-1.70	•	•	•	•	•
1.80	6.00	3.00	39	3371-3-1.80	•	•	•	•	•
1.85	6.00	3.00	39	3371-3-1.85	•	•	•	•	•
1.90	6.00	3.00	39	3371-3-1.90	•	•	•	•	•
1.95	6.00	3.00	39	3371-3-1.95	•	•	•	•	•

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
2.00	6.00	3.00	39	3371-3-2.00	•	•	•	•	•
2.10	6.00	3.00	39	3371-3-2.10	•	•	•	•	•
2.20	6.50	3.00	39	3371-3-2.20	•	•	•	•	•
2.30	7.00	3.00	39	3371-3-2.30	•	•	•	•	•
2.40	7.00	3.00	39	3371-3-2.40	•	•	•	•	•
2.50	7.50	3.00	39	3371-3-2.50	•	•	•	•	•
2.60	7.50	3.00	39	3371-3-2.60	•	•	•	•	•
2.70	8.00	3.00	39	3371-3-2.70	•	•	•	•	•
2.80	8.00	3.00	39	3371-3-2.80	•	•	•	•	•
2.90	8.50	3.00	39	3371-3-2.90	•	•	•	•	•

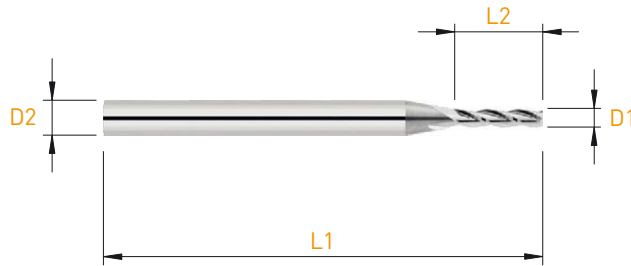


D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	1.20	3.00	39	3371-4-0.30	•	•	•	•	•
0.40	1.60	3.00	39	3371-4-0.40	•	•	•	•	•
0.50	2.00	3.00	39	3371-4-0.50	•	•	•	•	•
0.60	2.40	3.00	39	3371-4-0.60	•	•	•	•	•
0.70	2.80	3.00	39	3371-4-0.70	•	•	•	•	•
0.80	3.20	3.00	39	3371-4-0.80	•	•	•	•	•
0.90	3.60	3.00	39	3371-4-0.90	•	•	•	•	•
1.00	4.00	3.00	39	3371-4-1.00	•	•	•	•	•
1.10	4.40	3.00	39	3371-4-1.10	•	•	•	•	•
1.20	4.80	3.00	39	3371-4-1.20	•	•	•	•	•
1.30	5.20	3.00	39	3371-4-1.30	•	•	•	•	•
1.40	5.60	3.00	39	3371-4-1.40	•	•	•	•	•
1.50	6.00	3.00	39	3371-4-1.50	•	•	•	•	•
1.60	6.40	3.00	39	3371-4-1.60	•	•	•	•	•
1.70	6.80	3.00	39	3371-4-1.70	•	•	•	•	•
1.80	7.20	3.00	39	3371-4-1.80	•	•	•	•	•
1.90	7.60	3.00	39	3371-4-1.90	•	•	•	•	•
2.00	8.00	3.00	39	3371-4-2.00	•	•	•	•	•
2.10	8.40	3.00	39	3371-4-2.10	•	•	•	•	•
2.20	8.80	3.00	39	3371-4-2.20	•	•	•	•	•
2.30	9.20	3.00	39	3371-4-2.30	•	•	•	•	•
2.40	9.60	3.00	39	3371-4-2.40	•	•	•	•	•
2.50	10.00	3.00	39	3371-4-2.50	•	•	•	•	•
2.60	10.40	3.00	39	3371-4-2.60	•	•	•	•	•
2.70	10.80	3.00	39	3371-4-2.70	•	•	•	•	•
2.80	11.20	3.00	39	3371-4-2.80	•	•	•	•	•
2.90	11.60	3.00	39	3371-4-2.90	•	•	•	•	•

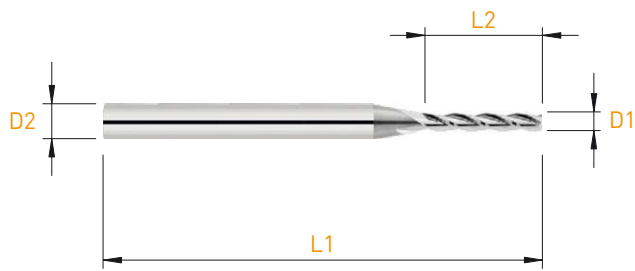
Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3371-5

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.50	2.50	3.00	39	3371-5-0.50	●	●	●	●	●
0.60	3.00	3.00	39	3371-5-0.60	●	●	●	●	●
0.70	3.50	3.00	39	3371-5-0.70	●	●	●	●	●
0.80	4.00	3.00	39	3371-5-0.80	●	●	●	●	●
0.90	4.50	3.00	39	3371-5-0.90	●	●	●	●	●
1.00	5.00	3.00	39	3371-5-1.00	●	●	●	●	●
1.10	5.50	3.00	39	3371-5-1.10	●	●	●	●	●
1.20	6.00	3.00	39	3371-5-1.20	●	●	●	●	●
1.50	7.50	3.00	39	3371-5-1.50	●	●	●	●	●
2.00	10.00	3.00	39	3371-5-2.00	●	●	●	●	●
2.50	12.50	3.00	39	3371-5-2.50	●	●	●	●	●



MD
VHM
HM

λ 30°

Sharp
Corner

8xD1

Z=3

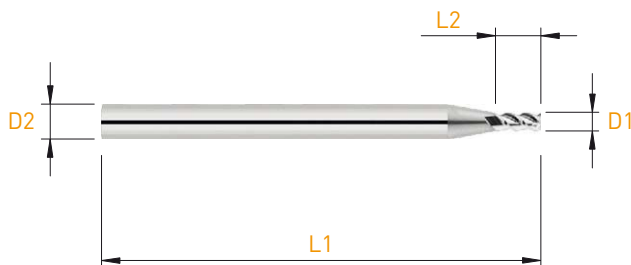
D1 +0.005 / -0.010	L2	D2 h4 Ø3.0 h5 Ø4.0	L1	Art. N°	Z	TiAIN	STF	TiCN	DLC
0.50	4.00	3.00	39	3371-8-0.50	●	●	●	●	●
0.60	5.00	3.00	39	3371-8-0.60	●	●	●	●	●
0.70	5.60	3.00	39	3371-8-0.70	●	●	●	●	●
0.80	6.00	3.00	39	3371-8-0.80	●	●	●	●	●
0.90	7.20	3.00	39	3371-8-0.90	●	●	●	●	●
1.00	8.00	3.00	39	3371-8-1.00	●	●	●	●	●
1.20	9.00	3.00	39	3371-8-1.20	●	●	●	●	●
1.30	11.00	3.00	39	3371-8-1.30	●	●	●	●	●
1.50	12.00	4.00	50	3371-8-1.50	●	●	●	●	●
2.00	16.00	4.00	50	3371-8-2.00	●	●	●	●	●
2.50	20.00	4.00	50	3371-8-2.50	●	●	●	●	●

Micro-fraises de précision

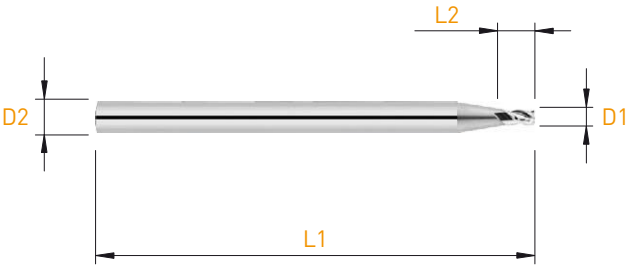
Mikropräzisionsfräser

Precision micro end mills

3375-2.5



D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.80	3.00	39	3375-2.5-0.30	●	●	●	●	●
0.40	1.00	3.00	39	3375-2.5-0.40	●	●	●	●	●
0.50	1.30	3.00	39	3375-2.5-0.50	●	●	●	●	●
0.60	1.50	3.00	39	3375-2.5-0.60	●	●	●	●	●
0.70	1.70	3.00	39	3375-2.5-0.70	●	●	●	●	●
0.80	2.00	3.00	39	3375-2.5-0.80	●	●	●	●	●
0.90	2.30	3.00	39	3375-2.5-0.90	●	●	●	●	●
1.00	2.50	3.00	39	3375-2.5-1.00	●	●	●	●	●
1.10	2.80	3.00	39	3375-2.5-1.10	●	●	●	●	●
1.20	3.00	3.00	39	3375-2.5-1.20	●	●	●	●	●
1.30	3.30	3.00	39	3375-2.5-1.30	●	●	●	●	●
1.40	3.50	3.00	39	3375-2.5-1.40	●	●	●	●	●
1.50	3.80	3.00	39	3375-2.5-1.50	●	●	●	●	●
1.60	4.00	3.00	39	3375-2.5-1.60	●	●	●	●	●
1.70	4.30	3.00	39	3375-2.5-1.70	●	●	●	●	●
1.80	4.50	3.00	39	3375-2.5-1.80	●	●	●	●	●
1.90	4.80	3.00	39	3375-2.5-1.90	●	●	●	●	●
2.00	5.00	3.00	39	3375-2.5-2.00	●	●	●	●	●
2.10	5.30	3.00	39	3375-2.5-2.10	●	●	●	●	●
2.20	5.50	3.00	39	3375-2.5-2.20	●	●	●	●	●
2.30	5.80	3.00	39	3375-2.5-2.30	●	●	●	●	●
2.40	6.00	3.00	39	3375-2.5-2.40	●	●	●	●	●
2.50	6.30	3.00	39	3375-2.5-2.50	●	●	●	●	●
2.60	6.50	3.00	39	3375-2.5-2.60	●	●	●	●	●
2.70	6.80	3.00	39	3375-2.5-2.70	●	●	●	●	●
2.80	7.00	3.00	39	3375-2.5-2.80	●	●	●	●	●
2.90	7.30	3.00	39	3375-2.5-2.90	●	●	●	●	●



MD
VHM
HM

λ 36°
38°
40°

Sharp
Corner

1.5xD1

Z=3

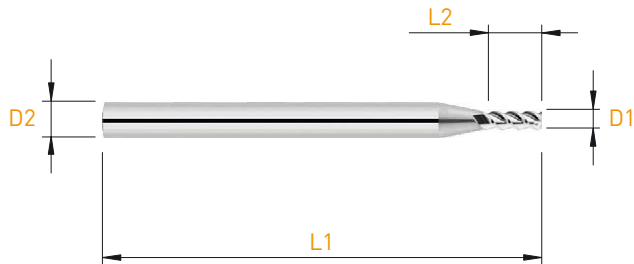
DHD Denture à pas irrégulier, hélice différente
Ungleiche Teilung, unterschiedliche Spirale
Uneven tooth pitch, different helix

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.45	3.00	39	DHD3371-1.5-0.30	●	●	●	●	●
0.40	0.60	3.00	39	DHD3371-1.5-0.40	●	●	●	●	●
0.50	0.75	3.00	39	DHD3371-1.5-0.50	●	●	●	●	●
0.60	0.90	3.00	39	DHD3371-1.5-0.60	●	●	●	●	●
0.70	1.05	3.00	39	DHD3371-1.5-0.70	●	●	●	●	●
0.80	1.20	3.00	39	DHD3371-1.5-0.80	●	●	●	●	●
0.90	1.35	3.00	39	DHD3371-1.5-0.90	●	●	●	●	●
1.00	1.50	3.00	39	DHD3371-1.5-1.00	●	●	●	●	●
1.10	1.65	3.00	39	DHD3371-1.5-1.10	●	●	●	●	●
1.20	1.80	3.00	39	DHD3371-1.5-1.20	●	●	●	●	●
1.30	1.95	3.00	39	DHD3371-1.5-1.30	●	●	●	●	●
1.40	2.10	3.00	39	DHD3371-1.5-1.40	●	●	●	●	●
1.50	2.25	3.00	39	DHD3371-1.5-1.50	●	●	●	●	●
1.60	2.40	3.00	39	DHD3371-1.5-1.60	●	●	●	●	●
1.70	2.55	3.00	39	DHD3371-1.5-1.70	●	●	●	●	●
1.80	2.70	3.00	39	DHD3371-1.5-1.80	●	●	●	●	●
1.90	2.85	3.00	39	DHD3371-1.5-1.90	●	●	●	●	●
2.00	3.00	3.00	39	DHD3371-1.5-2.00	●	●	●	●	●
2.50	3.75	3.00	39	DHD3371-1.5-2.50	●	●	●	●	●

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

DHD3371-3**DHD**

Denture à pas irrégulier, hélice différente
 Ungleiche Teilung, unterschiedliche Spirale
 Uneven tooth pitch, different helix

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.90	3.00	39	DHD3371-3-0.30	●	●	●	●	●
0.40	1.20	3.00	39	DHD3371-3-0.40	●	●	●	●	●
0.50	1.50	3.00	39	DHD3371-3-0.50	●	●	●	●	●
0.60	1.80	3.00	39	DHD3371-3-0.60	●	●	●	●	●
0.70	2.10	3.00	39	DHD3371-3-0.70	●	●	●	●	●
0.80	2.40	3.00	39	DHD3371-3-0.80	●	●	●	●	●
0.90	2.70	3.00	39	DHD3371-3-0.90	●	●	●	●	●
1.00	3.00	3.00	39	DHD3371-3-1.00	●	●	●	●	●
1.10	3.30	3.00	39	DHD3371-3-1.10	●	●	●	●	●
1.20	3.60	3.00	39	DHD3371-3-1.20	●	●	●	●	●
1.30	3.90	3.00	39	DHD3371-3-1.30	●	●	●	●	●
1.40	4.20	3.00	39	DHD3371-3-1.40	●	●	●	●	●
1.50	4.50	3.00	39	DHD3371-3-1.50	●	●	●	●	●
1.60	4.80	3.00	39	DHD3371-3-1.60	●	●	●	●	●
1.70	5.10	3.00	39	DHD3371-3-1.70	●	●	●	●	●
1.80	5.40	3.00	39	DHD3371-3-1.80	●	●	●	●	●
1.90	5.70	3.00	39	DHD3371-3-1.90	●	●	●	●	●
2.00	6.00	3.00	39	DHD3371-3-2.00	●	●	●	●	●
2.50	7.50	3.00	39	DHD3371-3-2.50	●	●	●	●	●



D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.60	0.90	0.27	3.00	39	3370S-3X-0.30	•	•	•	•	•
0.40	0.80	1.20	0.37	3.00	39	3370S-3X-0.40	•	•	•	•	•
0.50	1.00	1.50	0.45	3.00	39	3370S-3X-0.50	•	•	•	•	•
0.60	1.20	1.80	0.55	3.00	39	3370S-3X-0.60	•	•	•	•	•
0.70	1.40	2.10	0.65	3.00	39	3370S-3X-0.70	•	•	•	•	•
0.80	1.60	2.40	0.75	3.00	39	3370S-3X-0.80	•	•	•	•	•
0.90	1.80	2.70	0.85	3.00	39	3370S-3X-0.90	•	•	•	•	•
1.00	2.00	3.00	0.95	3.00	39	3370S-3X-1.00	•	•	•	•	•
1.10	2.20	3.30	1.05	3.00	39	3370S-3X-1.10	•	•	•	•	•
1.20	2.40	3.60	1.15	3.00	39	3370S-3X-1.20	•	•	•	•	•
1.30	2.60	3.90	1.25	3.00	39	3370S-3X-1.30	•	•	•	•	•
1.40	2.80	4.20	1.35	3.00	39	3370S-3X-1.40	•	•	•	•	•
1.50	3.00	4.50	1.45	3.00	39	3370S-3X-1.50	•	•	•	•	•
1.60	3.20	4.80	1.55	3.00	39	3370S-3X-1.60	•	•	•	•	•
1.70	3.40	5.10	1.65	3.00	39	3370S-3X-1.70	•	•	•	•	•
1.80	3.60	5.40	1.75	3.00	39	3370S-3X-1.80	•	•	•	•	•
1.90	3.80	5.70	1.85	3.00	39	3370S-3X-1.90	•	•	•	•	•
2.00	4.00	6.00	1.95	6.00	50	3370S-3X-2.00	•	•	•	•	•
2.10	4.20	6.30	2.05	6.00	50	3370S-3X-2.10	•	•	•	•	•
2.20	4.40	6.60	2.15	6.00	50	3370S-3X-2.20	•	•	•	•	•
2.30	4.60	6.90	2.25	6.00	50	3370S-3X-2.30	•	•	•	•	•
2.40	4.80	7.20	2.35	6.00	50	3370S-3X-2.40	•	•	•	•	•
2.50	5.00	7.50	2.45	6.00	50	3370S-3X-2.50	•	•	•	•	•
3.00	6.00	9.00	2.95	6.00	50	3370S-3X-3.00	•	•	•	•	•

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3370S-6X



D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.60	1.80	0.27	3.00	39	3370S-6X-0.30	•	•	•	•	•
0.40	0.80	2.40	0.37	3.00	39	3370S-6X-0.40	•	•	•	•	•
0.50	1.00	3.00	0.45	3.00	39	3370S-6X-0.50	•	•	•	•	•
0.60	1.20	3.60	0.55	3.00	39	3370S-6X-0.60	•	•	•	•	•
0.70	1.40	4.20	0.65	3.00	39	3370S-6X-0.70	•	•	•	•	•
0.80	1.60	4.80	0.75	3.00	39	3370S-6X-0.80	•	•	•	•	•
0.90	1.80	5.40	0.85	3.00	39	3370S-6X-0.90	•	•	•	•	•
1.00	2.00	6.00	0.95	3.00	39	3370S-6X-1.00	•	•	•	•	•
1.10	2.20	6.60	1.05	3.00	39	3370S-6X-1.10	•	•	•	•	•
1.20	2.40	7.20	1.15	3.00	39	3370S-6X-1.20	•	•	•	•	•
1.30	2.60	7.80	1.25	3.00	39	3370S-6X-1.30	•	•	•	•	•
1.40	2.80	8.40	1.35	3.00	39	3370S-6X-1.40	•	•	•	•	•
1.50	3.00	9.00	1.45	3.00	39	3370S-6X-1.50	•	•	•	•	•
1.60	3.20	9.60	1.55	3.00	39	3370S-6X-1.60	•	•	•	•	•
1.70	3.40	10.20	1.65	3.00	39	3370S-6X-1.70	•	•	•	•	•
1.80	3.60	10.80	1.75	3.00	39	3370S-6X-1.80	•	•	•	•	•
1.90	3.80	11.40	1.85	3.00	39	3370S-6X-1.90	•	•	•	•	•
2.00	4.00	12.00	1.95	6.00	50	3370S-6X-2.00	•	•	•	•	•
2.10	4.20	12.60	2.05	6.00	50	3370S-6X-2.10	•	•	•	•	•
2.20	4.40	13.20	2.15	6.00	50	3370S-6X-2.20	•	•	•	•	•
2.30	4.60	13.80	2.25	6.00	50	3370S-6X-2.30	•	•	•	•	•
2.40	4.80	14.40	2.35	6.00	50	3370S-6X-2.40	•	•	•	•	•
2.50	5.00	15.00	2.45	6.00	50	3370S-6X-2.50	•	•	•	•	•
3.00	6.00	18.00	2.95	6.00	50	3370S-6X-3.00	•	•	•	•	•



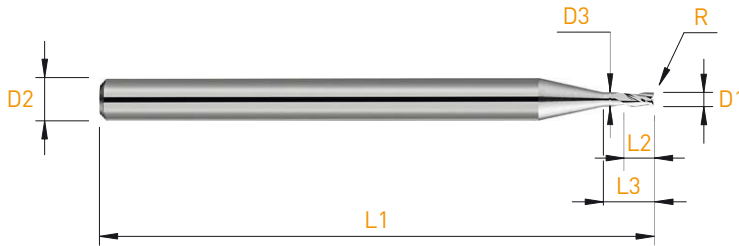
D1 +0.005 / -0.010	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.40	0.80	3.60	0.37	3.00	39	3370S-9X-0.40	●	●	●	●	●
0.50	1.00	4.50	0.45	3.00	39	3370S-9X-0.50	●	●	●	●	●
0.60	1.20	5.40	0.55	3.00	39	3370S-9X-0.60	●	●	●	●	●
0.70	1.40	6.30	0.65	3.00	39	3370S-9X-0.70	●	●	●	●	●
0.80	1.60	7.20	0.75	3.00	39	3370S-9X-0.80	●	●	●	●	●
0.90	1.80	8.10	0.85	3.00	39	3370S-9X-0.90	●	●	●	●	●
1.00	2.00	9.00	0.95	3.00	39	3370S-9X-1.00	●	●	●	●	●
1.10	2.20	9.90	1.05	3.00	39	3370S-9X-1.10	●	●	●	●	●
1.20	2.40	10.80	1.15	3.00	39	3370S-9X-1.20	●	●	●	●	●
1.30	2.60	11.70	1.25	3.00	39	3370S-9X-1.30	●	●	●	●	●
1.40	2.80	12.60	1.35	3.00	39	3370S-9X-1.40	●	●	●	●	●
1.50	3.00	13.50	1.45	3.00	39	3370S-9X-1.50	●	●	●	●	●
1.60	3.20	14.40	1.55	3.00	39	3370S-9X-1.60	●	●	●	●	●
1.70	3.40	15.30	1.65	3.00	39	3370S-9X-1.70	●	●	●	●	●
1.80	3.60	16.20	1.75	3.00	39	3370S-9X-1.80	●	●	●	●	●
1.90	3.80	17.10	1.85	3.00	39	3370S-9X-1.90	●	●	●	●	●
2.00	4.00	18.00	1.95	6.00	50	3370S-9X-2.00	●	●	●	●	●
2.10	4.20	18.90	2.05	6.00	50	3370S-9X-2.10	●	●	●	●	●
2.20	4.40	19.80	2.15	6.00	50	3370S-9X-2.20	●	●	●	●	●
2.30	4.60	20.70	2.25	6.00	50	3370S-9X-2.30	●	●	●	●	●
2.40	4.80	21.60	2.35	6.00	50	3370S-9X-2.40	●	●	●	●	●
2.50	5.00	22.50	2.45	6.00	50	3370S-9X-2.50	●	●	●	●	●
3.00	6.00	27.00	2.95	6.00	50	3370S-9X-3.00	●	●	●	●	●

Micro-fraises de précision

Mikropräzisionsfräser

Precision micro end mills

3379T-3X



D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	0.90	0.27	3.00	39	3379T-3X-0.30	●	●	●	●	●
0.40	0.05	0.80	1.20	0.37	3.00	39	3379T-3X-0.40	●	●	●	●	●
0.50	0.05	1.00	1.50	0.45	3.00	39	3379T-3X-0.50	●	●	●	●	●
0.60	0.05	1.20	1.80	0.55	3.00	39	3379T-3X-0.60	●	●	●	●	●
0.70	0.05	1.40	2.10	0.65	3.00	39	3379T-3X-0.70	●	●	●	●	●
0.80	0.05	1.60	2.40	0.75	3.00	39	3379T-3X-0.80	●	●	●	●	●
0.90	0.05	1.80	2.70	0.85	3.00	39	3379T-3X-0.90	●	●	●	●	●
1.00	0.10	2.00	3.00	0.95	3.00	39	3379T-3X-1.00	●	●	●	●	●
1.10	0.10	2.20	3.30	1.05	3.00	39	3379T-3X-1.10	●	●	●	●	●
1.20	0.10	2.40	3.60	1.15	3.00	39	3379T-3X-1.20	●	●	●	●	●
1.30	0.10	2.60	3.90	1.25	3.00	39	3379T-3X-1.30	●	●	●	●	●
1.40	0.10	2.80	4.20	1.35	3.00	39	3379T-3X-1.40	●	●	●	●	●
1.50	0.20	3.00	4.50	1.45	3.00	39	3379T-3X-1.50	●	●	●	●	●
1.60	0.20	3.20	4.80	1.55	3.00	39	3379T-3X-1.60	●	●	●	●	●
1.70	0.20	3.40	5.10	1.65	3.00	39	3379T-3X-1.70	●	●	●	●	●
1.80	0.20	3.60	5.40	1.75	3.00	39	3379T-3X-1.80	●	●	●	●	●
1.90	0.20	3.80	5.70	1.85	3.00	39	3379T-3X-1.90	●	●	●	●	●
2.00	0.20	4.00	6.00	1.95	6.00	50	3379T-3X-2.00	●	●	●	●	●
2.10	0.20	4.20	6.30	2.05	6.00	50	3379T-3X-2.10	●	●	●	●	●
2.20	0.20	4.40	6.60	2.15	6.00	50	3379T-3X-2.20	●	●	●	●	●
2.30	0.20	4.60	6.90	2.25	6.00	50	3379T-3X-2.30	●	●	●	●	●
2.40	0.20	4.80	7.20	2.35	6.00	50	3379T-3X-2.40	●	●	●	●	●
2.50	0.20	5.00	7.50	2.45	6.00	50	3379T-3X-2.50	●	●	●	●	●
3.00	0.20	6.00	9.00	2.95	6.00	50	3379T-3X-3.00	●	●	●	●	●



D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.05	0.60	1.80	0.27	3.00	39	3379T-6X-0.30	●	●	●	●	●
0.40	0.05	0.80	2.40	0.37	3.00	39	3379T-6X-0.40	●	●	●	●	●
0.50	0.05	1.00	3.00	0.45	3.00	39	3379T-6X-0.50	●	●	●	●	●
0.60	0.05	1.20	3.60	0.55	3.00	39	3379T-6X-0.60	●	●	●	●	●
0.70	0.05	1.40	4.20	0.65	3.00	39	3379T-6X-0.70	●	●	●	●	●
0.80	0.05	1.60	4.80	0.75	3.00	39	3379T-6X-0.80	●	●	●	●	●
0.90	0.05	1.80	5.40	0.85	3.00	39	3379T-6X-0.90	●	●	●	●	●
1.00	0.10	2.00	6.00	0.95	3.00	39	3379T-6X-1.00	●	●	●	●	●
1.10	0.10	2.20	6.60	1.05	3.00	39	3379T-6X-1.10	●	●	●	●	●
1.20	0.10	2.40	7.20	1.15	3.00	39	3379T-6X-1.20	●	●	●	●	●
1.30	0.10	2.60	7.80	1.25	3.00	39	3379T-6X-1.30	●	●	●	●	●
1.40	0.10	2.80	8.40	1.35	3.00	39	3379T-6X-1.40	●	●	●	●	●
1.50	0.20	3.00	9.00	1.45	3.00	39	3379T-6X-1.50	●	●	●	●	●
1.60	0.20	3.20	9.60	1.55	3.00	39	3379T-6X-1.60	●	●	●	●	●
1.70	0.20	3.40	10.20	1.65	3.00	39	3379T-6X-1.70	●	●	●	●	●
1.80	0.20	3.60	10.80	1.75	3.00	39	3379T-6X-1.80	●	●	●	●	●
1.90	0.20	3.80	11.40	1.85	3.00	39	3379T-6X-1.90	●	●	●	●	●
2.00	0.20	4.00	12.00	1.95	6.00	50	3379T-6X-2.00	●	●	●	●	●
2.10	0.20	4.20	12.60	2.05	6.00	50	3379T-6X-2.10	●	●	●	●	●
2.20	0.20	4.40	13.20	2.15	6.00	50	3379T-6X-2.20	●	●	●	●	●
2.30	0.20	4.60	13.80	2.25	6.00	50	3379T-6X-2.30	●	●	●	●	●
2.40	0.20	4.80	14.40	2.35	6.00	50	3379T-6X-2.40	●	●	●	●	●
2.50	0.20	5.00	15.00	2.45	6.00	50	3379T-6X-2.50	●	●	●	●	●
3.00	0.20	6.00	18.00	2.95	6.00	50	3379T-6X-3.00	●	●	●	●	●

Micro-fraises de précision

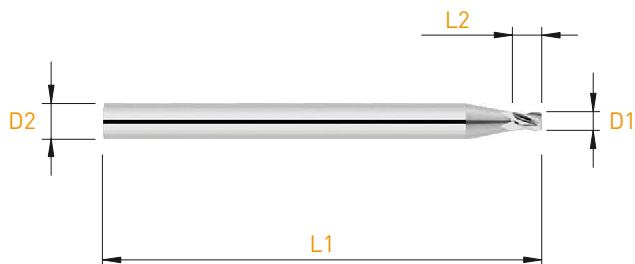
Mikropräzisionsfräser

Precision micro end mills

3379T-9X



D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAIN	STF	TiCN	DLC
0.40	0.05	0.80	3.60	0.37	3.00	39	3379T-9X-0.40	●	●	●	●	●
0.50	0.05	1.00	4.50	0.45	3.00	39	3379T-9X-0.50	●	●	●	●	●
0.60	0.05	1.20	5.40	0.55	3.00	39	3379T-9X-0.60	●	●	●	●	●
0.70	0.05	1.40	6.30	0.65	3.00	39	3379T-9X-0.70	●	●	●	●	●
0.80	0.05	1.60	7.20	0.75	3.00	39	3379T-9X-0.80	●	●	●	●	●
0.90	0.05	1.80	8.10	0.85	3.00	39	3379T-9X-0.90	●	●	●	●	●
1.00	0.10	2.00	9.00	0.95	3.00	39	3379T-9X-1.00	●	●	●	●	●
1.10	0.10	2.20	9.90	1.05	3.00	39	3379T-9X-1.10	●	●	●	●	●
1.20	0.10	2.40	10.80	1.15	3.00	39	3379T-9X-1.20	●	●	●	●	●
1.30	0.10	2.60	11.70	1.25	3.00	39	3379T-9X-1.30	●	●	●	●	●
1.40	0.10	2.80	12.60	1.35	3.00	39	3379T-9X-1.40	●	●	●	●	●
1.50	0.20	3.00	13.50	1.45	3.00	39	3379T-9X-1.50	●	●	●	●	●
1.60	0.20	3.20	14.40	1.55	3.00	39	3379T-9X-1.60	●	●	●	●	●
1.70	0.20	3.40	15.30	1.65	3.00	39	3379T-9X-1.70	●	●	●	●	●
1.80	0.20	3.60	16.20	1.75	3.00	39	3379T-9X-1.80	●	●	●	●	●
1.90	0.20	3.80	17.10	1.85	3.00	39	3379T-9X-1.90	●	●	●	●	●
2.00	0.20	4.00	18.00	1.95	6.00	50	3379T-9X-2.00	●	●	●	●	●
2.10	0.20	4.20	18.90	2.05	6.00	50	3379T-9X-2.10	●	●	●	●	●
2.20	0.20	4.40	19.80	2.15	6.00	50	3379T-9X-2.20	●	●	●	●	●
2.30	0.20	4.60	20.70	2.25	6.00	50	3379T-9X-2.30	●	●	●	●	●
2.40	0.20	4.80	21.60	2.35	6.00	50	3379T-9X-2.40	●	●	●	●	●
2.50	0.20	5.00	22.50	2.45	6.00	50	3379T-9X-2.50	●	●	●	●	●
3.00	0.20	6.00	27.00	2.95	6.00	50	3379T-9X-3.00	●	●	●	●	●



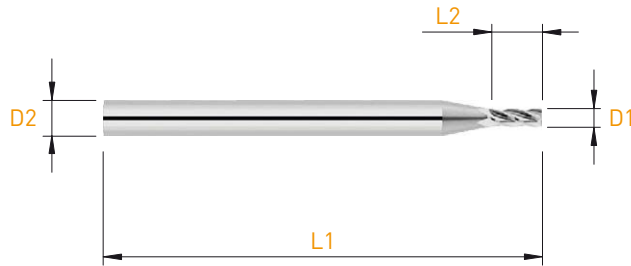
D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
0.30	0.45	3.00	39	3471-1.5-0.30	●	●	●	●	●
0.40	0.60	3.00	39	3471-1.5-0.40	●	●	●	●	●
0.50	0.75	3.00	39	3471-1.5-0.50	●	●	●	●	●
0.60	0.90	3.00	39	3471-1.5-0.60	●	●	●	●	●
0.70	1.05	3.00	39	3471-1.5-0.70	●	●	●	●	●
0.80	1.20	3.00	39	3471-1.5-0.80	●	●	●	●	●
0.90	1.35	3.00	39	3471-1.5-0.90	●	●	●	●	●
1.00	1.50	3.00	39	3471-1.5-1.00	●	●	●	●	●
1.10	1.65	3.00	39	3471-1.5-1.10	●	●	●	●	●
1.20	1.80	3.00	39	3471-1.5-1.20	●	●	●	●	●
1.30	1.95	3.00	39	3471-1.5-1.30	●	●	●	●	●
1.40	2.10	3.00	39	3471-1.5-1.40	●	●	●	●	●
1.50	2.25	3.00	39	3471-1.5-1.50	●	●	●	●	●
1.60	2.40	3.00	39	3471-1.5-1.60	●	●	●	●	●
1.70	2.55	3.00	39	3471-1.5-1.70	●	●	●	●	●
1.80	2.70	3.00	39	3471-1.5-1.80	●	●	●	●	●
1.90	2.85	3.00	39	3471-1.5-1.90	●	●	●	●	●
2.00	3.00	3.00	39	3471-1.5-2.00	●	●	●	●	●
2.10	3.15	3.00	39	3471-1.5-2.10	●	●	●	●	●
2.20	3.30	3.00	39	3471-1.5-2.20	●	●	●	●	●
2.30	3.45	3.00	39	3471-1.5-2.30	●	●	●	●	●
2.40	3.60	3.00	39	3471-1.5-2.40	●	●	●	●	●
2.50	3.75	3.00	39	3471-1.5-2.50	●	●	●	●	●
2.60	3.90	3.00	39	3471-1.5-2.60	●	●	●	●	●
2.70	4.05	3.00	39	3471-1.5-2.70	●	●	●	●	●
2.80	4.20	3.00	39	3471-1.5-2.80	●	●	●	●	●
2.90	4.35	3.00	39	3471-1.5-2.90	●	●	●	●	●

Micro-fraises de précision

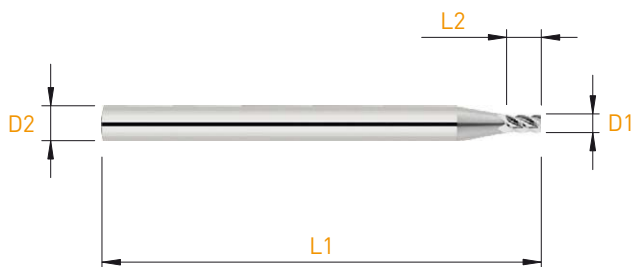
Mikropräzisionsfräser

Precision micro end mills

3471-3



D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.90	3.00	39	3471-3-0.30	●	●	●	●	●
0.40	1.20	3.00	39	3471-3-0.40	●	●	●	●	●
0.50	1.50	3.00	39	3471-3-0.50	●	●	●	●	●
0.55	1.70	3.00	39	3471-3-0.55	●	●	●	●	●
0.60	1.80	3.00	39	3471-3-0.60	●	●	●	●	●
0.70	2.10	3.00	39	3471-3-0.70	●	●	●	●	●
0.75	2.30	3.00	39	3471-3-0.75	●	●	●	●	●
0.80	2.40	3.00	39	3471-3-0.80	●	●	●	●	●
0.85	2.60	3.00	39	3471-3-0.85	●	●	●	●	●
0.90	2.70	3.00	39	3471-3-0.90	●	●	●	●	●
0.95	2.90	3.00	39	3471-3-0.95	●	●	●	●	●
1.00	3.00	3.00	39	3471-3-1.00	●	●	●	●	●
1.10	3.30	3.00	39	3471-3-1.10	●	●	●	●	●
1.20	3.60	3.00	39	3471-3-1.20	●	●	●	●	●
1.30	3.90	3.00	39	3471-3-1.30	●	●	●	●	●
1.40	4.20	3.00	39	3471-3-1.40	●	●	●	●	●
1.50	4.50	3.00	39	3471-3-1.50	●	●	●	●	●
1.60	4.80	3.00	39	3471-3-1.60	●	●	●	●	●
1.70	5.10	3.00	39	3471-3-1.70	●	●	●	●	●
1.80	5.40	3.00	39	3471-3-1.80	●	●	●	●	●
1.90	5.70	3.00	39	3471-3-1.90	●	●	●	●	●
2.00	6.00	3.00	39	3471-3-2.00	●	●	●	●	●
2.10	6.30	3.00	39	3471-3-2.10	●	●	●	●	●
2.20	6.60	3.00	39	3471-3-2.20	●	●	●	●	●
2.30	6.90	3.00	39	3471-3-2.30	●	●	●	●	●
2.40	7.20	3.00	39	3471-3-2.40	●	●	●	●	●
2.50	7.50	3.00	39	3471-3-2.50	●	●	●	●	●
2.60	7.80	3.00	39	3471-3-2.60	●	●	●	●	●
2.70	8.10	3.00	39	3471-3-2.70	●	●	●	●	●
2.80	8.40	3.00	39	3471-3-2.80	●	●	●	●	●
2.90	8.70	3.00	39	3471-3-2.90	●	●	●	●	●



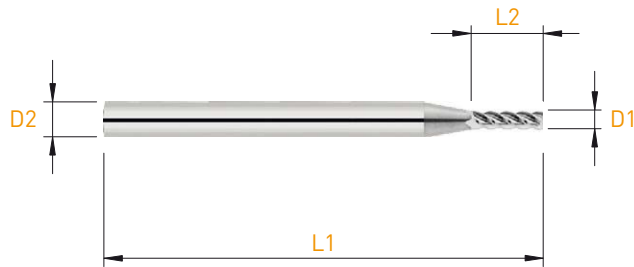
D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.60	3.00	39	3472-2-0.30	•	•	•	•	•
0.40	0.80	3.00	39	3472-2-0.40	•	•	•	•	•
0.50	1.00	3.00	39	3472-2-0.50	•	•	•	•	•
0.60	1.20	3.00	39	3472-2-0.60	•	•	•	•	•
0.70	1.40	3.00	39	3472-2-0.70	•	•	•	•	•
0.80	1.60	3.00	39	3472-2-0.80	•	•	•	•	•
0.90	1.80	3.00	39	3472-2-0.90	•	•	•	•	•
1.00	2.00	3.00	39	3472-2-1.00	•	•	•	•	•
1.10	2.20	3.00	39	3472-2-1.10	•	•	•	•	•
1.20	2.40	3.00	39	3472-2-1.20	•	•	•	•	•
1.30	2.60	3.00	39	3472-2-1.30	•	•	•	•	•
1.40	2.80	3.00	39	3472-2-1.40	•	•	•	•	•
1.50	3.00	3.00	39	3472-2-1.50	•	•	•	•	•
1.60	3.20	3.00	39	3472-2-1.60	•	•	•	•	•
1.70	3.40	3.00	39	3472-2-1.70	•	•	•	•	•
1.80	3.60	3.00	39	3472-2-1.80	•	•	•	•	•
1.90	3.80	3.00	39	3472-2-1.90	•	•	•	•	•
2.00	4.00	3.00	39	3472-2-2.00	•	•	•	•	•
2.10	4.20	3.00	39	3472-2-2.10	•	•	•	•	•
2.20	4.40	3.00	39	3472-2-2.20	•	•	•	•	•
2.30	4.60	3.00	39	3472-2-2.30	•	•	•	•	•
2.40	4.80	3.00	39	3472-2-2.40	•	•	•	•	•
2.50	5.00	3.00	39	3472-2-2.50	•	•	•	•	•
2.60	5.20	3.00	39	3472-2-2.60	•	•	•	•	•
2.70	5.40	3.00	39	3472-2-2.70	•	•	•	•	•
2.80	5.60	3.00	39	3472-2-2.80	•	•	•	•	•
2.90	5.80	3.00	39	3472-2-2.90	•	•	•	•	•

Micro-fraises de précision

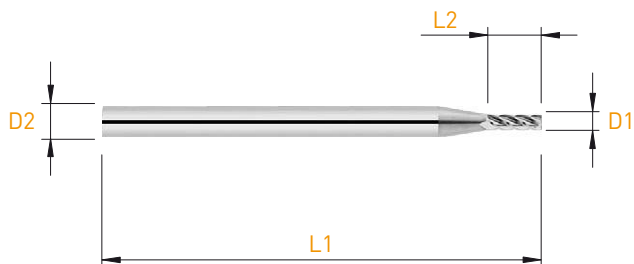
Mikropräzisionsfräser

Precision micro end mills

3472-4



D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.40	1.60	3.00	39	3472-4-0.40	●	●	●	●	●
0.50	2.00	3.00	39	3472-4-0.50	●	●	●	●	●
0.60	2.40	3.00	39	3472-4-0.60	●	●	●	●	●
0.70	2.80	3.00	39	3472-4-0.70	●	●	●	●	●
0.80	3.20	3.00	39	3472-4-0.80	●	●	●	●	●
0.90	3.60	3.00	39	3472-4-0.90	●	●	●	●	●
1.00	4.00	3.00	39	3472-4-1.00	●	●	●	●	●
1.10	4.40	3.00	39	3472-4-1.10	●	●	●	●	●
1.20	4.80	3.00	39	3472-4-1.20	●	●	●	●	●
1.30	5.20	3.00	39	3472-4-1.30	●	●	●	●	●
1.40	5.60	3.00	39	3472-4-1.40	●	●	●	●	●
1.50	6.00	3.00	39	3472-4-1.50	●	●	●	●	●
1.60	6.40	3.00	39	3472-4-1.60	●	●	●	●	●
1.70	6.80	3.00	39	3472-4-1.70	●	●	●	●	●
1.80	7.20	3.00	39	3472-4-1.80	●	●	●	●	●
1.90	7.60	3.00	39	3472-4-1.90	●	●	●	●	●
2.00	8.00	3.00	39	3472-4-2.00	●	●	●	●	●
2.10	8.40	3.00	39	3472-4-2.10	●	●	●	●	●
2.20	8.80	3.00	39	3472-4-2.20	●	●	●	●	●
2.30	9.20	3.00	39	3472-4-2.30	●	●	●	●	●
2.40	9.60	3.00	39	3472-4-2.40	●	●	●	●	●
2.50	10.00	3.00	39	3472-4-2.50	●	●	●	●	●
2.60	10.40	3.00	39	3472-4-2.60	●	●	●	●	●
2.70	10.80	3.00	39	3472-4-2.70	●	●	●	●	●
2.80	11.20	3.00	39	3472-4-2.80	●	●	●	●	●
2.90	11.60	3.00	39	3472-4-2.90	●	●	●	●	●



DHP

Denture à pas irrégulier, hélice progressive
Ungleiche Teilung, progressive Spirale
Uneven tooth pitch, progressive helix

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.50	1.50	3.00	39	DHP3471-3-0.50	●	●	●	●	●
0.60	1.80	3.00	39	DHP3471-3-0.60	●	●	●	●	●
0.70	2.10	3.00	39	DHP3471-3-0.70	●	●	●	●	●
0.80	2.40	3.00	39	DHP3471-3-0.80	●	●	●	●	●
0.90	2.70	3.00	39	DHP3471-3-0.90	●	●	●	●	●
1.00	3.00	3.00	39	DHP3471-3-1.00	●	●	●	●	●
1.10	3.30	3.00	39	DHP3471-3-1.10	●	●	●	●	●
1.20	3.60	3.00	39	DHP3471-3-1.20	●	●	●	●	●
1.30	3.90	3.00	39	DHP3471-3-1.30	●	●	●	●	●
1.40	4.20	3.00	39	DHP3471-3-1.40	●	●	●	●	●
1.50	4.50	3.00	39	DHP3471-3-1.50	●	●	●	●	●
1.60	4.80	3.00	39	DHP3471-3-1.60	●	●	●	●	●
1.70	5.10	3.00	39	DHP3471-3-1.70	●	●	●	●	●
1.80	5.40	3.00	39	DHP3471-3-1.80	●	●	●	●	●
1.90	5.70	3.00	39	DHP3471-3-1.90	●	●	●	●	●
2.00	6.00	3.00	39	DHP3471-3-2.00	●	●	●	●	●
2.50	7.50	3.00	39	DHP3471-3-2.50	●	●	●	●	●

Micro-fraises hémisphériques

Vollradius Mikrofräser

Ball nose micro end mills

3278-0.75

D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.20	0.10	0.15	3.00	39	3278-0.75-0.20	●				
0.30	0.15	0.20	3.00	39	3278-0.75-0.30	●	●	●	●	●
0.40	0.20	0.30	3.00	39	3278-0.75-0.40	●	●	●	●	●
0.50	0.25	0.35	3.00	39	3278-0.75-0.50	●	●	●	●	●
0.60	0.30	0.45	3.00	39	3278-0.75-0.60	●	●	●	●	●
0.70	0.35	0.55	3.00	39	3278-0.75-0.70	●	●	●	●	●
0.80	0.40	0.60	3.00	39	3278-0.75-0.80	●	●	●	●	●
0.90	0.45	0.70	3.00	39	3278-0.75-0.90	●	●	●	●	●
1.00	0.50	0.75	3.00	39	3278-0.75-1.00	●	●	●	●	●
1.50	0.75	1.15	3.00	39	3278-0.75-1.50	●	●	●	●	●
2.00	1.00	1.50	3.00	39	3278-0.75-2.00	●	●	●	●	●
2.50	1.25	1.90	3.00	39	3278-0.75-2.50	●	●	●	●	●

3278-1



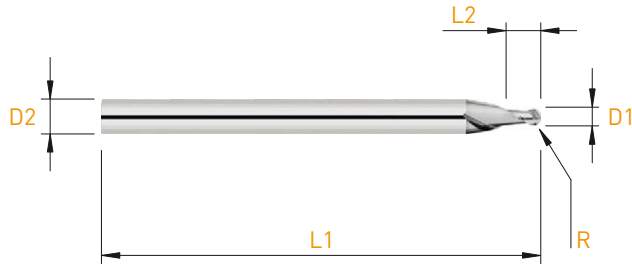
D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.20	0.10	0.20	3.00	39	3278-1-0.20	●				
0.30	0.15	0.30	3.00	39	3278-1-0.30	●	●	●	●	●
0.40	0.20	0.40	3.00	39	3278-1-0.40	●	●	●	●	●
0.50	0.25	0.50	3.00	39	3278-1-0.50	●	●	●	●	●
0.60	0.30	0.60	3.00	39	3278-1-0.60	●	●	●	●	●
0.70	0.35	0.70	3.00	39	3278-1-0.70	●	●	●	●	●
0.80	0.40	0.80	3.00	39	3278-1-0.80	●	●	●	●	●
0.90	0.45	0.90	3.00	39	3278-1-0.90	●	●	●	●	●
1.00	0.50	1.00	3.00	39	3278-1-1.00	●	●	●	●	●
1.10	0.55	1.10	3.00	39	3278-1-1.10	●	●	●	●	●
1.20	0.60	1.20	3.00	39	3278-1-1.20	●	●	●	●	●
1.30	0.35	1.30	3.00	39	3278-1-1.30	●	●	●	●	●
1.40	0.70	1.40	3.00	39	3278-1-1.40	●	●	●	●	●
1.50	0.75	1.50	3.00	39	3278-1-1.50	●	●	●	●	●
1.60	0.80	1.60	3.00	39	3278-1-1.60	●	●	●	●	●
1.70	0.85	1.70	3.00	39	3278-1-1.70	●	●	●	●	●
1.80	0.90	1.80	3.00	39	3278-1-1.80	●	●	●	●	●
1.90	0.95	1.90	3.00	39	3278-1-1.90	●	●	●	●	●
2.00	1.00	2.00	3.00	39	3278-1-2.00	●	●	●	●	●
2.10	1.05	2.10	3.00	39	3278-1-2.10	●	●	●	●	●
2.20	1.10	2.20	3.00	39	3278-1-2.20	●	●	●	●	●
2.30	1.15	2.30	3.00	39	3278-1-2.30	●	●	●	●	●
2.40	1.20	2.40	3.00	39	3278-1-2.40	●	●	●	●	●
2.50	1.25	2.50	3.00	39	3278-1-2.50	●	●	●	●	●
2.60	1.30	2.60	3.00	39	3278-1-2.60	●	●	●	●	●
2.70	1.35	2.70	3.00	39	3278-1-2.70	●	●	●	●	●
2.80	1.40	2.80	3.00	39	3278-1-2.80	●	●	●	●	●
2.90	1.45	2.90	3.00	39	3278-1-2.90	●	●	●	●	●

Micro-fraises hémisphériques

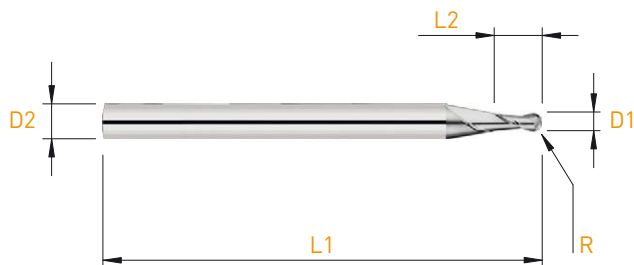
Vollradius Mikrofräser

Ball nose micro end mills

3278-1.5



D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.20	0.10	0.30	3.00	39	3278-1.5-0.20	●				
0.25	0.125	0.35	3.00	39	3278-1.5-0.25	●				
0.30	0.15	0.45	3.00	39	3278-1.5-0.30	●	●	●	●	●
0.40	0.20	0.60	3.00	39	3278-1.5-0.40	●	●	●	●	●
0.50	0.25	0.75	3.00	39	3278-1.5-0.50	●	●	●	●	●
0.60	0.30	0.90	3.00	39	3278-1.5-0.60	●	●	●	●	●
0.70	0.35	1.05	3.00	39	3278-1.5-0.70	●	●	●	●	●
0.80	0.40	1.20	3.00	39	3278-1.5-0.80	●	●	●	●	●
0.85	0.40	1.30	3.00	39	3278-1.5-0.85	●	●	●	●	●
0.90	0.45	1.35	3.00	39	3278-1.5-0.90	●	●	●	●	●
1.00	0.50	1.50	3.00	39	3278-1.5-1.00	●	●	●	●	●
1.10	0.55	1.65	3.00	39	3278-1.5-1.10	●	●	●	●	●
1.15	0.55	1.75	3.00	39	3278-1.5-1.15	●	●	●	●	●
1.20	0.60	1.80	3.00	39	3278-1.5-1.20	●	●	●	●	●
1.30	0.65	1.95	3.00	39	3278-1.5-1.30	●	●	●	●	●
1.40	0.70	2.10	3.00	39	3278-1.5-1.40	●	●	●	●	●
1.50	0.75	2.25	3.00	39	3278-1.5-1.50	●	●	●	●	●
1.60	0.80	2.40	3.00	39	3278-1.5-1.60	●	●	●	●	●
1.70	0.85	2.60	3.00	39	3278-1.5-1.70	●	●	●	●	●
1.80	0.90	2.70	3.00	39	3278-1.5-1.80	●	●	●	●	●
1.90	0.95	2.90	3.00	39	3278-1.5-1.90	●	●	●	●	●
2.00	1.00	3.00	3.00	39	3278-1.5-2.00	●	●	●	●	●
2.10	1.05	3.20	3.00	39	3278-1.5-2.10	●	●	●	●	●
2.20	1.10	3.30	3.00	39	3278-1.5-2.20	●	●	●	●	●
2.30	1.15	3.50	3.00	39	3278-1.5-2.30	●	●	●	●	●
2.40	1.20	3.60	3.00	39	3278-1.5-2.40	●	●	●	●	●
2.50	1.25	3.75	3.00	39	3278-1.5-2.50	●	●	●	●	●
2.60	1.30	3.90	3.00	39	3278-1.5-2.60	●	●	●	●	●
2.70	1.35	4.00	3.00	39	3278-1.5-2.70	●	●	●	●	●
2.80	1.40	4.20	3.00	39	3278-1.5-2.80	●	●	●	●	●
2.90	1.45	4.40	3.00	39	3278-1.5-2.90	●	●	●	●	●



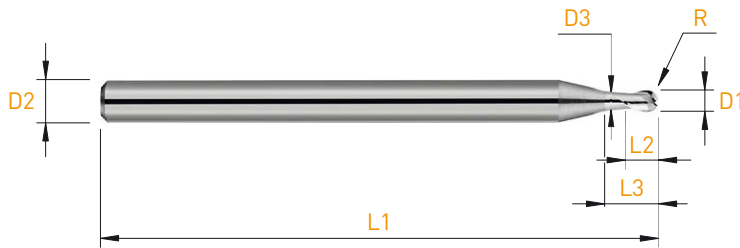
D1 +0.005 / -0.010	R	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.20	0.10	0.60	3.00	39	3278-3-0.20	●				
0.30	0.15	1.00	3.00	39	3278-3-0.30	●	●	●	●	●
0.40	0.20	1.00	3.00	39	3278-3-0.40	●	●	●	●	●
0.50	0.25	1.50	3.00	39	3278-3-0.50	●	●	●	●	●
0.60	0.30	1.50	3.00	39	3278-3-0.60	●	●	●	●	●
0.70	0.35	2.00	3.00	39	3278-3-0.70	●	●	●	●	●
0.80	0.40	2.00	3.00	39	3278-3-0.80	●	●	●	●	●
0.90	0.45	2.50	3.00	39	3278-3-0.90	●	●	●	●	●
1.00	0.50	3.00	3.00	39	3278-3-1.00	●	●	●	●	●
1.20	0.60	4.00	3.00	39	3278-3-1.20	●	●	●	●	●
1.30	0.65	4.00	3.00	39	3278-3-1.30	●	●	●	●	●
1.40	0.70	4.00	3.00	39	3278-3-1.40	●	●	●	●	●
1.50	0.75	4.50	3.00	39	3278-3-1.50	●	●	●	●	●
1.55	0.775	5.00	3.00	39	3278-3-1.55	●	●	●	●	●
1.60	0.80	5.00	3.00	39	3278-3-1.60	●	●	●	●	●
1.80	0.90	5.50	3.00	39	3278-3-1.80	●	●	●	●	●
2.00	1.00	6.00	3.00	39	3278-3-2.00	●	●	●	●	●
2.10	1.05	6.50	3.00	39	3278-3-2.10	●	●	●	●	●
2.20	1.10	7.00	3.00	39	3278-3-2.20	●	●	●	●	●
2.50	1.25	7.50	3.00	39	3278-3-2.50	●	●	●	●	●
2.60	1.30	7.80	3.00	39	3278-3-2.60	●	●	●	●	●
2.70	1.35	8.10	3.00	39	3278-3-2.70	●	●	●	●	●
2.80	1.40	8.40	3.00	39	3278-3-2.80	●	●	●	●	●
2.90	1.45	8.70	3.00	39	3278-3-2.90	●	●	●	●	●

Micro-fraises hémisphériques

Vollradius Mikrofräser

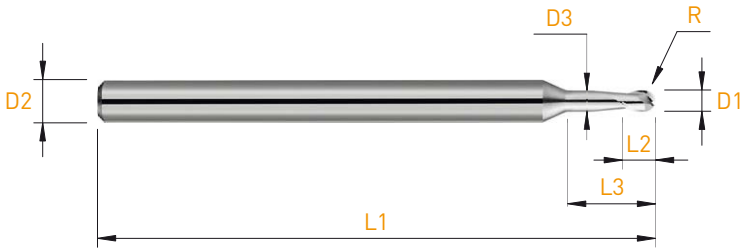
Ball nose micro end mills

3278H-3X



D1 +0.005 / -0.010	R	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.20	0.10	0.30	0.60	0.19	3.00	39	3278H-3X-0.20	●				
0.30	0.15	0.45	0.90	0.27	3.00	39	3278H-3X-0.30	●	●	●	●	●
0.40	0.20	0.60	1.20	0.37	3.00	39	3278H-3X-0.40	●	●	●	●	●
0.50	0.25	0.75	1.50	0.45	3.00	39	3278H-3X-0.50	●	●	●	●	●
0.60	0.30	0.90	1.80	0.55	3.00	39	3278H-3X-0.60	●	●	●	●	●
0.70	0.35	1.05	2.10	0.65	3.00	39	3278H-3X-0.70	●	●	●	●	●
0.80	0.40	1.20	2.40	0.75	3.00	39	3278H-3X-0.80	●	●	●	●	●
0.90	0.45	1.35	2.70	0.85	3.00	39	3278H-3X-0.90	●	●	●	●	●
1.00	0.50	1.50	3.00	0.95	3.00	39	3278H-3X-1.00	●	●	●	●	●
1.10	0.55	1.65	3.30	1.05	3.00	39	3278H-3X-1.10	●	●	●	●	●
1.20	0.60	1.80	3.60	1.15	3.00	39	3278H-3X-1.20	●	●	●	●	●
1.30	0.65	1.95	3.90	1.25	3.00	39	3278H-3X-1.30	●	●	●	●	●
1.40	0.70	2.10	4.20	1.35	3.00	39	3278H-3X-1.40	●	●	●	●	●
1.50	0.75	2.25	4.50	1.45	3.00	39	3278H-3X-1.50	●	●	●	●	●
1.60	0.80	2.40	4.80	1.55	3.00	39	3278H-3X-1.60	●	●	●	●	●
1.70	0.85	2.55	5.10	1.65	3.00	39	3278H-3X-1.70	●	●	●	●	●
1.80	0.90	2.70	5.40	1.75	3.00	39	3278H-3X-1.80	●	●	●	●	●
1.90	0.95	2.85	5.70	1.85	3.00	39	3278H-3X-1.90	●	●	●	●	●
2.00	1.00	3.00	6.00	1.95	6.00	50	3278H-3X-2.00	●	●	●	●	●
2.10	1.05	3.15	6.30	2.05	6.00	50	3278H-3X-2.10	●	●	●	●	●
2.20	1.10	3.30	6.60	2.15	6.00	50	3278H-3X-2.20	●	●	●	●	●
2.30	1.15	3.45	6.90	2.25	6.00	50	3278H-3X-2.30	●	●	●	●	●
2.40	1.20	3.60	7.20	2.35	6.00	50	3278H-3X-2.40	●	●	●	●	●
2.50	1.25	3.75	7.50	2.45	6.00	50	3278H-3X-2.50	●	●	●	●	●
3.00	1.50	4.50	9.00	2.95	6.00	50	3278H-3X-3.00	●	●	●	●	●

3278H-6X



D1 +0.005 / -0.010	R	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.15	0.45	1.80	0.27	3.00	39	3278H-6X-0.30	●	●	●	●	●
0.40	0.20	0.60	2.40	0.37	3.00	39	3278H-6X-0.40	●	●	●	●	●
0.50	0.25	0.75	3.00	0.45	3.00	39	3278H-6X-0.50	●	●	●	●	●
0.60	0.30	0.90	3.60	0.55	3.00	39	3278H-6X-0.60	●	●	●	●	●
0.70	0.35	1.05	4.20	0.65	3.00	39	3278H-6X-0.70	●	●	●	●	●
0.80	0.40	1.20	4.80	0.75	3.00	39	3278H-6X-0.80	●	●	●	●	●
0.90	0.45	1.35	5.40	0.85	3.00	39	3278H-6X-0.90	●	●	●	●	●
1.00	0.50	1.50	6.00	0.95	3.00	39	3278H-6X-1.00	●	●	●	●	●
1.10	0.55	1.65	6.60	1.05	3.00	39	3278H-6X-1.10	●	●	●	●	●
1.20	0.60	1.80	7.20	1.15	3.00	39	3278H-6X-1.20	●	●	●	●	●
1.30	0.65	1.95	7.80	1.25	3.00	39	3278H-6X-1.30	●	●	●	●	●
1.40	0.70	2.10	8.40	1.35	3.00	39	3278H-6X-1.40	●	●	●	●	●
1.50	0.75	2.25	9.00	1.45	3.00	39	3278H-6X-1.50	●	●	●	●	●
1.60	0.80	2.40	9.60	1.55	3.00	39	3278H-6X-1.60	●	●	●	●	●
1.70	0.85	2.55	10.20	1.65	3.00	39	3278H-6X-1.70	●	●	●	●	●
1.80	0.90	2.70	10.80	1.75	3.00	39	3278H-6X-1.80	●	●	●	●	●
1.90	0.95	2.85	11.40	1.85	3.00	39	3278H-6X-1.90	●	●	●	●	●
2.00	1.00	3.00	12.00	1.95	6.00	50	3278H-6X-2.00	●	●	●	●	●
2.10	1.05	3.15	12.60	2.05	6.00	50	3278H-6X-2.10	●	●	●	●	●
2.20	1.10	3.30	13.20	2.15	6.00	50	3278H-6X-2.20	●	●	●	●	●
2.30	1.15	3.45	13.80	2.25	6.00	50	3278H-6X-2.30	●	●	●	●	●
2.40	1.20	3.60	14.40	2.35	6.00	50	3278H-6X-2.40	●	●	●	●	●
2.50	1.25	3.75	15.00	2.45	6.00	50	3278H-6X-2.50	●	●	●	●	●
3.00	1.50	4.50	18.00	2.95	6.00	50	3278H-6X-3.00	●	●	●	●	●

Micro-fraises hémisphériques

Vollradius Mikrofräser

Ball nose micro end mills

3278H-9X



D1 +0.005 / -0.010	R	L2	L3	D3	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.40	0.20	0.60	3.60	0.37	3.00	39	3278H-9X-0.40	●	●	●	●	●
0.50	0.25	0.75	4.50	0.45	3.00	39	3278H-9X-0.50	●	●	●	●	●
0.60	0.30	0.90	5.40	0.55	3.00	39	3278H-9X-0.60	●	●	●	●	●
0.70	0.35	1.05	6.30	0.65	3.00	39	3278H-9X-0.70	●	●	●	●	●
0.80	0.40	1.20	7.20	0.75	3.00	39	3278H-9X-0.80	●	●	●	●	●
0.90	0.45	1.35	8.10	0.85	3.00	39	3278H-9X-0.90	●	●	●	●	●
1.00	0.50	1.50	9.00	0.95	3.00	39	3278H-9X-1.00	●	●	●	●	●
1.10	0.55	1.65	9.90	1.05	3.00	39	3278H-9X-1.10	●	●	●	●	●
1.20	0.60	1.80	10.80	1.15	3.00	39	3278H-9X-1.20	●	●	●	●	●
1.30	0.65	1.95	11.70	1.25	3.00	39	3278H-9X-1.30	●	●	●	●	●
1.40	0.70	2.10	12.60	1.35	3.00	39	3278H-9X-1.40	●	●	●	●	●
1.50	0.75	2.25	13.50	1.45	3.00	39	3278H-9X-1.50	●	●	●	●	●
1.60	0.80	2.40	14.40	1.55	3.00	39	3278H-9X-1.60	●	●	●	●	●
1.70	0.85	2.55	15.30	1.65	3.00	39	3278H-9X-1.70	●	●	●	●	●
1.80	0.90	2.70	16.20	1.75	3.00	39	3278H-9X-1.80	●	●	●	●	●
1.90	0.95	2.85	17.10	1.85	3.00	39	3278H-9X-1.90	●	●	●	●	●
2.00	1.00	3.00	18.00	1.95	6.00	50	3278H-9X-2.00	●	●	●	●	●
2.10	1.05	3.15	18.90	2.05	6.00	50	3278H-9X-2.10	●	●	●	●	●
2.20	1.10	3.30	19.80	2.15	6.00	50	3278H-9X-2.20	●	●	●	●	●
2.30	1.15	3.45	20.70	2.25	6.00	50	3278H-9X-2.30	●	●	●	●	●
2.40	1.20	3.60	21.60	2.35	6.00	50	3278H-9X-2.40	●	●	●	●	●
2.50	1.25	3.75	22.50	2.45	6.00	50	3278H-9X-2.50	●	●	●	●	●
3.00	1.50	4.50	27.00	2.95	6.00	50	3278H-9X-3.00	●	●	●	●	●

Fraises en bout

Schaftfräser

End mills

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Paramètres de coupe indicatifs Empfohlene Schnittwerte Standard machining data						> 16.54
Z	λ	D1	D2	Type	Corner	page
Z=3	Div.	Ø1.00 - 8.00	Ø3/6/8	E-DHP3300-1.5		> 16.57
Z=4	26° / 33°	Ø10.00	Ø10 h6	E-DHP3400-1.5		
Z=3	Div.	Ø1.00 - 8.00	Ø3/6/8	E-DHP3300-2.5		
Z=4	26° / 33°	Ø10.00	Ø10 h6	E-DHP3400-2.5		
Z=1	23°	Ø1.00 - 6.00	Ø6 h5	3123-2		> 16.58
		Ø1.00 - 6.00	Ø6 h5	3123-4		> 16.59
Z=2	60°	Ø0.50 - 6.00	Ø3/6/8	3260MV		> 16.60
	90°	Ø0.30 - 6.00	Ø3/6/8	3290MV		> 16.61
	120°	Ø0.50 - 6.00	Ø3/6/8	32120MV		> 16.62
Z=2	30°	Ø1.00 - 6.00	Ø6 h5	3230		> 16.63
		Ø3.00 - 6.00	Ø6 h5	3230-1.5		> 16.64
		Ø3.00 - 6.00	Ø6 h5	3230-3		> 16.65
		Ø2.00 - 6.00	D1 = D2	3231		> 16.66
		Ø3.00 - 6.00	Ø6 h5	3239T-2.5X		> 16.67
		Ø3.00 - 6.00	Ø6 h5	3239T-4X		> 16.68
Z=3	30°	Ø1.00 - 6.00	Ø6 h5	3330-S		> 16.69
		Ø3.00-12.00	D1 = D2	3330		> 16.70
		Ø3.00 - 6.00	Ø6 h5	3330-4		> 16.71
		Ø2.00 - 6.00	D1 = D2	3331		> 16.72
		Ø1.50 - 6.00	Ø6 h5	3336-HA		> 16.73
		Ø1.50 - 6.00	Ø6 h5	3337-HA		> 16.73
	45°	Ø2.00 - 6.00	D1 = D2	3341		> 16.74
		Ø0.50 - 6.00	Ø6 h5	3345-S		> 16.75
		Ø2.00 - 6.00	D1 = D2	3361		> 16.76
	35° / 38°	Ø1.00 - 6.00	Ø6 h5	DHP3336		> 16.77
Z=4	30°	Ø3.00 - 6.00	D1 = D2	3430		> 16.78
		Ø2.00 - 6.00	D1 = D2	3431		> 16.79
	45°	Ø2.00 - 6.00	D1 = D2	3441		> 16.80
		Ø0.50 - 6.00	Ø6 h5	3445-S		> 16.81
	50°	Ø1.00 - 6.00	Ø6 h5	3450		> 16.82
	35° / 38°	Ø1.00 - 6.00	Ø6 h5	DHP3436		> 16.83
	30°	Ø3.00 - 6.00	Ø6 h5	3439T-2.5X		> 16.84
		Ø3.00 - 6.00	Ø6 h5	3439T-4X		> 16.85
Z=5	45°	Ø1.00 - 6.00	Ø6 h5	3545		> 16.86
Z=4/5/6		Ø1.00 - 6.00	Ø6 h5	35645		> 16.87
Z=8		Ø6.00	Ø6 h5	3810		> 16.88

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Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

> 16.54

Z	λ	D1	D2	Type	Corner	page
Z=2	30°	Ø2.00 - 6.00	D1 = D2	3238		> 16.89
Z=3	30°	Ø2.00 - 6.00	D1 = D2	3338		> 16.90
Z=3	30°	Ø8.00-12.00	Ø6 h6	3383		> 16.91
Z=10	30°	Ø16.3 / 20.30	Ø10 h6	3831 / 3833		> 16.92
Z=3	0°	Ø0.50 -3.00	Ø3 h4	3611		> 16.93
Z=3	0°	Ø0.50 -3.00	Ø3 h4	3911		> 16.94
Z=4	0°	Ø3.00-8.00	Ø3 h4 Ø6 h5 Ø8 h6	1901 / 3901		> 16.95

Fraises ébauches

Schruppfräser

Roughing mills

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Matière Werkstoff Material	VC	1.0 - 2.0	2.0 - 4.0	4.0 - 6.0	6.0 - 10.0	Z	TAIN	STF
	[m/min]	fz [mm]	fz [mm]	fz [mm]	fz [mm]			
Acier de décolletage Automatenstahl Free-cutting steel (P)	100 - 140	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	***	***
Acier Stahl Steel < 600 N/mm² (P)	90 - 140	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	***	***
Acier Stahl Steel < 800 N/mm² (P)	90 - 140	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	***	***
Acier Stahl Steel > 800 N/mm² (P)	80 - 120	0.010 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.060	-	***	***
Acier trempé Gehärteter Stahl -55HRC (H)	120 - 170	0.005 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.035	-	***	***
Acier trempé Gehärteter Stahl +55HRC (H)	110 - 150	0.005 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.035	-	***	***
Inox Rostfreistahl Stainless steel (M)	50 - 90	0.004 - 0.008	0.008 - 0.012	0.012 - 0.020	0.020 - 0.040	-	***	***
Aluminium (N)	250 - 350	0.008 - 0.015	0.015 - 0.030	0.030 - 0.040	0.040 - 0.065	-	***	**
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N)	130 - 240	0.005 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.050	-	***	**
Matière synthétique Synthetisches Material Synthetic material (N)	150 - 300	0.020 - 0.030	0.030 - 0.050	0.050 - 0.080	0.080 - 0.150	-	***	**
Métaux précieux Edelmetalle Precious metals (N)	120 - 150	0.005 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.050	-	***	**
Titane Titan Titanium (S)	50 - 100	0.010 - 0.015	0.015 - 0.020	0.020 - 0.030	0.030 - 0.050	-	***	***
Alliage de nickel Nickel-Legierung Nickel alloy (S)	40 - 60	0.005 - 0.007	0.007 - 0.012	0.012 - 0.020	0.020 - 0.030	-	***	***
Matière exotique Exotisches material Exotic material (O)	15 - 25	0.005 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.050	-	***	***

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

* Bien / Gut / Good

** Très bien / Sehr gut / Very good

*** Excellent / Ausgezeichnet / Excellent

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Fraises en bout

Schafftfräser

End mills

Matière Werkstoff Material	VC	0.50 - 2.0	2.0 - 4.0	4.0 - 6.0	6.0 - 8.0	8.0 - 12.0	Z	TiAlN	STF	DLC
	(m/min)	fz (mm)	fz (mm)	fz (mm)	fz (mm)	fz (mm)				
Acier de décolletage Automatenstahl Free-cutting steel (P)	80 - 130	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	***	***	-
Acier Stahl Steel < 600 N/mm ² (P)	70 - 100	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	***	***	-
Acier Stahl Steel < 800 N/mm ² (P)	70 - 100	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	***	***	-
Acier Stahl Steel > 800 N/mm ² (P)	50 - 80	0.004-0.015	0.015 - 0.025	0.025 - 0.035	0.035 - 0.050	0.050 - 0.080	-	***	***	-
Acier trempé Gehärteter Stahl -55HRC (H)	60 - 90	0.002 - 0.008	0.008 - 0.015	0.012 - 0.020	0.020 - 0.025	0.025 - 0.030	-	***	***	-
Acier trempé Gehärteter Stahl +55HRC (H)	40 - 70	0.002 - 0.008	0.008 - 0.015	0.012 - 0.020	0.020 - 0.025	0.020 - 0.030	-	***	***	-
Inox Rostfreistahl Stainless steel (M)	40 - 80	0.003 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.030	0.030 - 0.050	-	***	***	-
Aluminium (N)	230 - 320	0.003 - 0.010	0.010 - 0.025	0.025 - 0.030	0.030 - 0.050	0.050 - 0.080	**	*	**	***
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N)	100 - 190	0.003 - 0.010	0.010 - 0.020	0.020 - 0.030	0.030 - 0.040	0.040 - 0.070	**	*	**	***
Matière synthétique Synthetisches Material Synthetic material (N)	250 - 500	0.005 - 0.030	0.030 - 0.050	0.050 - 0.080	0.080 - 0.100	0.100 - 0.200	***	-	**	***
Métaux précieux Edelmetalle Precious metals (N)	90 - 150	0.003 - 0.015	0.015 - 0.025	0.025 - 0.030	0.030 - 0.050	0.050 - 0.080	***	*	**	***
Titane Titan Titanium (S)	30 - 70	0.004 - 0.010	0.010 - 0.017	0.017-0.025	0.025 - 0.035	0.035 - 0.050	-	**	***	-
Alliage de nickel Nickel-Legierung Nickel alloy (S)	30 - 60	0.003 - 0.008	0.008 - 0.015	0.015 - 0.020	0.020 - 0.025	0.025 - 0.040	-	***	***	-
Matière exotique Exotisches material Exotic material (O)	15 - 25	0.002 - 0.008	0.008 - 0.020	0.020 - 0.030	0.030 - 0.040	0.040 - 0.050	-	***	***	**

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*** Excellent / Ausgezeichnet / Excellent

Fraises à angle

Kegelsenker

Chamfering tools

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Matière Werkstoff Material	VC (m/min)	Z	TAIN	STF
Acier de décolletage Automatenstahl (P) Free-cutting steel	80 - 130	★	★★★	★★★
Acier Stahl < 600 N/mm² (P) Steel	70 - 100	★	★★★	★★★
Acier Stahl < 800 N/mm² (P) Steel	70 - 100	★	★★★	★★★
Acier Stahl > 800 N/mm² (P) Steel	50 - 80	★	★★★	★★★
Acier trempé Gehärteter Stahl -55HRC (H) Hardened steel	60 - 90	-	★★	★★★
Acier trempé Gehärteter Stahl +55HRC (H) Hardened steel	40 - 70	-	★★	★★★
Inox Rostfreistahl (M) Stainless steel	50 - 100	★	★★★	★★★
Aluminium (N)	200 - 300	★★★	★★	★★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze (N) Copper, brass, bronze	100 - 200	★★★	★★	★★★
Matière synthétique Synthetisches Material (N) Synthetic material	200 - 500	★★★	★★	★★
Métaux précieux Edelmetalle (N) Precious metals	90 - 140	★★★	★★	★★★
Titane Titan (S) Titanium	30 - 80	-	★★★	★★★
Alliage de nickel Nickel-Legierung (S) Nickel alloy	30 - 60	-	★★★	★★★
Matière exotique Exotisches material (O) Exotic material	20 - 30	-	★★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

★ Bien / Gut / Good

★★ Très bien / Sehr gut / Very good

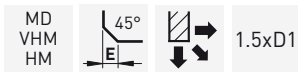
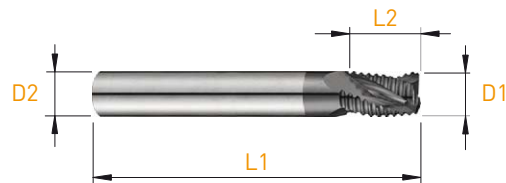
★★★ Excellent / Ausgezeichnet / Excellent

Fraises ébauches

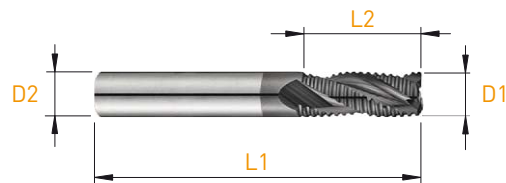
Schruppfräser

Roughing mills

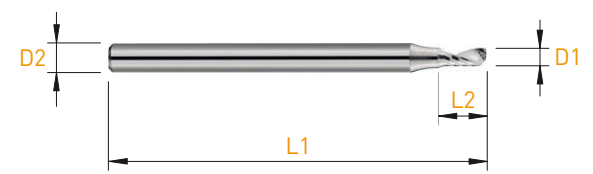
E-DHP3300 / 3400



	Z	E	λ	D1 h10	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6 Ø10 h6	L1	Art. N°	Z	TiAIN	STF
	3	0.05	26°/30°	1.00	1.50	3.00	39	E-DHP3300-1.5-1.00	●	●	●
	3	0.10	26°/30°	1.50	2.25	3.00	39	E-DHP3300-1.5-1.50	●	●	●
	3	0.20	26°/30°	2.00	3.00	3.00	39	E-DHP3300-1.5-2.00	●	●	●
	3	0.20	26°/33°	2.50	3.75	6.00	50	E-DHP3300-1.5-2.50	●	●	●
	3	0.20	26°/33°	3.00	4.25	6.00	50	E-DHP3300-1.5-3.00	●	●	●
	3	0.30	26°/33°	4.00	6.00	6.00	50	E-DHP3300-1.5-4.00	●	●	●
	3	0.30	26°/33°	5.00	7.50	6.00	50	E-DHP3300-1.5-5.00	●	●	●
	3	0.40	26°/33°	6.00	9.00	6.00	50	E-DHP3300-1.5-6.00	●	●	●
	3	0.50	26°/33°	8.00	12.00	8.00	64	E-DHP3300-1.5-8.00	●	●	●
	4	0.50	26°/33°	10.00	15.00	10.00	73	E-DHP3400-1.5-10.00	●	●	●



	Z	E	λ	D1 h10	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6 Ø10 h6	L1	Art. N°	Z	TiAIN	STF
	3	0.05	26°/30°	1.00	2.50	3.00	39	E-DHP3300-2.5-1.00	●	●	●
	3	0.10	26°/30°	1.50	3.75	3.00	39	E-DHP3300-2.5-1.50	●	●	●
	3	0.20	26°/30°	2.00	5.00	3.00	39	E-DHP3300-2.5-2.00	●	●	●
	3	0.20	26°/33°	2.50	6.25	6.00	57	E-DHP3300-2.5-2.50	●	●	●
	3	0.20	26°/33°	3.00	7.50	6.00	57	E-DHP3300-2.5-3.00	●	●	●
	3	0.30	26°/33°	4.00	10.00	6.00	57	E-DHP3300-2.5-4.00	●	●	●
	3	0.30	26°/33°	5.00	12.50	6.00	57	E-DHP3300-2.5-5.00	●	●	●
	3	0.40	26°/33°	6.00	15.00	6.00	57	E-DHP3300-2.5-6.00	●	●	●
	3	0.50	26°/33°	8.00	20.00	8.00	64	E-DHP3300-2.5-8.00	●	●	●
	4	0.50	26°/33°	10.00	25.00	10.00	73	E-DHP3400-2.5-10.00	●	●	●



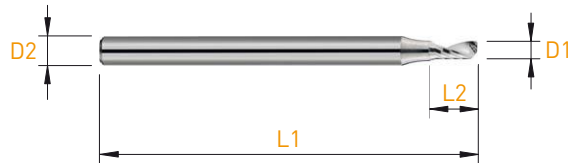
MD VHM HM	λ 23°	Sharp Corner		2xD1	Z=1
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D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF	DLC
1.00	2.00	6.00	50	3123-2-1.0	•	•	•	•
2.00	4.00	6.00	50	3123-2-2.0	•	•	•	•
3.00	6.00	6.00	50	3123-2-3.0	•	•	•	•
4.00	8.00	6.00	50	3123-2-4.0	•	•	•	•
5.00	10.00	6.00	50	3123-2-5.0	•	•	•	•
6.00	12.00	6.00	50	3123-2-6.0	•	•	•	•

Fraises en bout de finition

Schlicht Schaftfräser

Finishing end mills

3123-4

MD VHM HM	λ 23°	Sharp Corner		4xD1	Z=1
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D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF	DLC
1.00	4.00	6.00	50	3123-4-1.0	●	●	●	●
2.00	8.00	6.00	50	3123-4-2.0	●	●	●	●
3.00	12.00	6.00	50	3123-4-3.0	●	●	●	●
4.00	16.00	6.00	50	3123-4-4.0	●	●	●	●
5.00	20.00	6.00	50	3123-4-5.0	●	●	●	●
6.00	24.00	6.00	50	3123-4-6.0	●	●	●	●



MD
VHM
HM

60°

Z=2

D1 h10	E	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6	L1	Art. N°	Z	TiAlN	STF
0.50	0.05	1.00	3.00	39	3260MV-0.5	●	●	●
1.00	0.10	2.00	3.00	39	3260MV-1.0	●	●	●
1.50	0.15	3.00	3.00	39	3260MV-1.5	●	●	●
2.00	0.20	4.00	3.00	39	3260MV-2.0	●	●	●
2.50	0.25	5.00	3.00	39	3260MV-2.5	●	●	●
3.00	0.30	6.00	6.00	50	3260MV-3.0	●	●	●
4.00	0.40	8.00	6.00	50	3260MV-4.0	●	●	●
6.00	0.60	12.00	8.00	64	3260MV-6.0	●	●	●

Fraises en bout

Schaftfräser

End mills

3290MV



D1 h10	E	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6	L1	Art. N°	Z	TiAlN	STF
0.30	0.03	0.60	3.00	39	3290MV-0.3	•	•	•
0.40	0.04	0.80	3.00	39	3290MV-0.4	•	•	•
0.50	0.05	1.00	3.00	39	3290MV-0.5	•	•	•
0.60	0.06	1.20	3.00	39	3290MV-0.6	•	•	•
0.70	0.07	1.40	3.00	39	3290MV-0.7	•	•	•
0.80	0.08	1.60	3.00	39	3290MV-0.8	•	•	•
0.90	0.09	1.80	3.00	39	3290MV-0.9	•	•	•
1.00	0.10	2.00	3.00	39	3290MV-1.0	•	•	•
1.10	0.11	2.20	3.00	39	3290MV-1.1	•	•	•
1.20	0.12	2.40	3.00	39	3290MV-1.2	•	•	•
1.30	0.13	2.60	3.00	39	3290MV-1.3	•	•	•
1.40	0.14	2.80	3.00	39	3290MV-1.4	•	•	•
1.50	0.15	3.00	3.00	39	3290MV-1.5	•	•	•
1.60	0.16	3.20	3.00	39	3290MV-1.6	•	•	•
1.70	0.17	3.40	3.00	39	3290MV-1.7	•	•	•
1.80	0.18	3.60	3.00	39	3290MV-1.8	•	•	•
1.90	0.19	3.80	3.00	39	3290MV-1.9	•	•	•
2.00	0.20	4.00	3.00	39	3290MV-2.0	•	•	•
2.50	0.25	5.00	3.00	39	3290MV-2.5	•	•	•
3.00	0.30	6.00	6.00	50	3290MV-3.0	•	•	•
4.00	0.40	8.00	6.00	50	3290MV-4.0	•	•	•
6.00	0.60	12.00	8.00	64	3290MV-6.0	•	•	•



MD
VHM
HM

120°

Z=2

D1 h10	E	L2	D2 Ø3 h4 Ø6 h5 Ø8 h6	L1	Art. N°	Z	TiAlN	STF
0.50	0.05	1.00	3.00	39	32120MV-0.5	●	●	●
1.00	0.10	2.00	3.00	39	32120MV-1.0	●	●	●
1.50	0.15	3.00	3.00	39	32120MV-1.5	●	●	●
2.00	0.20	4.00	3.00	39	32120MV-2.0	●	●	●
2.50	0.25	5.00	3.00	39	32120MV-2.5	●	●	●
3.00	0.30	6.00	6.00	50	32120MV-3.0	●	●	●
4.00	0.40	8.00	6.00	50	32120MV-4.0	●	●	●
6.00	0.60	12.00	8.00	64	32120MV-6.0	●	●	●

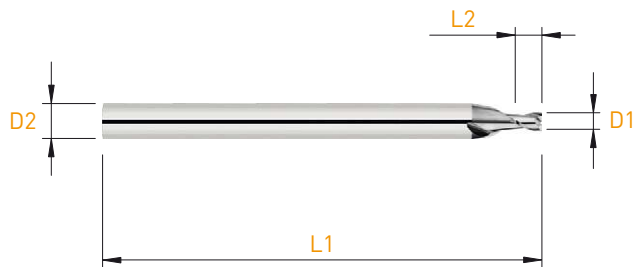
Fraises en bout de finition

Schlicht Schaftfräser

Finishing end mills

3230

D1 h10	L2	D2 h5	L1	Art. N°	Z	TAIN	STF
1.00	1.00	6.00	50	3230-1.0	●	●	●
1.50	1.50	6.00	50	3230-1.5	●	●	●
2.00	2.00	6.00	50	3230-2.0	●	●	●
2.50	2.50	6.00	50	3230-2.5	●	●	●
3.00	3.00	6.00	50	3230-3.0	●	●	●
4.00	4.00	6.00	50	3230-4.0	●	●	●
5.00	5.00	6.00	50	3230-5.0	●	●	●
6.00	6.00	6.00	50	3230-6.0	●	●	●



MD
VHM
HM

λ 30°

Sharp
Corner

1.5xD1

Z=2

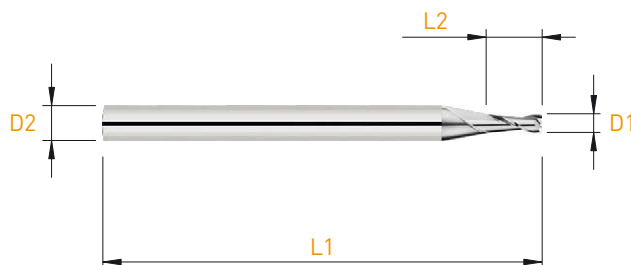
D1 h10	L2	D2 h5	L1	Art. N°	Z		
					T	A	S
					T	A	S
3.00	4.50	6.00	50	3230-1.5-3.0	•	•	•
3.50	5.00	6.00	50	3230-1.5-3.5	•	•	•
4.00	6.00	6.00	50	3230-1.5-4.0	•	•	•
4.50	7.00	6.00	50	3230-1.5-4.5	•	•	•
5.00	8.00	6.00	50	3230-1.5-5.0	•	•	•
6.00	9.00	6.00	50	3230-1.5-6.0	•	•	•

Fraises en bout de finition

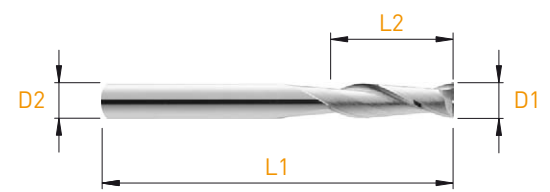
Schlicht Schaftfräser

Finishing end mills

3230-3



D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAIN	STF
3.00	9.00	6.00	50	3230-3-3.0	●	●	●
3.50	10.00	6.00	50	3230-3-3.5	●	●	●
4.00	12.00	6.00	50	3230-3-4.0	●	●	●
4.50	13.00	6.00	50	3230-3-4.5	●	●	●
5.00	15.00	6.00	50	3230-3-5.0	●	●	●
6.00	18.00	6.00	50	3230-3-6.0	●	●	●

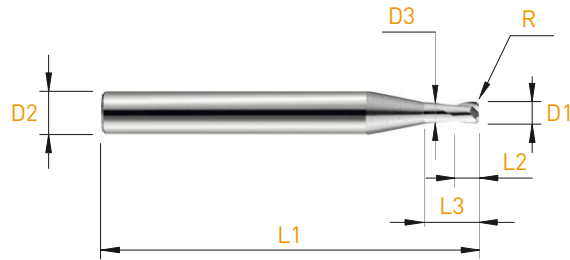


D1 e9	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
2.00	8.00	2.00	32	3231-2.0	●	●	●
2.50	8.00	2.50	32	3231-2.5	●	●	●
3.00	12.00	3.00	32	3231-3.0	●	●	●
3.50	12.00	3.50	32	3231-3.5	●	●	●
4.00	12.00	4.00	40	3231-4.0	●	●	●
4.50	14.00	4.50	50	3231-4.5	●	●	●
5.00	14.00	5.00	50	3231-5.0	●	●	●
6.00	16.00	6.00	50	3231-6.0	●	●	●

Fraises en bout de finition

Schlicht Schaftfräser

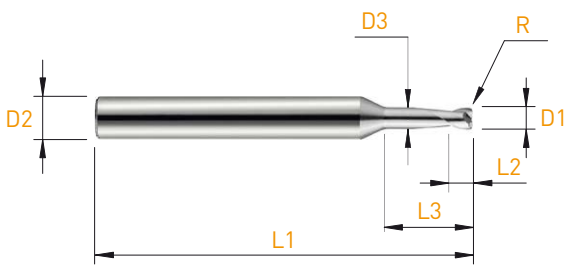
Finishing end mills

3239T-2.5X

D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	Z	TiAIN	STF
3.00	0.50	3.00	7.50	2.95	6.00	57	3239T-2.5X-3.0	●	●	●
3.50	0.50	3.50	8.75	3.45	6.00	57	3239T-2.5X-3.5	●	●	●
4.00	0.50	4.00	10.00	3.95	6.00	57	3239T-2.5X-4.0	●	●	●
4.50	0.50	4.50	11.25	4.45	6.00	57	3239T-2.5X-4.5	●	●	●
5.00	0.50	5.00	12.50	4.95	6.00	57	3239T-2.5X-5.0	●	●	●
5.50	0.50	5.50	13.75	5.45	6.00	57	3239T-2.5X-5.5	●	●	●
6.00	0.50	6.00	15.00	5.95	6.00	57	3239T-2.5X-6.0	●	●	●

3239T-4X

Fraises en bout de finition
Schlicht Schaftfräser
Finishing end mills



MD
VHM
HM

λ 30°

Radius
Corner

L3
4xD1

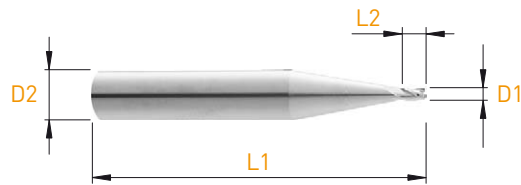
Z=2

D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	Z	TiAIN	STF
3.00	0.50	3.00	12.00	2.95	6.00	57	3239T-4X-3.0	●	●	●
3.50	0.50	3.50	14.00	3.45	6.00	57	3239T-4X-3.5	●	●	●
4.00	0.50	4.00	16.00	3.95	6.00	57	3239T-4X-4.0	●	●	●
4.50	0.50	4.50	18.00	4.45	6.00	57	3239T-4X-4.5	●	●	●
5.00	0.50	5.00	20.00	4.95	6.00	57	3239T-4X-5.0	●	●	●
5.50	0.50	5.50	22.00	5.45	6.00	57	3239T-4X-5.5	●	●	●
6.00	0.50	6.00	24.00	5.95	6.00	57	3239T-4X-6.0	●	●	●

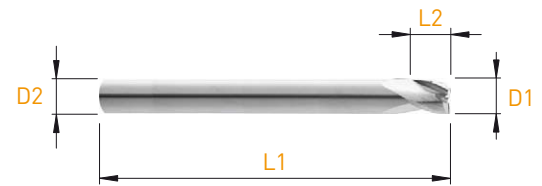
Fraises en bout de finition

Schlicht Schaftfräser

Finishing end mills

3330-S

D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
1.00	3.00	6.00	40	3330-S-1.0	●	●	●
1.50	3.00	6.00	40	3330-S-1.5	●	●	●
2.00	3.00	6.00	40	3330-S-2.0	●	●	●
2.50	3.00	6.00	40	3330-S-2.5	●	●	●
3.00	4.00	6.00	40	3330-S-3.0	●	●	●
3.50	4.00	6.00	40	3330-S-3.5	●	●	●
4.00	5.00	6.00	40	3330-S-4.0	●	●	●
4.50	5.00	6.00	40	3330-S-4.5	●	●	●
5.00	6.00	6.00	40	3330-S-5.0	●	●	●
6.00	7.00	6.00	40	3330-S-6.0	●	●	●



MD
VHM
HM

λ 30°

Sharp
Corner

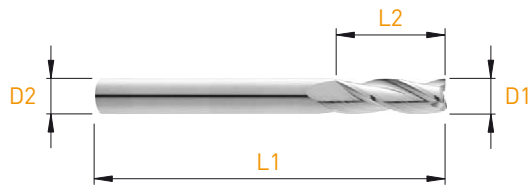
Z=3

D1 e9	L2	D2 h5	L1	Art. N°	Z		
					TAIN	STF	
3.00	3.00	3.00	39	3330-3.0	●	●	●
4.00	4.00	4.00	50	3330-4.0	●	●	●
5.00	5.00	5.00	50	3330-5.0	●	●	●
6.00	6.00	6.00	50	3330-6.0	●	●	●
8.00	8.00	8.00	58	3330-8.0	●		
10.00	10.00	10.00	66	3330-10.0	●		
12.00	12.00	12.00	73	3330-12.0	●		

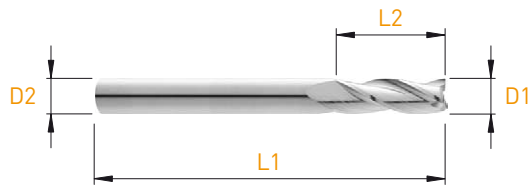
Fraises en bout de finition

Schlicht Schaftfräser

Finishing end mills

3330-4

D1 h10	L2	D2 h5	L1	Art. N°	Z	TAIN	STF
3.00	12.00	6.00	50	3330-4-3.0	●	●	●
4.00	16.00	6.00	50	3330-4-4.0	●	●	●
5.00	20.00	6.00	50	3330-4-5.0	●	●	●
6.00	24.00	6.00	57	3330-4-6.0	●	●	●



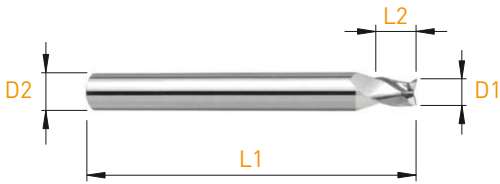
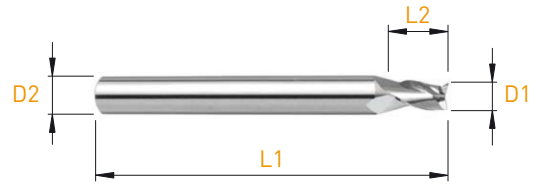
D1 e9	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
2.00	8.00	2.00	32	3331-2.0	●	●	●
2.50	8.00	2.50	32	3331-2.5	●	●	●
3.00	12.00	3.00	32	3331-3.0	●	●	●
3.50	12.00	3.50	32	3331-3.5	●	●	●
4.00	12.00	4.00	40	3331-4.0	●	●	●
4.50	14.00	4.50	50	3331-4.5	●	●	●
5.00	14.00	5.00	50	3331-5.0	●	●	●
6.00	16.00	6.00	50	3331-6.0	●	●	●

Fraises en bout de finition

Schlicht Schaftfräser

Finishing end mills

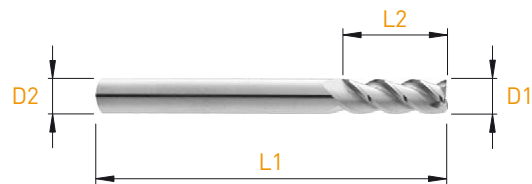
3336-HA / 3337-HA



D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAIN	STF
1.50	3.00	6.00	50	3336-HA-1.5	●	●	●
1.80	3.00	6.00	50	3336-HA-1.8	●	●	●
2.00	3.00	6.00	50	3336-HA-2.0	●	●	●
2.50	3.00	6.00	50	3336-HA-2.5	●	●	●
2.80	4.00	6.00	50	3336-HA-2.8	●	●	●
3.00	4.00	6.00	50	3336-HA-3.0	●	●	●
3.50	4.00	6.00	50	3336-HA-3.5	●	●	●
3.80	5.00	6.00	54	3336-HA-3.8	●	●	●
4.00	5.00	6.00	54	3336-HA-4.0	●	●	●
4.50	5.00	6.00	54	3336-HA-4.5	●	●	●
4.80	6.00	6.00	54	3336-HA-4.8	●	●	●
5.00	6.00	6.00	54	3336-HA-5.0	●	●	●
5.50	7.00	6.00	54	3336-HA-5.5	●	●	●
5.80	7.00	6.00	54	3336-HA-5.8	●	●	●
6.00	7.00	6.00	54	3336-HA-6.0	●	●	●



D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAIN	STF
1.50	6.00	6.00	57	3337-HA-1.5	●	●	●
1.80	6.00	6.00	57	3337-HA-1.8	●	●	●
2.00	6.00	6.00	57	3337-HA-2.0	●	●	●
2.50	6.00	6.00	57	3337-HA-2.5	●	●	●
2.80	7.00	6.00	57	3337-HA-2.8	●	●	●
3.00	7.00	6.00	57	3337-HA-3.0	●	●	●
3.50	7.00	6.00	57	3337-HA-3.5	●	●	●
3.80	8.00	6.00	57	3337-HA-3.8	●	●	●
4.00	8.00	6.00	57	3337-HA-4.0	●	●	●
4.50	8.00	6.00	57	3337-HA-4.5	●	●	●
4.80	10.00	6.00	57	3337-HA-4.8	●	●	●
5.00	10.00	6.00	57	3337-HA-5.0	●	●	●
5.50	10.00	6.00	57	3337-HA-5.5	●	●	●
5.80	10.00	6.00	57	3337-HA-5.8	●	●	●
6.00	10.00	6.00	57	3337-HA-6.0	●	●	●



MD
VHM
HM

$\lambda\ 45^\circ$

Sharp
Corner

Z=3

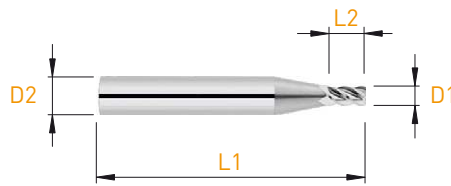
D1 e9	L2	D2 h5	L1	Art. N°	Z		
					T	A	S
2.00	8.00	2.00	32	3341-2.0	•	•	•
2.50	8.00	2.50	32	3341-2.5	•	•	•
3.00	12.00	3.00	32	3341-3.0	•	•	•
3.50	12.00	3.50	32	3341-3.5	•	•	•
4.00	12.00	4.00	40	3341-4.0	•	•	•
4.50	14.00	4.50	50	3341-4.5	•	•	•
5.00	14.00	5.00	50	3341-5.0	•	•	•
6.00	16.00	6.00	50	3341-6.0	•	•	•

Fraises en bout de finition

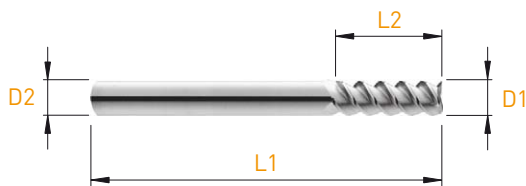
Schlicht Schaftfräser

Finishing end mills

3345-S



D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
0.50	1.00	6.00	40	3345-S-0.5	●	●	●
0.60	1.20	6.00	40	3345-S-0.6	●	●	●
0.70	1.40	6.00	40	3345-S-0.7	●	●	●
0.80	1.60	6.00	40	3345-S-0.8	●	●	●
0.90	1.80	6.00	40	3345-S-0.9	●	●	●
1.00	2.00	6.00	40	3345-S-1.0	●	●	●
1.10	2.20	6.00	40	3345-S-1.1	●	●	●
1.20	2.40	6.00	40	3345-S-1.2	●	●	●
1.30	2.60	6.00	40	3345-S-1.3	●	●	●
1.40	2.80	6.00	40	3345-S-1.4	●	●	●
1.50	3.00	6.00	40	3345-S-1.5	●	●	●
1.60	3.20	6.00	40	3345-S-1.6	●	●	●
1.70	3.40	6.00	40	3345-S-1.7	●	●	●
1.80	3.60	6.00	40	3345-S-1.8	●	●	●
1.90	3.80	6.00	40	3345-S-1.9	●	●	●
2.00	4.00	6.00	40	3345-S-2.0	●	●	●
2.10	4.20	6.00	40	3345-S-2.1	●	●	●
2.20	4.40	6.00	40	3345-S-2.2	●	●	●
2.30	4.60	6.00	40	3345-S-2.3	●	●	●
2.40	4.80	6.00	40	3345-S-2.4	●	●	●
2.50	5.00	6.00	40	3345-S-2.5	●	●	●
2.60	5.20	6.00	40	3345-S-2.6	●	●	●
2.70	5.40	6.00	40	3345-S-2.7	●	●	●
2.80	5.60	6.00	40	3345-S-2.8	●	●	●
2.90	5.80	6.00	40	3345-S-2.9	●	●	●
3.00	6.00	6.00	40	3345-S-3.0	●	●	●
3.50	7.00	6.00	40	3345-S-3.5	●	●	●
4.00	8.00	6.00	40	3345-S-4.0	●	●	●
4.50	9.00	6.00	40	3345-S-4.5	●	●	●
5.00	10.00	6.00	40	3345-S-5.0	●	●	●
6.00	12.00	6.00	40	3345-S-6.0	●	●	●

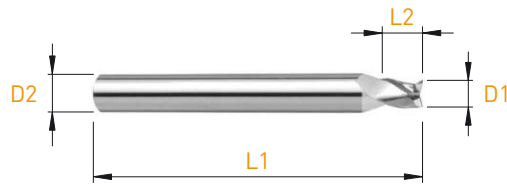


D1 e9	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
2.00	8.00	2.00	32	3361-2.0	●	●	●
2.50	8.00	2.50	32	3361-2.5	●	●	●
3.00	12.00	3.00	32	3361-3.0	●	●	●
3.50	12.00	3.50	32	3361-3.5	●	●	●
4.00	12.00	4.00	40	3361-4.0	●	●	●
4.50	14.00	4.50	50	3361-4.5	●	●	●
5.00	14.00	5.00	50	3361-5.0	●	●	●
6.00	16.00	6.00	50	3361-6.0	●	●	●

Fraises en bout de finition

Schlicht Schaftfräser

Finishing end mills

DHP3336MD
VHM
HM
 λ 35°
↓
38°
Sharp
Corner

Z=3

**DHP**

Denture à pas irrégulier, hélice progressive
 Ungleiche Teilung, progressive Spirale
 Uneven tooth pitch, progressive helix

D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
1.00	4.00	6.00	40	DHP3336-1.0	●	●	●
1.50	4.00	6.00	40	DHP3336-1.5	●	●	●
2.00	4.00	6.00	40	DHP3336-2.0	●	●	●
2.50	4.00	6.00	40	DHP3336-2.5	●	●	●
3.00	5.00	6.00	40	DHP3336-3.0	●	●	●
3.50	5.00	6.00	40	DHP3336-3.5	●	●	●
4.00	6.00	6.00	40	DHP3336-4.0	●	●	●
5.00	7.00	6.00	40	DHP3336-5.0	●	●	●
6.00	8.00	6.00	40	DHP3336-6.0	●	●	●

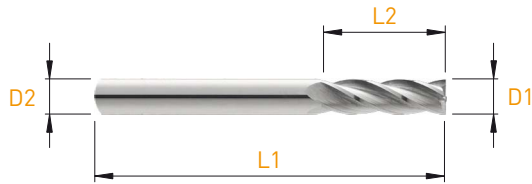


D1 e9	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
3.00	3.00	3.00	39	3430-3.0	•	•	•
4.00	4.00	4.00	50	3430-4.0	•	•	•
5.00	5.00	5.00	50	3430-5.0	•	•	•
6.00	6.00	6.00	50	3430-6.0	•	•	•

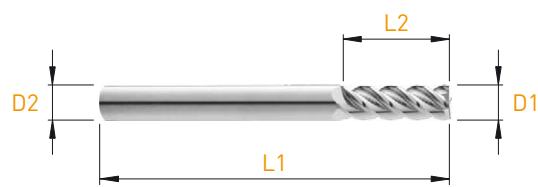
Fraises en bout de finition

Schlicht Schaftfräser

Finishing end mills

3431

D1 _{e9}	L2	D2 _{h5}	L1	Art. N°	Z	TiAIN	STF
2.00	8.00	2.00	32	3431-2.0	●	●	●
2.50	8.00	2.50	32	3431-2.5	●	●	●
3.00	12.00	3.00	32	3431-3.0	●	●	●
3.50	12.00	3.50	32	3431-3.5	●	●	●
4.00	12.00	4.00	40	3431-4.0	●	●	●
4.50	14.00	4.50	50	3431-4.5	●	●	●
5.00	14.00	5.00	50	3431-5.0	●	●	●
6.00	16.00	6.00	50	3431-6.0	●	●	●



MD
VHM
HM

λ 45°

Sharp
Corner

Z=4

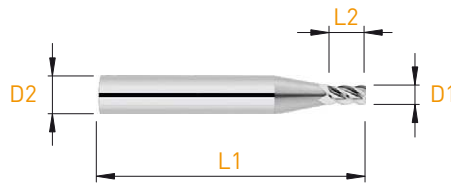
D1 e9	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
2.00	8.00	2.00	32	3441-2.0	●	●	●
2.50	8.00	2.50	32	3441-2.5	●	●	●
3.00	12.00	3.00	32	3441-3.0	●	●	●
3.50	12.00	3.50	32	3441-3.5	●	●	●
4.00	12.00	4.00	40	3441-4.0	●	●	●
4.50	14.00	4.50	50	3441-4.5	●	●	●
5.00	14.00	5.00	50	3441-5.0	●	●	●
6.00	16.00	6.00	50	3441-6.0	●	●	●

Fraises en bout de finition

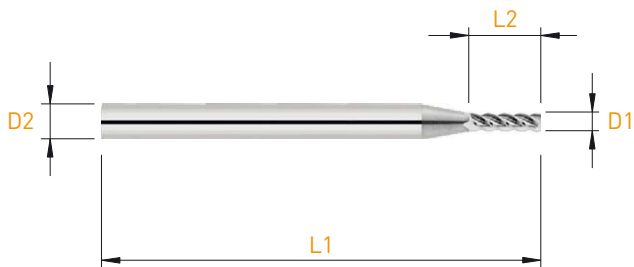
Schlicht Schaftfräser

Finishing end mills

3445-S



D1 _{h10}	L2	D2 _{h5}	L1	Art. N°	Z	TiAlN	STF
0.50	1.00	6.00	40	3445-S-0.5	●	●	●
0.60	1.20	6.00	40	3445-S-0.6	●	●	●
0.70	1.40	6.00	40	3445-S-0.7	●	●	●
0.80	1.60	6.00	40	3445-S-0.8	●	●	●
0.90	1.80	6.00	40	3445-S-0.9	●	●	●
1.00	2.00	6.00	40	3445-S-1.0	●	●	●
1.10	2.20	6.00	40	3445-S-1.1	●	●	●
1.20	2.40	6.00	40	3445-S-1.2	●	●	●
1.30	2.60	6.00	40	3445-S-1.3	●	●	●
1.40	2.80	6.00	40	3445-S-1.4	●	●	●
1.50	3.00	6.00	40	3445-S-1.5	●	●	●
1.60	3.20	6.00	40	3445-S-1.6	●	●	●
1.70	3.40	6.00	40	3445-S-1.7	●	●	●
1.80	3.60	6.00	40	3445-S-1.8	●	●	●
1.90	3.80	6.00	40	3445-S-1.9	●	●	●
2.00	4.00	6.00	40	3445-S-2.0	●	●	●
2.10	4.20	6.00	40	3445-S-2.1	●	●	●
2.20	4.40	6.00	40	3445-S-2.2	●	●	●
2.30	4.60	6.00	40	3445-S-2.3	●	●	●
2.40	4.80	6.00	40	3445-S-2.4	●	●	●
2.50	5.00	6.00	40	3445-S-2.5	●	●	●
2.60	5.20	6.00	40	3445-S-2.6	●	●	●
2.70	5.40	6.00	40	3445-S-2.7	●	●	●
2.80	5.60	6.00	40	3445-S-2.8	●	●	●
2.90	5.80	6.00	40	3445-S-2.9	●	●	●
3.00	6.00	6.00	40	3445-S-3.0	●	●	●
3.50	7.00	6.00	40	3445-S-3.5	●	●	●
4.00	8.00	6.00	40	3445-S-4.0	●	●	●
4.50	9.00	6.00	40	3445-S-4.5	●	●	●
5.00	10.00	6.00	40	3445-S-5.0	●	●	●
6.00	12.00	6.00	40	3445-S-6.0	●	●	●



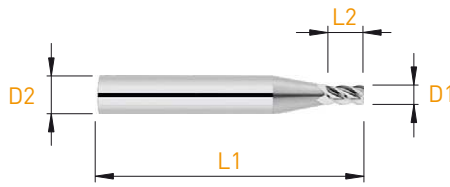
D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAIN	STF
1.00	1.50	6.00	50	3450-1.0	●	●	●
1.50	2.25	6.00	50	3450-1.5	●	●	●
2.00	3.00	6.00	50	3450-2.0	●	●	●
2.50	3.75	6.00	50	3450-2.5	●	●	●
3.00	4.50	6.00	50	3450-3.0	●	●	●
3.50	5.25	6.00	50	3450-3.5	●	●	●
4.00	6.00	6.00	50	3450-4.0	●	●	●
5.00	7.50	6.00	50	3450-5.0	●	●	●
6.00	9.00	6.00	50	3450-6.0	●	●	●

Fraises en bout de finition

Schlicht Schaftfräser

Finishing end mills

DHP3436



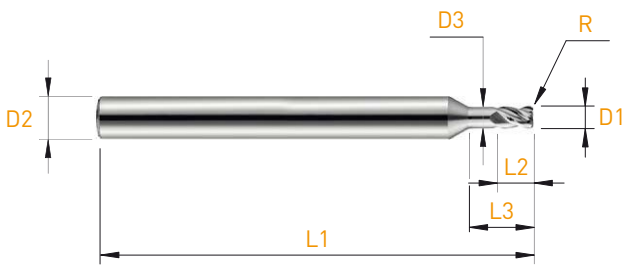
DHP

Denture à pas irrégulier, hélice progressive
 Ungleiche Teilung, progressive Spirale
 Uneven tooth pitch, progressive helix

D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
1.00	4.00	6.00	40	DHP3436-1.0	●	●	●
1.50	4.00	6.00	40	DHP3436-1.5	●	●	●
2.00	4.00	6.00	40	DHP3436-2.0	●	●	●
2.50	4.00	6.00	40	DHP3436-2.5	●	●	●
3.00	5.00	6.00	40	DHP3436-3.0	●	●	●
3.50	5.00	6.00	40	DHP3436-3.5	●	●	●
4.00	6.00	6.00	40	DHP3436-4.0	●	●	●
5.00	7.00	6.00	40	DHP3436-5.0	●	●	●
6.00	8.00	6.00	40	DHP3436-6.0	●	●	●

3439T-2.5X

Fraises en bout toriques
Torische Schaftfräser
Toric end mills



MD
VHM
HM

λ 30°

Radius
Corner



L3
2.5xD1

Z=4



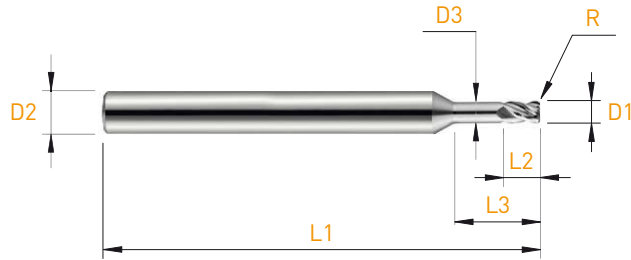
D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	Z	TiAIN	STF
3.00	0.50	3.00	7.50	2.95	6.00	57	3439T-2.5X-3.0	●	●	●
3.50	0.50	3.50	8.75	3.45	6.00	57	3439T-2.5X-3.5	●	●	●
4.00	0.50	4.00	10.00	3.95	6.00	57	3439T-2.5X-4.0	●	●	●
4.50	0.50	4.50	11.25	4.45	6.00	57	3439T-2.5X-4.5	●	●	●
5.00	0.50	5.00	12.50	4.95	6.00	57	3439T-2.5X-5.0	●	●	●
5.50	0.50	5.50	13.75	5.45	6.00	57	3439T-2.5X-5.5	●	●	●
6.00	0.50	6.00	15.00	5.95	6.00	57	3439T-2.5X-6.0	●	●	●

Fraises en bout toriques

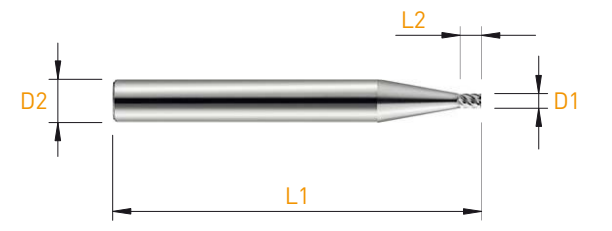
Torische Schaftfräser

Toric end mills

3439T-4X



D1 h10	R +/- 0.02	L2	L3	D3	D2 h5	L1	Art. N°	Z	TAIN	STF
3.00	0.50	3.00	12.00	2.95	6.00	57	3439T-4X-3.0	●	●	●
3.50	0.50	3.50	14.00	3.45	6.00	57	3439T-4X-3.5	●	●	●
4.00	0.50	4.00	16.00	3.95	6.00	57	3439T-4X-4.0	●	●	●
4.50	0.50	4.50	18.00	4.45	6.00	57	3439T-4X-4.5	●	●	●
5.00	0.50	5.00	20.00	4.95	6.00	57	3439T-4X-5.0	●	●	●
5.50	0.50	5.50	22.00	5.45	6.00	57	3439T-4X-5.5	●	●	●
6.00	0.50	6.00	24.00	5.95	6.00	57	3439T-4X-6.0	●	●	●



MD
VHM
HM

λ 45°

Sharp
Corner

1.5xD1

Z=5

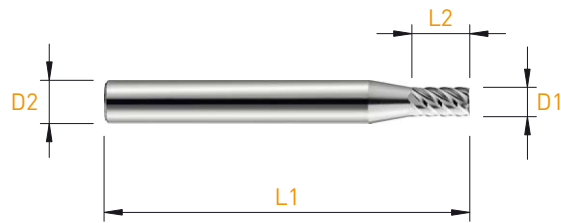
D1 h10	L2	D2 h5	L1	Art. N°	Z	TiAIN	STF
1.00	1.50	6.00	50	3545-1.0	●	●	●
2.00	3.00	6.00	50	3545-2.0	●	●	●
3.00	4.50	6.00	50	3545-3.0	●	●	●
4.00	6.00	6.00	50	3545-4.0	●	●	●
5.00	7.50	6.00	50	3545-5.0	●	●	●
6.00	9.00	6.00	50	3545-6.0	●	●	●

Fraises en bout de finition

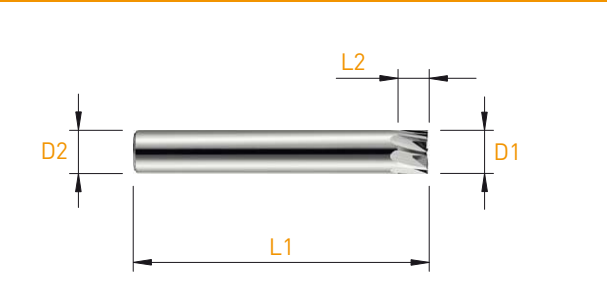
Schlicht Schaftfräser

Finishing end mills

35645



D1 h10	L2	Z	D2 h5	L1	Art. N°	Z	TiAIN	STF
1.00	2.00	4	6.00	50	35645-1.0	●	●	●
1.50	3.00	5	6.00	50	35645-1.5	●	●	●
2.00	4.00	5	6.00	50	35645-2.0	●	●	●
2.50	5.00	5	6.00	50	35645-2.5	●	●	●
3.00	6.00	5	6.00	50	35645-3.0	●	●	●
3.50	7.00	5	6.00	50	35645-3.5	●	●	●
4.00	8.00	6	6.00	50	35645-4.0	●	●	●
4.50	9.00	6	6.00	50	35645-4.5	●	●	●
5.00	10.00	6	6.00	50	35645-5.0	●	●	●
6.00	12.00	6	6.00	50	35645-6.0	●	●	●



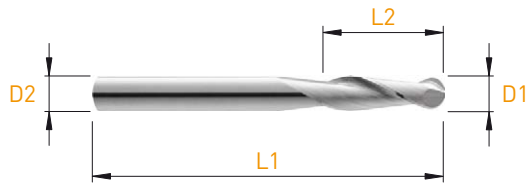
D1 _{e9}	L2	D2 _{h5}	L1	Art. N°	Z	TiAIN	STF
6.00	4.00	6.00	50	3810-0.65-6.0	●	●	●
6.00	6.00	6.00	57	3810-1.0-6.0	●	●	●
6.00	9.00	6.00	57	3810-1.5-6.0	●	●	●

Fraises en bout hémisphériques

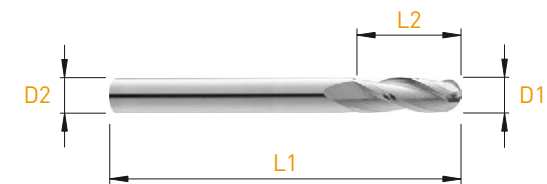
Vollradius Schaftfräser

Ball nose end mills

3238



D1 _{e9}	L2	D2 _{h5}	L1	Art. N°	Z	TiAIN	STF
2.00	8.00	2.00	32	3238-2.0	●	●	●
2.50	8.00	2.50	32	3238-2.5	●	●	●
3.00	12.00	3.00	32	3238-3.0	●	●	●
3.50	12.00	3.50	32	3238-3.5	●	●	●
4.00	12.00	4.00	40	3238-4.0	●	●	●
4.50	14.00	4.50	50	3238-4.5	●	●	●
5.00	14.00	5.00	50	3238-5.0	●	●	●
6.00	16.00	6.00	50	3238-6.0	●	●	●

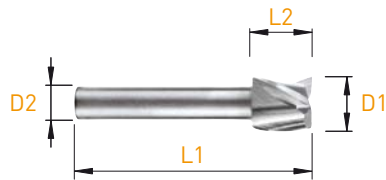


D1 e9	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
2.00	8.00	2.00	32	3338-2.0	●	●	●
2.50	8.00	2.50	32	3338-2.5	●	●	●
3.00	12.00	3.00	32	3338-3.0	●	●	●
3.50	12.00	3.50	32	3338-3.5	●	●	●
4.00	12.00	4.00	40	3338-4.0	●	●	●
4.50	14.00	4.50	50	3338-4.5	●	●	●
5.00	14.00	5.00	50	3338-5.0	●	●	●
6.00	16.00	6.00	50	3338-6.0	●	●	●

Fraises en bout pour usinage en bout plat

Schaftfräser für flache Frontbearbeitung

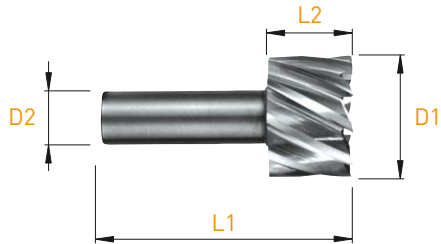
End mills for flat front machining

3383

D1 h_{10}	L2	D2 h_6	L1	Art. N°	z
8.00	8.00	6.00	40	3383-8.0	•
10.00	10.00	6.00	40	3383-10.0	•
12.00	12.00	6.00	40	3383-12.0	•

3831 / 3833

Fraises en bout avec queue réduite
Schaftfräser mit reduziertem Schaft
End mills with reduced shank



MD
VHM
HM

$\lambda\ 30^\circ$

Sharp
Corner

Z=10

D1 h10	L2	D2 h6	L1	Art. N°	z
16.30	15.00	10.00	45	3831	●
20.30	15.00	10.00	45	3833	●

Fraises à angler
Kegelsenker
Chamfering tools

3611

MD VHM HM	λ^{0°		Z=3	60°
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D1 +0.005 / -0.010	L2	D2 h4	L1	d	Art. N°	Z	TiAlN	STF
0.50	3.00	3.00	39	0.10	3611-0.5	●	●	●
0.60	3.00	3.00	39	0.10	3611-0.6	●	●	●
0.70	3.00	3.00	39	0.10	3611-0.7	●	●	●
0.80	3.00	3.00	39	0.10	3611-0.8	●	●	●
0.90	3.00	3.00	39	0.10	3611-0.9	●	●	●
1.00	3.00	3.00	39	0.10	3611-1.0	●	●	●
1.50	4.50	3.00	39	0.10	3611-1.5	●	●	●
2.00	6.00	3.00	39	0.10	3611-2.0	●	●	●
2.50	7.50	3.00	39	0.10	3611-2.5	●	●	●
3.00	-	3.00	39	0.10	3611-3.0	●	●	●

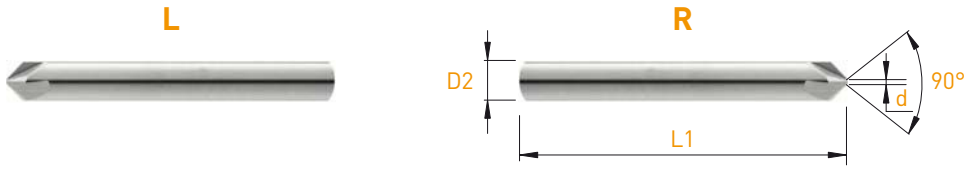


MD VHM HM	λ^{0°		Z=3	90°
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D1 +0.010 / -0.010	L2	D2 h4	L1	d	Art. N°	Z	TIALN	STF
0.30	2.00	3.00	39	0.05	3911-0.30	●	●	●
0.40	2.00	3.00	39	0.05	3911-0.40	●	●	●
0.50	3.00	3.00	39	0.10	3911-0.50	●	●	●
0.60	3.00	3.00	39	0.10	3911-0.60	●	●	●
0.70	3.00	3.00	39	0.10	3911-0.70	●	●	●
0.80	3.00	3.00	39	0.10	3911-0.80	●	●	●
0.90	3.00	3.00	39	0.10	3911-0.90	●	●	●
1.00	3.00	3.00	39	0.10	3911-1.00	●	●	●
1.10	3.00	3.00	39	0.10	3911-1.10	●	●	●
1.20	3.00	3.00	39	0.10	3911-1.20	●	●	●
1.30	3.00	3.00	39	0.10	3911-1.30	●	●	●
1.40	3.00	3.00	39	0.10	3911-1.40	●	●	●
1.50	4.50	3.00	39	0.10	3911-1.50	●	●	●
2.00	6.00	3.00	39	0.10	3911-2.00	●	●	●
2.50	7.50	3.00	39	0.10	3911-2.50	●	●	●
3.00	-	3.00	39	0.10	3911-3.00	●	●	●

Fraises à angler
Kegelsenker
Chamfering tools

1901 / 3901



MD VHM HM	λ^{0°		Z=4	90°	L	R
D2 Ø3 h4 Ø6 h5 Ø8 h6	d	L1	Art. N°	Z	Art. N°	Z TiAlN STF
3.00	0.30	39	1901-3.0	●	3901-3.0	● ● ●
6.00	0.70	50	1901-6.0	●	3901-6.0	● ● ●
8.00	1.20	59	1901-8.0	●	3901-8.0	● ● ●

Paramètres de coupe indicatifs						
Empfohlene Schnittwerte						
Standard machining data						
> 16.98						
Z	λ	D1	D2	Type	Corner	page
			Ø6 h4	701SE330-P		> 16.99
			Ø6 h4	701SE330-R		> 16.100
Z=1	0°	Ø0.50 -3.00	Ø6 h4	701S3170R-2		> 16.101
Z=2	0°	Ø0.30 -3.00	Ø6 h4	701S3279T-3X		> 16.102
Z=3		Ø0.30 - 3.50	Ø6 h5	701S3371-1		> 16.103
		Ø0.30 - 3.00	Ø6 h5	701S3371-2		> 16.104
		Ø0.30 - 2.50	Ø6 h5	701S3371-3		> 16.105
Z=3	30°	Ø1.00 -2.00	Ø6 h4	701S3379T-3X		> 16.106
Z=3	0°	Ø0.40 -2.00	Ø6 h4	701S3911		> 16.107



Tous les outils de la gamme MICRO-Line sont réalisables
pour la machine WM 701S sur demande.

Alle Werkzeuge aus der MICRO-Line sind machbar
für die Maschine WM 701S auf Anfrage.

All tools of MICRO-Line can be produced for
the machine WM 701S on request.

Fraises pour machine WM 701S

Werkzeuge für Maschine WM 701S

Executions for machine WM 701S

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Matière Werkstoff Material	VC (m/min)	N	TiAlN	STF	DLC
Acier de décolletage Automatenstahl P Free-cutting steel	120 - 180	-	***	***	-
Acier Stahl < 600 N/mm ² P Steel	100 - 150	-	***	***	-
Acier Stahl < 800 N/mm ² P Steel	100 - 130	-	***	***	-
Acier Stahl > 800 N/mm ² P Steel	80 - 100	-	***	***	-
Acier trempé Gehärteter Stahl -55HRC H Hardened steel	-	-	***	***	-
Acier trempé Gehärteter Stahl +55HRC H Hardened steel	-	-	***	***	-
Inox Rostfreistahl M Stainless steel	60 - 90	-	***	***	-
Aluminium N	250 - 400	**	***	***	***
Cuivre, laiton, bronze Kupfer, Messing, Bronze N Copper, brass, bronze	150 - 200	***	**	**	***
Matière synthétique Synthetisches Material N Synthetic material	100 - 150	***	**	**	***
Métaux précieux Edelmetalle N Precious metals	140 - 200	***	**	**	***
Titane Titan S Titanium	40 - 70	-	***	***	-
Alliage de nickel Nickel-Legierung S Nickel alloy	30 - 60	-	***	***	-
Matière exotique Exotisches material O Exotic material	30 - 60	-	***	***	***

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

* Bien / Gut / Good

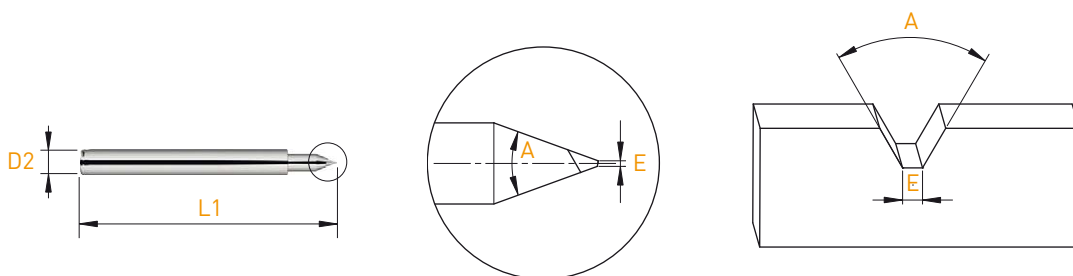
** Très bien / Sehr gut / Very good

*** Excellent / Ausgezeichnet / Excellent

Fraises à graver avec plat - WM 701S

Gravierfräser mit Fläche - WM 701S

Engraving mills with flat - WM 701S

701SE330-PMD
VHM
HM

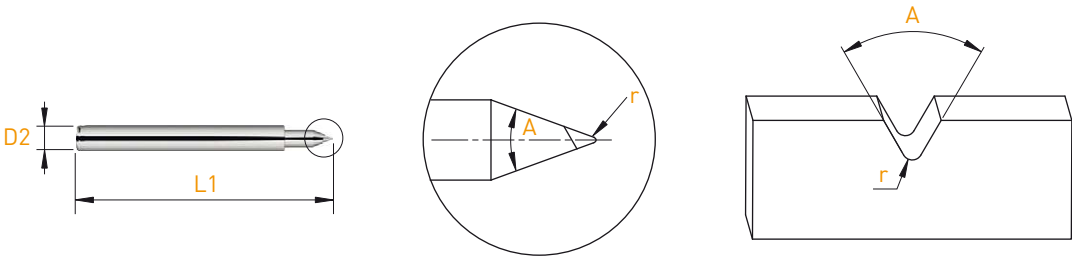
A	E	D2 h4	L1	Art. N°	Z	TiAlN	STF	DLC
30°	0.02-0.10* / 0.10-0.30**	6.00	33	701SE330-P-_(E)	●	●	●	●
35°	0.02-0.10* / 0.10-0.30**	6.00	33	701SE335-P-_(E)	●	●	●	●
40°	0.02-0.10* / 0.10-0.30**	6.00	33	701SE340-P-_(E)	●	●	●	●
50°	0.02-0.10* / 0.10-0.30**	6.00	33	701SE350-P-_(E)	●	●	●	●
60°	0.02-0.10* / 0.10-0.30**	6.00	33	701SE360-P-_(E)	●	●	●	●

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

701SE330-R

Fraises à graver à rayon - WM 701S
Gravierfräser mit Radius - WM 701S
Engraving mills with radius - WM 701S



MD
VHM
HM

A	r	D2 h4	L1	Art. N°	Z	TiAIN	STF	DLC
30°	0.04-0.10* / 0.10-0.30**	6.00	33	701SE330-R-_[r]	●	●	●	●
35°	0.04-0.10* / 0.10-0.30**	6.00	33	701SE335-R-_[r]	●	●	●	●
40°	0.04-0.10* / 0.10-0.30**	6.00	33	701SE340-R-_[r]	●	●	●	●
50°	0.04-0.10* / 0.10-0.30**	6.00	33	701SE350-R-_[r]	●	●	●	●
60°	0.04-0.10* / 0.10-0.30**	6.00	33	701SE360-R-_[r]	●	●	●	●

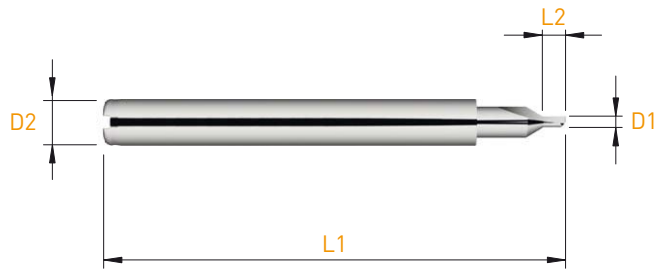
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises en bout - WM 701S

Schaftfräser - WM 701S

End mills - WM 701S

701S3170R-2

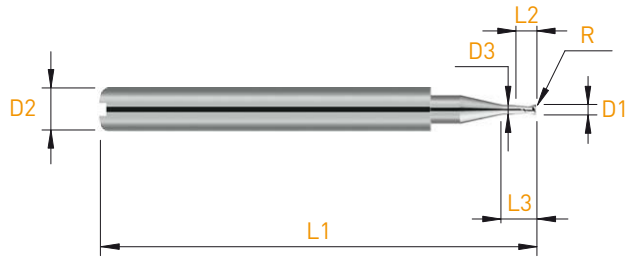
D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAIN	STF	DLC
0.50	1.00	6.00	33	701S3170R-2-0.50	•	•	•	•
1.00	2.00	6.00	33	701S3170R-2-1.00	•	•	•	•
1.50	3.00	6.00	33	701S3170R-2-1.50	•	•	•	•
2.00	4.00	6.00	33	701S3170R-2-2.00	•	•	•	•
2.50	5.00	6.00	33	701S3170R-2-2.50	•	•	•	•
3.00	6.00	6.00	33	701S3170R-2-3.00	•	•	•	•

701S3279T-3X

Fraises en bout toriques - WM 701S

Torische Schaftfräser - WM 701S

Toric end mills - WM 701S

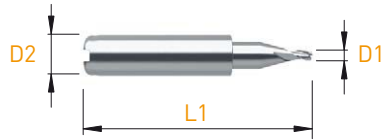


D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4	L1	Art. N°	Z	TiAlN	STF	DLC
0.30	0.05	0.30	0.90	0.27	6.00	33	701S3279T-3X-0.30	●	●	●	●
0.40	0.05	0.40	1.20	0.45	6.00	33	701S3279T-3X-0.40	●	●	●	●
0.50	0.05	0.50	1.50	0.45	6.00	33	701S3279T-3X-0.50	●	●	●	●
0.60	0.05	0.60	1.80	0.55	6.00	33	701S3279T-3X-0.60	●	●	●	●
0.80	0.05	0.80	2.40	0.75	6.00	33	701S3279T-3X-0.80	●	●	●	●
1.00	0.10	1.00	3.00	0.95	6.00	33	701S3279T-3X-1.00	●	●	●	●
1.20	0.10	1.20	3.60	1.15	6.00	33	701S3279T-3X-1.20	●	●	●	●
1.50	0.20	1.50	4.50	1.45	6.00	33	701S3279T-3X-1.50	●	●	●	●
1.80	0.20	1.80	5.40	1.75	6.00	33	701S3279T-3X-1.80	●	●	●	●
2.00	0.20	2.00	6.00	1.95	6.00	33	701S3279T-3X-2.00	●	●	●	●
2.50	0.20	2.50	7.50	2.45	6.00	33	701S3279T-3X-2.50	●	●	●	●
3.00	0.20	3.00	9.00	2.95	6.00	33	701S3279T-3X-3.00	●	●	●	●

Fraises en bout - WM 701S

Schaftfräser - WM 701S

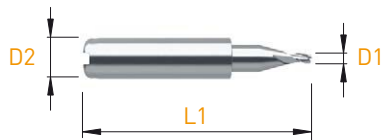
End mills - WM 701S

701S3371-1

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.30	6.00	33	701S3371-1-0.30	●	●	●	●	●
0.40	0.40	6.00	33	701S3371-1-0.40	●	●	●	●	●
0.50	0.50	6.00	33	701S3371-1-0.50	●	●	●	●	●
0.60	0.60	6.00	33	701S3371-1-0.60	●	●	●	●	●
0.80	0.80	6.00	33	701S3371-1-0.80	●	●	●	●	●
1.00	1.00	6.00	33	701S3371-1-1.00	●	●	●	●	●
1.20	1.20	6.00	33	701S3371-1-1.20	●	●	●	●	●
1.50	1.50	6.00	33	701S3371-1-1.50	●	●	●	●	●
1.80	1.80	6.00	33	701S3371-1-1.80	●	●	●	●	●
2.00	2.00	6.00	33	701S3371-1-2.00	●	●	●	●	●
2.50	2.50	6.00	33	701S3371-1-2.50	●	●	●	●	●
3.00	3.00	6.00	33	701S3371-1-3.00	●	●	●	●	●
3.20	3.20	6.00	33	701S3371-1-3.20	●	●	●	●	●

701S3371-2

Fraises en bout - WM 701S
Schaftfräser - WM 701S
End mills - WM 701S



MD
VHM
HM

λ 36°
↓
38°

Sharp
Corner

2xD1

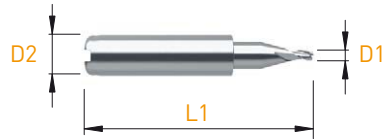
Z=3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.60	6.00	33	701S3371-2-0.30	●	●	●	●	●
0.40	0.80	6.00	33	701S3371-2-0.40	●	●	●	●	●
0.50	1.00	6.00	33	701S3371-2-0.50	●	●	●	●	●
0.60	1.20	6.00	33	701S3371-2-0.60	●	●	●	●	●
0.80	1.60	6.00	33	701S3371-2-0.80	●	●	●	●	●
1.00	2.00	6.00	33	701S3371-2-1.00	●	●	●	●	●
1.20	2.40	6.00	33	701S3371-2-1.20	●	●	●	●	●
1.50	3.00	6.00	33	701S3371-2-1.50	●	●	●	●	●
1.80	3.60	6.00	33	701S3371-2-1.80	●	●	●	●	●
2.00	4.00	6.00	33	701S3371-2-2.00	●	●	●	●	●
2.50	5.00	6.00	33	701S3371-2-2.50	●	●	●	●	●
3.00	6.00	6.00	33	701S3371-2-3.00	●	●	●	●	●

Fraises en bout - WM 701S

Schaftfräser - WM 701S

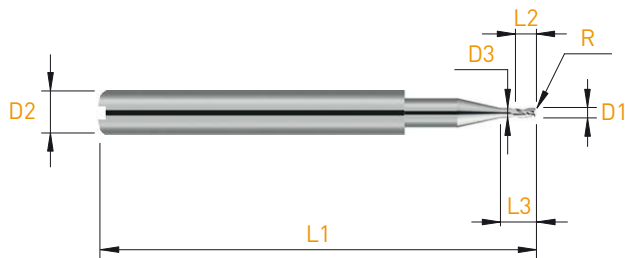
End mills - WM 701S

701S3371-3

D1 +0.005 / -0.010	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
0.30	0.90	6.00	33	701S3371-3-0.30	●	●	●	●	●
0.40	1.20	6.00	33	701S3371-3-0.40	●	●	●	●	●
0.50	1.50	6.00	33	701S3371-3-0.50	●	●	●	●	●
0.60	1.80	6.00	33	701S3371-3-0.60	●	●	●	●	●
0.80	2.40	6.00	33	701S3371-3-0.80	●	●	●	●	●
1.00	3.00	6.00	33	701S3371-3-1.00	●	●	●	●	●
1.20	3.60	6.00	33	701S3371-3-1.20	●	●	●	●	●
1.50	4.50	6.00	33	701S3371-3-1.50	●	●	●	●	●
1.80	5.40	6.00	33	701S3371-3-1.80	●	●	●	●	●
2.00	6.00	6.00	33	701S3371-3-2.00	●	●	●	●	●
2.50	7.50	6.00	33	701S3371-3-2.50	●	●	●	●	●

701S3379T-3X

Fraises en bout toriques - WM 701S
Torische Schaftfräser - WM 701S
Toric end mills - WM 701S



D1 +0.005 / -0.010	R +/- 0.02	L2	L3	D3	D2 h4	L1	Art. N°	Z	TiAIN	STF	DLC
1.00	0.10	2.00	3.00	0.95	6.00	33	701S3379T-3X-1.00	●	●	●	●
1.50	0.20	3.00	4.50	1.45	6.00	33	701S3379T-3X-1.50	●	●	●	●
2.00	0.20	4.00	6.00	1.95	6.00	33	701S3379T-3X-2.00	●	●	●	●

Fraises à angler - WM 701S

Kegelsenker - WM 701S

Chamfering tools - WM 701S

701S3911

MD VHM HM	λ^{0°		Z=3	90°
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D1 +0.010 / -0.010	L2	D2 h4	L1	d +/- 0.02	Art. N°	Z	TiAlN	STF	DLC
0.40	2.00	6.00	33	0.05	701S3911-0.40	●	●	●	●
0.50	2.50	6.00	33	0.05	701S3911-0.50	●	●	●	●
0.60	2.50	6.00	33	0.05	701S3911-0.60	●	●	●	●
1.00	3.00	6.00	33	0.05	701S3911-1.00	●	●	●	●
1.50	4.50	6.00	33	0.05	701S3911-1.50	●	●	●	●
2.00	4.50	6.00	33	0.05	701S3911-2.00	●	●	●	●

Paramètres de coupe indicatifs				
Empfohlene Schnittwerte			> 16.109	
Standard machining data				
A	Plat [E] / Rayon [r] Fläche [E] / Radius [r] Flat [E] / Radius [r]	D2	Type	Page
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90° / 120°	0.05-0.30 0.05-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4 Ø6 h5	E100-P	> 16.110
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.02-0.30 0.02-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4	E300-P	> 16.111
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4	E300-R	> 16.112
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4	E900-P	> 16.113
20° / 30° / 35° / 40° 45° / 50° / 55° / 60° 65° / 70° / 90°	0.04-0.30 0.04-0.10 / every 0.01 0.10-0.30 / every 0.05	Ø3 h4	E900-R	> 16.114

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Fraises à graver

Gravierfräser

Engraving mills

Matière Werkstoff Material		n	Vf	N	TiAlN	STF	TiCN	DLC
		(tr/min)	(mm/min)					
Acier de décolletage Automatenstahl Free-cutting steel	P	20 - 50'000	100 - 180	-	***	***	**	-
Acier Stahl Steel	< 600 N/mm ² P	20 - 50'000	100 - 180	-	***	***	**	-
Acier Stahl Steel	< 800 N/mm ² P	20 - 50'000	100 - 180	-	***	***	**	-
Acier Stahl Steel	> 800 N/mm ² P	20 - 50'000	100 - 150	-	***	***	**	-
Acier trempé Gehärteter Stahl Hardened steel	-55HRC H	20 - 50'000	-	-	***	***	*	-
Acier trempé Gehärteter Stahl Hardened steel	+55HRC H	20 - 50'00	-	-	***	***	*	-
Inox Rostfreistahl Stainless steel	M	20 - 50'000	100 - 170	-	***	***	**	-
Aluminium	N	20 - 50'000	100 - 250	***	**	**	*	***
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	20 - 50'000	70 - 150	***	**	**	**	***
Matière synthétique Synthetisches Material Synthetic material	N	20 - 50'000	100 - 200	***	**	**	**	***
Métaux précieux Edelmetalle Precious metals	N	20 - 50'000	100 - 200	***	**	**	**	***
Titane Titan Titanium	S	20 - 50'000	70 - 150	-	***	***	**	-
Alliage de nickel Nickel-Legierung Nickel alloy	S	20 - 50'000	80 - 180	-	***	***	**	-
Matière exotique Exotisches material Exotic material	O	20 - 50'000	80 - 180	*	***	***	**	***

Avec revêtement, augmenter les valeurs de 20-30%

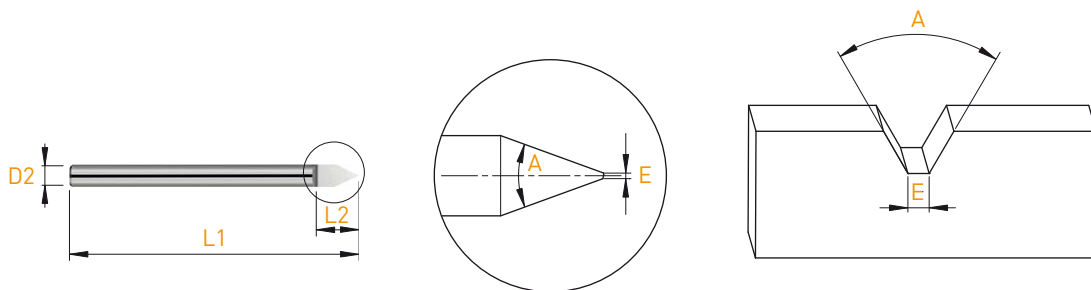
Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

* Bien / Gut / Good

** Très bien / Sehr gut / Very good

*** Excellent / Ausgezeichnet / Excellent



MD
VHM
HM

A	E	L2	D2 h4 Ø3.0 h5 Ø6.0	L1	Art. N°	Z	TiAIN	STF	TiCN	DLC
20°	0.05-0.10* / 0.10-0.30 **	5.20	3.00	33	E120-P-_(E)	●	●	●	●	●
30°	0.05-0.10* / 0.10-0.30 **	5.20	3.00	33	E130-P-_(E)	●	●	●	●	●
35°	0.05-0.10* / 0.10-0.30 **	5.20	3.00	33	E135P-_(E)	●	●	●	●	●
40°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	E140-P-_(E)	●	●	●	●	●
45°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	E145-P-_(E)	●	●	●	●	●
50°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	E150-P-_(E)	●	●	●	●	●
55°	0.05-0.10* / 0.10-0.30 **	6.00	3.00	33	E155-P-_(E)	●	●	●	●	●
60°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	E160-P-_(E)	●	●	●	●	●
65°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	E165-P-_(E)	●	●	●	●	●
70°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	E170-P-_(E)	●	●	●	●	●
90°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	E190-P-_(E)	●	●	●	●	●
120°	0.05-0.10* / 0.10-0.30 **	8.00	3.00	33	E1120-P-_(E)	●	●	●	●	●
30°	0.05-0.10* / 0.10-0.30 **	12.00	6.00	40	E130-6-P-_(E)	●	●	●	●	●
40°	0.05-0.10* / 0.10-0.30 **	12.00	6.00	40	E140-6-P-_(E)	●	●	●	●	●

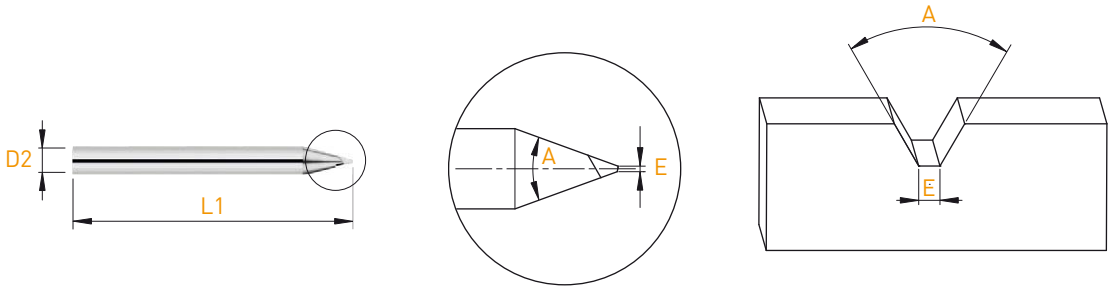
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises à graver avec plat

Gravierfräser mit Fläche

Engraving mills with flat

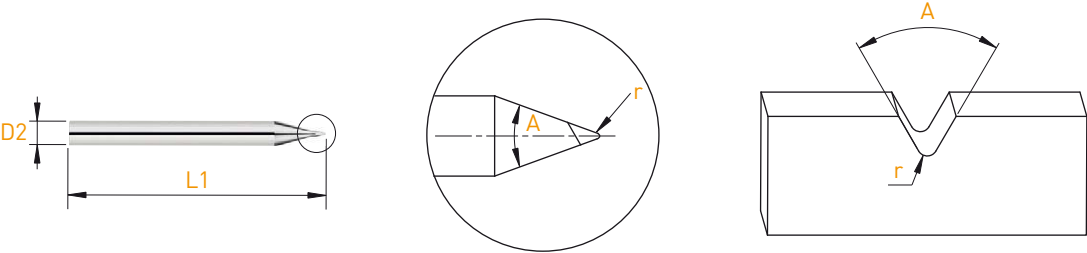
E300-P
MD
VHM
HM

A	E	D2 _{h4}	L1	Art. N°	N	TiAlN	STF	TiCN	DLC
20°	0.02-0.10* / 0.10-0.30**	3.00	33	E320-P-_(E)	●	●	●	●	●
30°	0.02-0.10* / 0.10-0.30**	3.00	33	E330-P-_(E)	●	●	●	●	●
35°	0.02-0.10* / 0.10-0.30**	3.00	33	E335-P-_(E)	●	●	●	●	●
40°	0.02-0.10* / 0.10-0.30**	3.00	33	E340-P-_(E)	●	●	●	●	●
45°	0.02-0.10* / 0.10-0.30**	3.00	33	E345-P-_(E)	●	●	●	●	●
50°	0.02-0.10* / 0.10-0.30**	3.00	33	E350-P-_(E)	●	●	●	●	●
55°	0.02-0.10* / 0.10-0.30**	3.00	33	E355-P-_(E)	●	●	●	●	●
60°	0.02-0.10* / 0.10-0.30**	3.00	33	E360-P-_(E)	●	●	●	●	●
65°	0.02-0.10* / 0.10-0.30**	3.00	33	E365-P-_(E)	●	●	●	●	●
70°	0.02-0.10* / 0.10-0.30**	3.00	33	E370-P-_(E)	●	●	●	●	●
90°	0.02-0.10* / 0.10-0.30**	3.00	33	E390-P-_(E)	●	●	●	●	●

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

E300-R



MD
VHM
HM

A	r	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
20°	0.04-0.10* / 0.10-0.30**	3.00	33	E320-R-_(r)	●	●	●	●	●
30°	0.04-0.10* / 0.10-0.30**	3.00	33	E330-R-_(r)	●	●	●	●	●
35°	0.04-0.10* / 0.10-0.30**	3.00	33	E335-R-_(r)	●	●	●	●	●
40°	0.04-0.10* / 0.10-0.30**	3.00	33	E340-R-_(r)	●	●	●	●	●
45°	0.04-0.10* / 0.10-0.30**	3.00	33	E345-R-_(r)	●	●	●	●	●
50°	0.04-0.10* / 0.10-0.30**	3.00	33	E350-R-_(r)	●	●	●	●	●
55°	0.04-0.10* / 0.10-0.30**	3.00	33	E355-R-_(r)	●	●	●	●	●
60°	0.04-0.10* / 0.10-0.30**	3.00	33	E360-R-_(r)	●	●	●	●	●
65°	0.04-0.10* / 0.10-0.30**	3.00	33	E365-R-_(r)	●	●	●	●	●
70°	0.04-0.10* / 0.10-0.30**	3.00	33	E370-R-_(r)	●	●	●	●	●
90°	0.04-0.10* / 0.10-0.30**	3.00	33	E390-R-_(r)	●	●	●	●	●

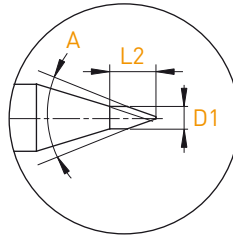
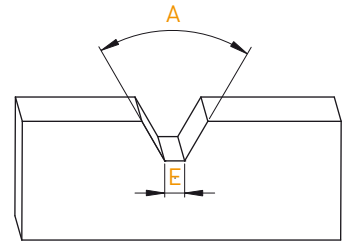
* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Fraises à graver renforcées

Verstärkte Gravierfräser

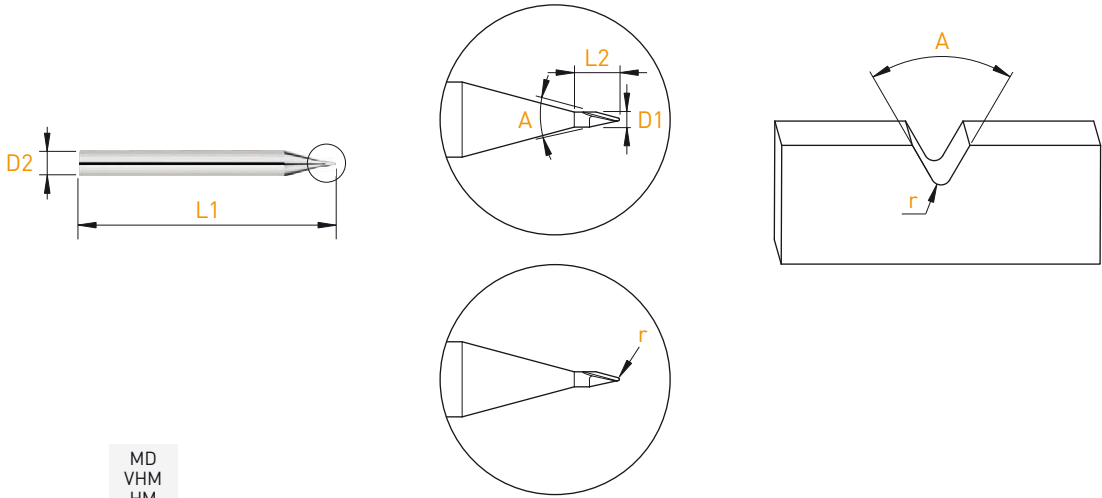
Reinforced engraving mills

E900-PMD
VHM
HM

A	E	D1	L2	D2 h4	L1	Art. N°	Z	TiAlN	STF	TiCN	DLC
20°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	E920-P-_(E)	●	●	●	●	●
30°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	E930-P-_(E)	●	●	●	●	●
35°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	E935-P-_(E)	●	●	●	●	●
40°	0.04-0.10* / 0.10-0.30**	0.60	1.80	3.00	33	E940-P-_(E)	●	●	●	●	●
45°	0.04-0.10* / 0.10-0.30**	1.00	1.80	3.00	33	E945-P-_(E)	●	●	●	●	●
50°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	E950-P-_(E)	●	●	●	●	●
55°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	E955-P-_(E)	●	●	●	●	●
60°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	E960-P-_(E)	●	●	●	●	●
65°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	E965-P-_(E)	●	●	●	●	●
70°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	E970-P-_(E)	●	●	●	●	●
90°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	E990-P-_(E)	●	●	●	●	●

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm



MD
VHM
HM

A	r	D1	L2	D2 h4	L1	Art. N°	z	TiAlN	STF	TiCN	DLC
20°	0.04-0.10* / 0.10-0.20**	0.60	1.80	3.00	33	E920-R_(E)	●	●	●	●	●
30°	0.04-0.10* / 0.10-0.20**	0.60	1.80	3.00	33	E930-R_(E)	●	●	●	●	●
35°	0.04-0.10* / 0.10-0.20**	0.60	1.80	3.00	33	E935-R_(E)	●	●	●	●	●
40°	0.04-0.10* / 0.10-0.20**	0.60	1.80	3.00	33	E940-R_(E)	●	●	●	●	●
45°	0.04-0.10* / 0.10-0.30**	1.00	1.80	3.00	33	E945-R_(E)	●	●	●	●	●
50°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	E950-R_(E)	●	●	●	●	●
55°	0.04-0.10* / 0.10-0.30**	1.00	2.00	3.00	33	E955-R_(E)	●	●	●	●	●
60°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	E960-R_(E)	●	●	●	●	●
65°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	E965-R_(E)	●	●	●	●	●
70°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	E970-R_(E)	●	●	●	●	●
90°	0.04-0.10* / 0.10-0.30**	1.20	2.00	3.00	33	E990-R_(E)	●	●	●	●	●

* tous les 0.01 mm
alle 0.01 mm
every 0.01 mm

** tous les 0.05 mm
alle 0.05 mm
every 0.05 mm

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

> 16.116

Standard machining data

Micro-forets et forets à centrer

Mikrobohrer und Zentrierbohrer

Micro drills and centering drills

Point angle	λ	L2	D1	D2	Type	Page
60°	25°	Div.	Ø 2.00 - 6.00	D1 = D2	2680-60	> 16.118
90°	25°	Div.	Ø 0.50 - 20.00	Ø 2.0 - 20.0 h5	2680-90	> 16.119
90°	25°	Div.	Ø 2.00 - 16.00	D1 = D2	1680-90	> 16.119
120°	25°	Div.	Ø 0.50 - 20.00	Ø 2.0 - 20.0 h5	2680-120	> 16.120
120°	25°	Div.	Ø 2.00 - 12.00	D1 = D2	1680-120	> 16.120

Micro-forets de préperçage

Mikro Pilotbohrer

Micro pilot drill

Z	Point angle	λ	L2	D1	D2	Type	Page
Z2	90°	25° - 32°	Div.	Ø 0.50 - 3.00	Ø2 h5 Ø3 h4	2690	> 16.121
Z2	130°	30°	~ 2 x D1	Ø 0.10 - 2.00	Ø3 h6	2020	> 16.126

Micro-forets avec affûtage à facettes

Mikrobohrer mit Facettenschliff

Micro drills with faceted drill point

Z	Point angle	λ	L2	D1	D2	Type	Page
Z2	118°	25°	~ 5-10 x D1	Ø 0.50 - 6.00	D1 = D2	1010	> 16.122
Z2	118°	25°/35°	~ 5-10 x D1	Ø 0.50 - 6.00	D1 = D2	2010	> 16.123
Z2	120°	30°	~ 2 x D1	Ø 0.80 - 2.00	Ø2 h6	2011	> 16.124
Z2	120°	24°	~ 3 x D1	Ø 0.50 - 2.40	Ø1.5 - 3.0 h6	2012	> 16.124
Z2	120°	35°	~ 8 x D1	Ø 0.40 - 1.90	Ø1.0 - 2.0 h6	2013	> 16.125
Z2	120°	30°	~ 12 x D1	Ø 0.50 - 1.95	Ø1.5 - 2.0 h6	2014	> 16.125
Z2	130°	35°	6 x D1	Ø 0.10 - 3.00	Ø3 h6	2023	> 16.128
Z2	130°	35°	12 x D1	Ø 0.20 - 2.00	Ø3 h6	2026	> 16.131
Z3	140°	35°	5 x D1	Ø 0.20 - 2.99	Ø3 h6	2030	> 16.133

Forets à centrer

Zentrierbohrer

Centering drills

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Matière Werkstoff Material	VC	f	Z	TAIN	STF
	{m/min}	{mm}			
Acier de décolletage Automatenstahl Free-cutting steel (P)	60	D1/55	★★	★★★	★★★
Acier Stahl Steel < 600 N/mm² (P)	55	D1/55	★★	★★★	★★★
Acier Stahl Steel < 800 N/mm² (P)	55	D1/55	★★	★★★	★★★
Acier Stahl Steel > 800 N/mm² (P)	55	D1/55	★★	★★★	★★★
Acier trempé Gehärteter Stahl -55HRC (H)	10	D1/100	-	★★★	★★★
Acier trempé Gehärteter Stahl +55HRC (H)	-	-	-	-	-
Inox Rostfreistahl Stainless steel (M)	30	D1/85	★★	★★★	★★★
Aluminium (N)	100 - 180	D1/50	★★★	★★	★★
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze (N)	60 - 90	D1/60	★★★	★★	★★
Matière synthétique Synthetisches Material Synthetic material (N)	350 - 700	D1/60	★★★	★★	★★
Métaux précieux Edelmetalle Precious metals (N)	50 - 80	D1/100	★★★	★★	★★
Titane Titan Titanium (S)	30	D1/115	★★	★★★	★★★
Alliage de nickel Nickel-Legierung Nickel alloy (S)	15 - 20	D1/120	★★	★★★	★★★
Matière exotique Exotisches material Exotic material (O)	10	D1/100	★★	★★★	★★★

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%

★ Bien / Gut / Good

★★ Très bien / Sehr gut / Very good

★★★ Excellent / Ausgezeichnet / Excellent

Paramètres de coupe indicatifs

Empfohlene Schnittwerte

Standard machining data

Forets

Bohrer

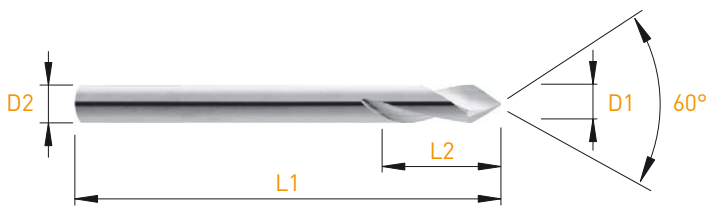
Drills

Matière Werkstoff Material		VC	f	Débouillage Entspannvorgang Pecking
		[m/min]	[mm]	
Acier de décolletage Automatenstahl Free-cutting steel	(P)	60 - 90	D1/70	1.5xØ
Acier Stahl Steel	< 600 N/mm ² (P)	50 - 80	D1/70	1.5xØ
Acier Stahl Steel	< 800 N/mm ² (P)	50 - 80	D1/70	1.5xØ
Acier Stahl Steel	> 800 N/mm ² (P)	50 - 80	D1/70	1.5xØ
Acier trempé Gehärteter Stahl Hardened steel	-55HRC (H)	-	-	-
Acier trempé Gehärteter Stahl Hardened steel	+55HRC (H)	-	-	-
Inox Rostfreistahl Stainless steel	(M)	20 - 30	D1/70	3xØ
Aluminium	(N)	100 - 180	D1/40	2xØ
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	(N)	50 - 85	D1/120	1xØ
Matière synthétique Synthetisches Material Synthetic material	(N)	350 - 750	D1/40	2xØ
Métaux précieux Edelmetalle Precious metals	(N)	60 - 90	D1/100	0.85xØ
Titane Titan Titanium	(S)	20 - 40	D1/120	1.3xØ
Alliage de nickel Nickel-Legierung Nickel alloy	(S)	20	D1/120	1xØ
Matière exotique Exotisches material Exotic material	(O)	5 - 10	D1/100	1xØ

Avec revêtement, augmenter les valeurs de 20-30%

Mit Beschichtung, Daten um 20-30% erhöhen

With coating, increase data by 20-30%



MD VHM HM	λ 25°	60°
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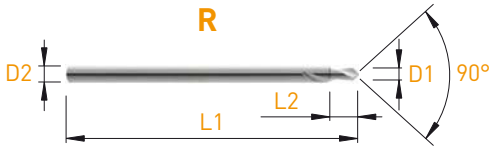
D1 h6	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
2.00	8.00	2.00	39	2680-2.00-60	●	●	●
3.00	10.00	3.00	39	2680-3.00-60	●	●	●
4.00	12.00	4.00	50	2680-4.00-60	●	●	●
5.00	14.00	5.00	50	2680-5.00-60	●	●	●
6.00	16.00	6.00	50	2680-6.00-60	●	●	●

Forets à centrer

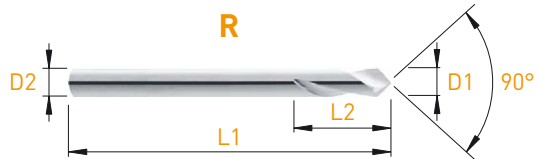
Zentrierbohrer

Centering drills

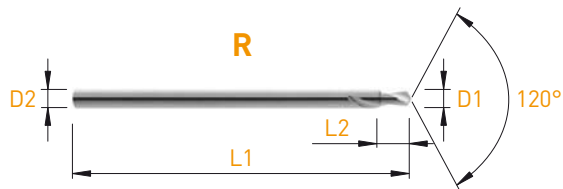
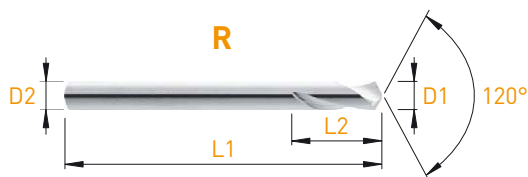
1680-90° / 2680-90°



MD VHM HM	λ	25°	90°	R	
D1 h6	L2	D2 h5	L1	Art. N°	z
0.50	1.50	2.00	39	2680-0.50-90	●
0.60	1.50	2.00	39	2680-0.60-90	●
0.70	1.50	2.00	39	2680-0.70-90	●
0.80	1.50	2.00	39	2680-0.80-90	●
0.90	1.50	2.00	39	2680-0.90-90	●
1.00	3.00	2.00	39	2680-1.00-90	●
1.10	3.00	2.00	39	2680-1.10-90	●
1.20	3.00	2.00	39	2680-1.20-90	●
1.30	3.00	2.00	39	2680-1.30-90	●
1.40	3.00	2.00	39	2680-1.40-90	●
1.50	4.00	2.00	39	2680-1.50-90	●
1.60	4.00	2.00	39	2680-1.60-90	●
1.70	4.00	2.00	39	2680-1.70-90	●
1.80	4.00	2.00	39	2680-1.80-90	●
1.90	4.00	2.00	39	2680-1.90-90	●



MD VHM HM	λ	25°	90°	L		R				HSS	R	
D1 h6	L2	D2 h5	L1	Art. N°	z	Art. N°	z	TiAIN	STF		Art. N°	z
2.00	8.00	2.00	39	1680-2.00-90	●	2680-2.00-90	●	●	●		-	
2.50	8.00	2.50	39	1680-2.50-90	●	2680-2.50-90	●	●	●		-	
3.00	10.00	3.00	39	1680-3.00-90	●	2680-3.00-90	●	●	●		2680-3.00-90-HSS	●
4.00	12.00	4.00	50	1680-4.00-90	●	2680-4.00-90	●	●	●		2680-4.00-90-HSS	●
5.00	15.00	5.00	50	1680-5.00-90	●	2680-5.00-90	●	●	●		2680-5.00-90-HSS	●
6.00	16.00	6.00	57	1680-6.00-90	●	2680-6.00-90	●	●	●		2680-6.00-90-HSS	●
8.00	20.00	8.00	63	1680-8.00-90	●	2680-8.00-90	●				2680-8.00-90-HSS	●
10.00	22.00	10.00	72	1680-10.00-90	●	2680-10.00-90	●				2680-10.00-90-HSS	●
12.00	24.00	12.00	73	1680-12.00-90	●	2680-12.00-90	●				2680-12.00-90-HSS	●
16.00	26.00	16.00	82	1680-16.00-90	●	2680-16.00-90	●				-	
20.00	30.00	20.00	92	-		2680-20.00-90	●				-	



MD VHM HM	λ 25°	120°	R		
D1 h6	L2	D2 h5	L1	Art. N°	z
0.50	1.50	2.00	39	2680-0.50-120	●
0.60	1.50	2.00	39	2680-0.60-120	●
0.70	1.50	2.00	39	2680-0.70-120	●
0.80	1.50	2.00	39	2680-0.80-120	●
0.90	1.50	2.00	39	2680-0.90-120	●
1.00	3.00	2.00	39	2680-1.00-120	●
1.10	3.00	2.00	39	2680-1.10-120	●
1.20	3.00	2.00	39	2680-1.20-120	●
1.30	3.00	2.00	39	2680-1.30-120	●
1.40	3.00	2.00	39	2680-1.40-120	●
1.50	4.00	2.00	39	2680-1.50-120	●
1.60	4.00	2.00	39	2680-1.60-120	●
1.70	4.00	2.00	39	2680-1.70-120	●
1.80	4.00	2.00	39	2680-1.80-120	●
1.90	4.00	2.00	39	2680-1.90-120	●

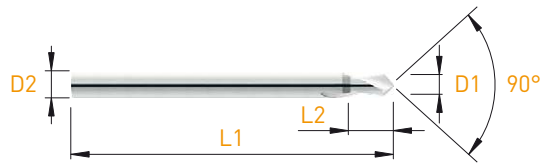
MD VHM HM	$\lambda^{25^{\circ}}$	120°							
			L		R				
D1 h6	L2	D2 h5	L1	Art. N°	z	Art. N°	z	TiAIN	STF
2.00	8.00	2.00	39	1680-2.00-120	●	2680-2.00-120	●	●	●
2.50	8.00	2.50	39	1680-2.50-120	●	2680-2.50-120	●	●	●
3.00	10.00	3.00	39	1680-3.00-120	●	2680-3.00-120	●	●	●
4.00	12.00	4.00	50	1680-4.00-120	●	2680-4.00-120	●	●	●
5.00	15.00	5.00	50	1680-5.00-120	●	2680-5.00-120	●	●	●
6.00	16.00	6.00	57	1680-6.00-120	●	2680-6.00-120	●	●	●
8.00	20.00	8.00	63	1680-8.00-120	●	2680-8.00-120	●		
10.00	22.00	10.00	72	1680-10.00-120	●	2680-10.00-120	●		
12.00	24.00	12.00	73	1680-12.00-120	●	2680-12.00-120	●		
16.00	26.00	16.00	82	-		2680-16.00-120	●		
20.00	30.00	20.00	92	-		2680-20.00-120	●		

Micro-forets de préperçage

Mikro Pilotbohrer

Micro pilot drills

2690

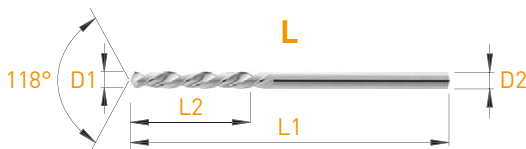


MD	λ 32°	*	λ 25°	90°
VHM				
HM				

D1 h5	L2	D2 h5	L1	Art. N°	Z	TiAlN	STF
0.50*	2.50	2.00	39	2690-0.50	●		
0.60*	2.50	2.00	39	2690-0.60	●		
0.70*	2.50	2.00	39	2690-0.70	●		
0.80*	2.50	2.00	39	2690-0.80	●		
0.90*	2.50	2.00	39	2690-0.90	●		
1.00	3.00	2.00	39	2690-1.00	●		
1.10	3.00	2.00	39	2690-1.10	●		
1.20	3.00	2.00	39	2690-1.20	●		
1.30	3.00	2.00	39	2690-1.30	●		
1.40	3.00	2.00	39	2690-1.40	●		
1.50	3.50	2.00	39	2690-1.50	●		
1.60	3.50	2.00	39	2690-1.60	●		
1.70	3.50	2.00	39	2690-1.70	●		
1.80	3.50	2.00	39	2690-1.80	●		
1.90	3.50	2.00	39	2690-1.90	●		
2.00	-	2.00	39	2690-2.00	●	●	●
2.10	4.00	3.00	39	2690-2.10	●	●	●
2.20	4.00	3.00	39	2690-2.20	●	●	●
2.30	4.00	3.00	39	2690-2.30	●	●	●
2.40	4.00	3.00	39	2690-2.40	●	●	●
2.50	4.00	3.00	39	2690-2.50	●	●	●
2.60	4.00	3.00	39	2690-2.60	●	●	●
2.70	4.00	3.00	39	2690-2.70	●	●	●
2.80	4.00	3.00	39	2690-2.80	●	●	●
2.90	4.00	3.00	39	2690-2.90	●	●	●
3.00	-	3.00	50	2690-3.00	●	●	●

Coupe à gauche
Linksschneidend
Left hand cut

Forets cylindriques
Zylindrische Bohrer
Cylindrical drills



MD
VHM
HM

$\lambda 25^\circ$

Z=2

118°



L

L

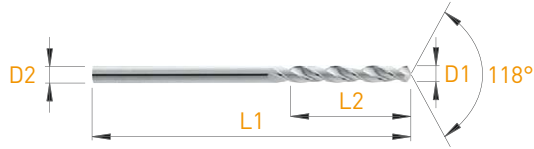
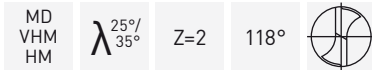
D1 h6 D2 h6	L1	L2	Art. N°	z	D1 h6 D2 h6	L1	L2	Art. N°	z
0.50	30	5.00	1010-0.50	●	2.55	45	18.00	1010-2.55	●
0.55	30	5.00	1010-0.55	●	2.60	45	18.00	1010-2.60	●
0.60	30	5.00	1010-0.60	●	2.65	45	18.00	1010-2.65	●
0.65	30	6.00	1010-0.65	●	2.70	45	18.00	1010-2.70	●
0.70	30	6.00	1010-0.70	●	2.75	45	18.00	1010-2.75	●
0.75	30	8.00	1010-0.75	●	2.80	45	18.00	1010-2.80	●
0.80	30	8.00	1010-0.80	●	2.85	45	18.00	1010-2.85	●
0.85	30	9.00	1010-0.85	●	2.90	45	18.00	1010-2.90	●
0.90	30	9.00	1010-0.90	●	2.95	45	18.00	1010-2.95	●
0.95	30	10.00	1010-0.95	●	3.00	45	18.00	1010-3.00	●
1.00	30	10.00	1010-1.00	●	3.10	50	20.00	1010-3.10	●
1.05	30	10.00	1010-1.05	●	3.20	50	20.00	1010-3.20	●
1.10	30	10.00	1010-1.10	●	3.30	50	20.00	1010-3.30	●
1.15	30	12.00	1010-1.15	●	3.40	50	20.00	1010-3.40	●
1.20	30	12.00	1010-1.20	●	3.50	50	20.00	1010-3.50	●
1.25	30	12.00	1010-1.25	●	3.60	50	20.00	1010-3.60	●
1.30	30	12.00	1010-1.30	●	3.70	50	20.00	1010-3.70	●
1.35	30	12.00	1010-1.35	●	3.80	50	20.00	1010-3.80	●
1.40	30	12.00	1010-1.40	●	3.90	50	20.00	1010-3.90	●
1.45	30	12.00	1010-1.45	●	4.00	50	20.00	1010-4.00	●
1.50	30	12.00	1010-1.50	●	4.10	50	25.00	1010-4.10	●
1.55	40	16.00	1010-1.55	●	4.20	50	25.00	1010-4.20	●
1.60	40	16.00	1010-1.60	●	4.30	50	25.00	1010-4.30	●
1.65	40	16.00	1010-1.65	●	4.40	50	25.00	1010-4.40	●
1.70	40	16.00	1010-1.70	●	4.50	50	25.00	1010-4.50	●
1.75	40	16.00	1010-1.75	●	4.60	50	25.00	1010-4.60	●
1.80	40	16.00	1010-1.80	●	4.70	50	25.00	1010-4.70	●
1.85	40	16.00	1010-1.85	●	4.80	50	25.00	1010-4.80	●
1.90	40	16.00	1010-1.90	●	4.90	50	25.00	1010-4.90	●
1.95	40	16.00	1010-1.95	●	5.00	50	25.00	1010-5.00	●
2.00	40	16.00	1010-2.00	●	5.10	50	25.00	1010-5.10	●
2.05	40	18.00	1010-2.05	●	5.20	50	25.00	1010-5.20	●
2.10	40	18.00	1010-2.10	●	5.30	50	25.00	1010-5.30	●
2.15	40	18.00	1010-2.15	●	5.40	50	25.00	1010-5.40	●
2.20	40	18.00	1010-2.20	●	5.50	50	25.00	1010-5.50	●
2.25	40	18.00	1010-2.25	●	5.60	50	25.00	1010-5.60	●
2.30	40	18.00	1010-2.30	●	5.70	50	25.00	1010-5.70	●
2.35	40	18.00	1010-2.35	●	5.80	50	25.00	1010-5.80	●
2.40	40	18.00	1010-2.40	●	5.90	50	25.00	1010-5.90	●
2.45	40	18.00	1010-2.45	●	6.00	50	25.00	1010-6.00	●
2.50	40	18.00	1010-2.50	●					

Forets cylindriques

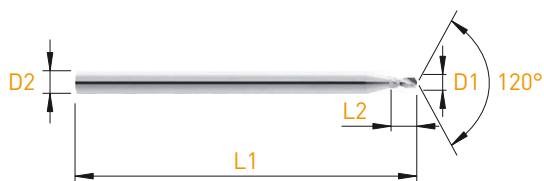
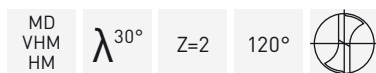
Zylindrische Bohrer

Cylindrical drills

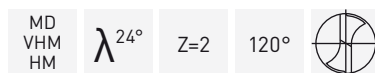
2010



D1 h6 D2 h6	L1	L2	Art. N°	z	D1 h6 D2 h6	L1	L2	Art. N°	z
0.50	30	5.00	2010-0.50	●	2.55	45	18.00	2010-2.55	●
0.55	30	5.00	2010-0.55	●	2.60	45	18.00	2010-2.60	●
0.60	30	5.00	2010-0.60	●	2.65	45	18.00	2010-2.65	●
0.65	30	6.00	2010-0.65	●	2.70	45	18.00	2010-2.70	●
0.70	30	6.00	2010-0.70	●	2.75	45	18.00	2010-2.75	●
0.75	30	8.00	2010-0.75	●	2.80	45	18.00	2010-2.80	●
0.80	30	8.00	2010-0.80	●	2.85	45	18.00	2010-2.85	●
0.85	30	9.00	2010-0.85	●	2.90	45	18.00	2010-2.90	●
0.90	30	9.00	2010-0.90	●	2.95	45	18.00	2010-2.95	●
0.95	30	10.00	2010-0.95	●	3.00	45	18.00	2010-3.00	●
1.00	30	10.00	2010-1.00	●	3.10	50	20.00	2010-3.10	●
1.05	30	10.00	2010-1.05	●	3.20	50	20.00	2010-3.20	●
1.10	30	10.00	2010-1.10	●	3.30	50	20.00	2010-3.30	●
1.15	30	12.00	2010-1.15	●	3.40	50	20.00	2010-3.40	●
1.20	30	12.00	2010-1.20	●	3.50	50	20.00	2010-3.50	●
1.25	30	12.00	2010-1.25	●	3.60	50	20.00	2010-3.60	●
1.30	30	12.00	2010-1.30	●	3.70	50	20.00	2010-3.70	●
1.35	30	12.00	2010-1.35	●	3.80	50	20.00	2010-3.80	●
1.40	30	12.00	2010-1.40	●	3.90	50	20.00	2010-3.90	●
1.45	30	12.00	2010-1.45	●	4.00	50	20.00	2010-4.00	●
1.50	30	12.00	2010-1.50	●	4.10	50	25.00	2010-4.10	●
1.55	40	16.00	2010-1.55	●	4.20	50	25.00	2010-4.20	●
1.60	40	16.00	2010-1.60	●	4.30	50	25.00	2010-4.30	●
1.65	40	16.00	2010-1.65	●	4.40	50	25.00	2010-4.40	●
1.70	40	16.00	2010-1.70	●	4.50	50	25.00	2010-4.50	●
1.75	40	16.00	2010-1.75	●	4.60	50	25.00	2010-4.60	●
1.80	40	16.00	2010-1.80	●	4.70	50	25.00	2010-4.70	●
1.85	40	16.00	2010-1.85	●	4.80	50	25.00	2010-4.80	●
1.90	40	16.00	2010-1.90	●	4.90	50	25.00	2010-4.90	●
1.95	40	16.00	2010-1.95	●	5.00	50	25.00	2010-5.00	●
2.00	40	16.00	2010-2.00	●	5.10	50	25.00	2010-5.10	●
2.05	40	18.00	2010-2.05	●	5.20	50	25.00	2010-5.20	●
2.10	40	18.00	2010-2.10	●	5.30	50	25.00	2010-5.30	●
2.15	40	18.00	2010-2.15	●	5.40	50	25.00	2010-5.40	●
2.20	40	18.00	2010-2.20	●	5.50	50	25.00	2010-5.50	●
2.25	40	18.00	2010-2.25	●	5.60	50	25.00	2010-5.60	●
2.30	40	18.00	2010-2.30	●	5.70	50	25.00	2010-5.70	●
2.35	40	18.00	2010-2.35	●	5.80	50	25.00	2010-5.80	●
2.40	40	18.00	2010-2.40	●	5.90	50	25.00	2010-5.90	●
2.45	40	18.00	2010-2.45	●	6.00	50	25.00	2010-6.00	●
2.50	40	18.00	2010-2.50	●					



D1 h6	L2	D2 h6	L1	Art. N°	z
0.80	2.50	2.00	30	2011-0.80	●
0.90	2.50	2.00	30	2011-0.90	●
1.00	2.50	2.00	30	2011-1.00	●
1.10	2.50	2.00	30	2011-1.10	●
1.20	2.50	2.00	30	2011-1.20	●
1.30	2.50	2.00	30	2011-1.30	●
1.40	2.50	2.00	30	2011-1.40	●
1.50	2.50	2.00	30	2011-1.50	●
2.00	2.50	2.00	30	2011-2.00	●



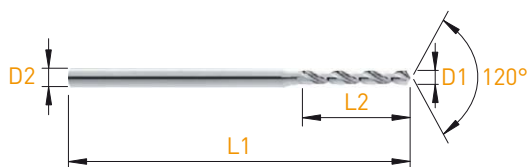
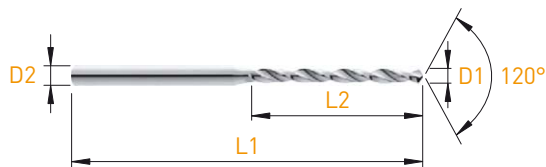
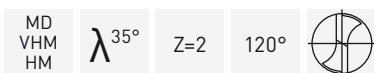
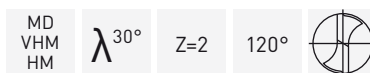
D1 h6	L2	D2 Ø1.5h6 Ø2h6 Ø3h5	L1	Art. N°	z
0.50	1.70	1.50	30	2012-0.50	●
0.55	1.90	1.50	30	2012-0.55	●
0.60	1.90	1.50	30	2012-0.60	●
0.65	1.90	1.50	30	2012-0.65	●
0.70	2.40	1.50	30	2012-0.70	●
0.75	2.40	1.50	30	2012-0.75	●
0.80	2.60	1.50	30	2012-0.80	●
0.85	2.60	1.50	30	2012-0.85	●
0.90	3.00	1.50	30	2012-0.90	●
0.95	3.00	1.50	30	2012-0.95	●
1.00	3.40	1.50	30	2012-1.00	●
1.10	3.80	1.50	30	2012-1.10	●
1.20	4.20	1.50	30	2012-1.20	●
1.30	4.20	1.50	30	2012-1.30	●
1.40	4.70	1.50	30	2012-1.40	●
1.50	4.70	2.00	38	2012-1.50	●
1.60	5.40	2.00	38	2012-1.60	●
1.70	5.40	2.00	38	2012-1.70	●
1.80	6.50	2.00	38	2012-1.80	●
1.90	6.50	2.00	38	2012-1.90	●
2.00	6.50	3.00	38	2012-2.00	●
2.10	6.50	3.00	38	2012-2.10	●
2.20	6.50	3.00	38	2012-2.20	●
2.30	6.50	3.00	38	2012-2.30	●
2.40	6.50	3.00	38	2012-2.40	●

Micro-forets

Mikrobohrer

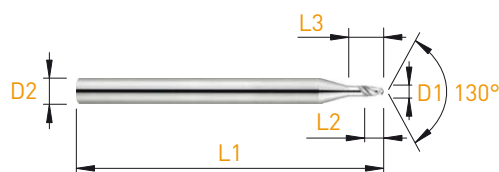
Micro drills

2013 / 2014



D1 h ₆	L2	D2 h ₆	L1	Art. N°	z
0.40	3.60	1.00	25	2013-0.40	●
0.45	3.60	1.00	25	2013-0.45	●
0.50	4.00	1.00	25	2013-0.50	●
0.55	4.50	1.00	25	2013-0.55	●
0.60	4.50	1.50	30	2013-0.60	●
0.65	5.00	1.50	30	2013-0.65	●
0.70	5.60	1.50	30	2013-0.70	●
0.75	5.60	1.50	30	2013-0.75	●
0.80	6.30	1.50	30	2013-0.80	●
0.85	6.30	1.50	30	2013-0.85	●
0.90	7.10	1.50	30	2013-0.90	●
0.95	7.10	1.50	30	2013-0.95	●
1.00	8.00	1.50	30	2013-1.00	●
1.05	8.00	1.50	30	2013-1.05	●
1.10	9.00	1.50	30	2013-1.10	●
1.15	9.00	1.50	30	2013-1.15	●
1.20	10.00	1.50	30	2013-1.20	●
1.25	10.00	1.50	30	2013-1.25	●
1.30	10.00	1.50	30	2013-1.30	●
1.35	11.20	1.50	30	2013-1.35	●
1.40	11.20	1.50	30	2013-1.40	●
1.45	11.20	1.50	30	2013-1.45	●
1.50	12.00	2.00	38	2013-1.50	●
1.60	12.00	2.00	38	2013-1.60	●
1.70	12.00	2.00	38	2013-1.70	●
1.80	12.00	2.00	38	2013-1.80	●
1.90	12.00	2.00	38	2013-1.90	●

D1 h ₆	L2	D2 h ₆	L1	Art. N°	z
0.50	6.00	1.50	30	2014-0.50	●
0.55	6.50	1.50	30	2014-0.55	●
0.60	6.50	1.50	30	2014-0.60	●
0.65	7.50	1.50	30	2014-0.65	●
0.70	8.50	1.50	30	2014-0.70	●
0.75	8.50	1.50	30	2014-0.75	●
0.80	9.50	1.50	30	2014-0.80	●
0.85	9.50	1.50	30	2014-0.85	●
0.90	10.50	1.50	30	2014-0.90	●
0.95	10.50	1.50	30	2014-0.95	●
1.00	12.00	1.50	38	2014-1.00	●
1.05	12.00	1.50	38	2014-1.05	●
1.10	13.50	1.50	38	2014-1.10	●
1.15	13.50	1.50	38	2014-1.15	●
1.20	15.00	1.50	38	2014-1.20	●
1.25	15.00	1.50	38	2014-1.25	●
1.30	17.00	1.50	38	2014-1.30	●
1.35	17.00	1.50	38	2014-1.35	●
1.40	17.00	1.50	38	2014-1.40	●
1.45	17.00	1.50	38	2014-1.45	●
1.50	18.00	2.00	38	2014-1.50	●
1.55	18.00	2.00	38	2014-1.55	●
1.60	18.00	2.00	38	2014-1.60	●
1.65	18.00	2.00	38	2014-1.65	●
1.70	18.00	2.00	38	2014-1.70	●
1.75	18.00	2.00	38	2014-1.75	●
1.80	18.00	2.00	38	2014-1.80	●
1.85	18.00	2.00	38	2014-1.85	●
1.90	18.00	2.00	38	2014-1.90	●
1.95	18.00	2.00	38	2014-1.95	●



MD VHM HM	λ^{30°	2xD1	Z=2	130°	
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D1 +0.005 / 0	L2	L3	D2 h ₆	L1	Art. N°	Z
0.10	0.35	0.55	3.00	38	2020-0.10	●
0.11	0.35	0.55	3.00	38	2020-0.11	●
0.12	0.35	0.55	3.00	38	2020-0.12	●
0.13	0.40	0.60	3.00	38	2020-0.13	●
0.14	0.40	0.60	3.00	38	2020-0.14	●
0.15	0.40	0.60	3.00	38	2020-0.15	●
0.16	0.40	0.60	3.00	38	2020-0.16	●
0.17	0.50	0.70	3.00	38	2020-0.17	●
0.18	0.50	0.70	3.00	38	2020-0.18	●
0.19	0.50	0.70	3.00	38	2020-0.19	●
0.20	0.55	0.75	3.00	38	2020-0.20	●
0.21	0.55	0.75	3.00	38	2020-0.21	●
0.22	0.60	0.80	3.00	38	2020-0.22	●
0.23	0.60	0.80	3.00	38	2020-0.23	●
0.24	0.60	0.80	3.00	38	2020-0.24	●
0.25	0.70	0.90	3.00	38	2020-0.25	●
0.26	0.70	0.90	3.00	38	2020-0.26	●
0.27	0.70	0.90	3.00	38	2020-0.27	●
0.28	0.80	1.00	3.00	38	2020-0.28	●
0.29	0.80	1.00	3.00	38	2020-0.29	●
0.30	0.90	1.20	3.00	38	2020-0.30	●
0.31	0.90	1.20	3.00	38	2020-0.31	●
0.32	0.90	1.20	3.00	38	2020-0.32	●
0.33	0.90	1.20	3.00	38	2020-0.33	●
0.34	0.90	1.35	3.00	38	2020-0.34	●
0.35	0.90	1.35	3.00	38	2020-0.35	●
0.36	0.95	1.35	3.00	38	2020-0.36	●
0.37	0.95	1.35	3.00	38	2020-0.37	●
0.38	0.95	1.50	3.00	38	2020-0.38	●
0.39	0.95	1.50	3.00	38	2020-0.39	●
0.40	0.80	1.60	3.00	38	2020-0.40	●
0.41	0.82	1.60	3.00	38	2020-0.41	●
0.42	0.84	1.60	3.00	38	2020-0.42	●
0.43	0.86	1.60	3.00	38	2020-0.43	●
0.44	0.88	1.60	3.00	38	2020-0.44	●
0.45	0.90	1.60	3.00	38	2020-0.45	●
0.46	0.92	1.70	3.00	38	2020-0.46	●
0.47	0.94	1.70	3.00	38	2020-0.47	●
0.48	0.96	1.70	3.00	38	2020-0.48	●

D1 +0.005 / 0	L2	L3	D2 h ₆	L1	Art. N°	Z
0.49	0.98	1.70	3.00	38	2020-0.49	●
0.50	1.00	1.70	3.00	38	2020-0.50	●
0.51	1.02	1.80	3.00	38	2020-0.51	●
0.52	1.04	1.80	3.00	38	2020-0.52	●
0.53	1.06	1.80	3.00	38	2020-0.53	●
0.54	1.08	1.80	3.00	38	2020-0.54	●
0.55	1.10	1.80	3.00	38	2020-0.55	●
0.56	1.12	1.90	3.00	38	2020-0.56	●
0.57	1.14	1.90	3.00	38	2020-0.57	●
0.58	1.16	1.90	3.00	38	2020-0.58	●
0.59	1.18	1.90	3.00	38	2020-0.59	●
0.60	1.20	1.90	3.00	38	2020-0.60	●
0.61	1.22	2.00	3.00	38	2020-0.61	●
0.62	1.24	2.00	3.00	38	2020-0.62	●
0.63	1.26	2.00	3.00	38	2020-0.63	●
0.64	1.28	2.00	3.00	38	2020-0.64	●
0.65	1.30	2.00	3.00	38	2020-0.65	●
0.66	1.32	2.10	3.00	38	2020-0.66	●
0.67	1.34	2.10	3.00	38	2020-0.67	●
0.68	1.36	2.10	3.00	38	2020-0.68	●
0.69	1.38	2.10	3.00	38	2020-0.69	●
0.70	1.40	2.10	3.00	38	2020-0.70	●
0.71	1.42	2.20	3.00	38	2020-0.71	●
0.72	1.44	2.20	3.00	38	2020-0.72	●
0.73	1.46	2.20	3.00	38	2020-0.73	●
0.74	1.48	2.20	3.00	38	2020-0.74	●
0.75	1.50	2.20	3.00	38	2020-0.75	●
0.76	1.52	2.30	3.00	38	2020-0.76	●
0.77	1.54	2.30	3.00	38	2020-0.77	●
0.78	1.56	2.30	3.00	38	2020-0.78	●
0.79	1.58	2.30	3.00	38	2020-0.79	●
0.80	1.60	2.30	3.00	38	2020-0.80	●
0.81	1.62	2.40	3.00	38	2020-0.81	●
0.82	1.64	2.40	3.00	38	2020-0.82	●
0.83	1.66	2.40	3.00	38	2020-0.83	●
0.84	1.68	2.40	3.00	38	2020-0.84	●
0.85	1.70	2.40	3.00	38	2020-0.85	●
0.86	1.72	2.50	3.00	38	2020-0.86	●
0.87	1.74	2.50	3.00	38	2020-0.87	●
0.88	1.76	2.50	3.00	38	2020-0.88	●
0.89	1.78	2.50	3.00	38	2020-0.89	●
0.90	1.80	2.50	3.00	38	2020-0.90	●
0.91	1.82	2.60	3.00	38	2020-0.91	●
0.92	1.84	2.60	3.00	38	2020-0.92	●
0.93	1.86	2.60	3.00	38	2020-0.93	●
0.94	1.88	2.60	3.00	38	2020-0.94	●
0.95	1.90	2.60	3.00	38	2020-0.95	●
0.96	1.92	2.70	3.00	38	2020-0.96	●
0.97	1.94	2.70	3.00	38	2020-0.97	●
0.98	1.96	2.70	3.00	38	2020-0.98	●
0.99	1.98	2.70	3.00	38	2020-0.99	●

Micro-forets de préperçage

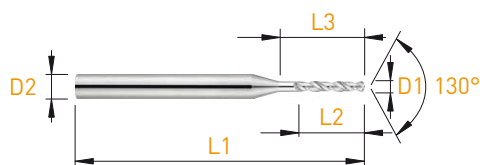
Mikro Pilotbohrer

Micro pilot drills

Ø 1.00 - Ø 2.00 mm

2020

D1 +0.005 / 0	L2	L3	D2 h ₆	L1	Art. N°	z	D1 +0.005 / 0	L2	L3	D2 h ₆	L1	Art. N°	z
1.00	2.00	2.70	3.00	38	2020-1.00	●	1.51	3.02	5.10	3.00	38	2020-1.51	●
1.01	2.02	3.50	3.00	38	2020-1.01	●	1.52	3.04	5.10	3.00	38	2020-1.52	●
1.02	2.04	3.50	3.00	38	2020-1.02	●	1.53	3.06	5.10	3.00	38	2020-1.53	●
1.03	2.06	3.50	3.00	38	2020-1.03	●	1.54	3.08	5.10	3.00	38	2020-1.54	●
1.04	2.08	3.50	3.00	38	2020-1.04	●	1.55	3.10	5.10	3.00	38	2020-1.55	●
1.05	2.10	3.50	3.00	38	2020-1.05	●	1.56	3.12	5.20	3.00	38	2020-1.56	●
1.06	2.12	3.60	3.00	38	2020-1.06	●	1.57	3.14	5.20	3.00	38	2020-1.57	●
1.07	2.14	3.60	3.00	38	2020-1.07	●	1.58	3.16	5.20	3.00	38	2020-1.58	●
1.08	2.16	3.60	3.00	38	2020-1.08	●	1.59	3.18	5.20	3.00	38	2020-1.59	●
1.09	2.18	3.60	3.00	38	2020-1.09	●	1.60	3.20	5.20	3.00	38	2020-1.60	●
1.10	2.20	3.60	3.00	38	2020-1.10	●	1.61	3.22	5.30	3.00	38	2020-1.61	●
1.11	2.22	3.70	3.00	38	2020-1.11	●	1.62	3.24	5.30	3.00	38	2020-1.62	●
1.12	2.24	3.70	3.00	38	2020-1.12	●	1.63	3.26	5.30	3.00	38	2020-1.63	●
1.13	2.26	3.70	3.00	38	2020-1.13	●	1.64	3.28	5.30	3.00	38	2020-1.64	●
1.14	2.28	3.70	3.00	38	2020-1.14	●	1.65	3.30	5.30	3.00	38	2020-1.65	●
1.15	2.30	3.70	3.00	38	2020-1.15	●	1.66	3.32	5.40	3.00	38	2020-1.66	●
1.16	2.32	3.80	3.00	38	2020-1.16	●	1.67	3.34	5.40	3.00	38	2020-1.67	●
1.17	2.34	3.80	3.00	38	2020-1.17	●	1.68	3.36	5.40	3.00	38	2020-1.68	●
1.18	2.36	3.80	3.00	38	2020-1.18	●	1.69	3.38	5.40	3.00	38	2020-1.69	●
1.19	2.38	3.80	3.00	38	2020-1.19	●	1.70	3.40	5.40	3.00	38	2020-1.70	●
1.20	2.40	3.80	3.00	38	2020-1.20	●	1.71	3.42	5.50	3.00	38	2020-1.71	●
1.21	2.42	4.20	3.00	38	2020-1.21	●	1.72	3.44	5.50	3.00	38	2020-1.72	●
1.22	2.44	4.20	3.00	38	2020-1.22	●	1.73	3.46	5.50	3.00	38	2020-1.73	●
1.23	2.46	4.20	3.00	38	2020-1.23	●	1.74	3.48	5.50	3.00	38	2020-1.74	●
1.24	2.48	4.20	3.00	38	2020-1.24	●	1.75	3.50	5.50	3.00	38	2020-1.75	●
1.25	2.50	4.20	3.00	38	2020-1.25	●	1.76	3.52	5.60	3.00	38	2020-1.76	●
1.26	2.52	4.30	3.00	38	2020-1.26	●	1.77	3.54	5.60	3.00	38	2020-1.77	●
1.27	2.54	4.30	3.00	38	2020-1.27	●	1.78	3.56	5.60	3.00	38	2020-1.78	●
1.28	2.56	4.30	3.00	38	2020-1.28	●	1.79	3.58	5.60	3.00	38	2020-1.79	●
1.29	2.58	4.30	3.00	38	2020-1.29	●	1.80	3.60	5.60	3.00	38	2020-1.80	●
1.30	2.60	4.30	3.00	38	2020-1.30	●	1.81	3.62	5.70	3.00	38	2020-1.81	●
1.31	2.62	4.40	3.00	38	2020-1.31	●	1.82	3.64	5.70	3.00	38	2020-1.82	●
1.32	2.64	4.40	3.00	38	2020-1.32	●	1.83	3.66	5.70	3.00	38	2020-1.83	●
1.33	2.66	4.40	3.00	38	2020-1.33	●	1.84	3.68	5.70	3.00	38	2020-1.84	●
1.34	2.68	4.40	3.00	38	2020-1.34	●	1.85	3.70	5.70	3.00	38	2020-1.85	●
1.35	2.70	4.40	3.00	38	2020-1.35	●	1.86	3.72	5.80	3.00	38	2020-1.86	●
1.36	2.72	4.50	3.00	38	2020-1.36	●	1.87	3.74	5.80	3.00	38	2020-1.87	●
1.37	2.74	4.50	3.00	38	2020-1.37	●	1.88	3.76	5.80	3.00	38	2020-1.88	●
1.38	2.76	4.50	3.00	38	2020-1.38	●	1.89	3.78	5.80	3.00	38	2020-1.89	●
1.39	2.78	4.50	3.00	38	2020-1.39	●	1.90	3.80	5.80	3.00	38	2020-1.90	●
1.40	2.80	4.50	3.00	38	2020-1.40	●	1.91	3.82	5.90	3.00	38	2020-1.91	●
1.41	2.82	4.60	3.00	38	2020-1.41	●	1.92	3.84	5.90	3.00	38	2020-1.92	●
1.42	2.84	4.60	3.00	38	2020-1.42	●	1.93	3.86	5.90	3.00	38	2020-1.93	●
1.43	2.86	4.60	3.00	38	2020-1.43	●	1.94	3.88	5.90	3.00	38	2020-1.94	●
1.44	2.88	4.60	3.00	38	2020-1.44	●	1.95	3.90	5.90	3.00	38	2020-1.95	●
1.45	2.90	4.60	3.00	38	2020-1.45	●	1.96	3.92	6.00	3.00	38	2020-1.96	●
1.46	2.92	4.70	3.00	38	2020-1.46	●	1.97	3.94	6.00	3.00	38	2020-1.97	●
1.47	2.94	4.70	3.00	38	2020-1.47	●	1.98	3.96	6.00	3.00	38	2020-1.98	●
1.48	2.96	4.70	3.00	38	2020-1.48	●	1.99	3.98	6.00	3.00	38	2020-1.99	●
1.49	2.98	4.70	3.00	38	2020-1.49	●	2.00	4.00	6.00	3.00	38	2020-2.00	●
1.50	3.00	4.70	3.00	38	2020-1.50	●							



MD VHM HM	λ^{35°	6xD1	Z=2	130°	
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D1 0 / -0.004	L2	L3	D2 h ₆	L1	Art. N°	z
0.10	0.50	0.70	3.00	38	2023-0.10	●
0.11	0.50	0.70	3.00	38	2023-0.11	●
0.12	0.50	0.70	3.00	38	2023-0.12	●
0.13	0.80	1.00	3.00	38	2023-0.13	●
0.14	0.80	1.00	3.00	38	2023-0.14	●
0.15	0.80	1.00	3.00	38	2023-0.15	●
0.16	1.10	1.40	3.00	38	2023-0.16	●
0.17	1.10	1.40	3.00	38	2023-0.17	●
0.18	1.10	1.40	3.00	38	2023-0.18	●
0.19	1.10	1.40	3.00	38	2023-0.19	●
0.20	1.50	1.80	3.00	38	2023-0.20	●
0.21	1.50	1.80	3.00	38	2023-0.21	●
0.22	1.50	1.80	3.00	38	2023-0.22	●
0.23	1.50	1.80	3.00	38	2023-0.23	●
0.24	1.50	1.80	3.00	38	2023-0.24	●
0.25	1.90	2.20	3.00	38	2023-0.25	●
0.26	1.90	2.20	3.00	38	2023-0.26	●
0.27	1.90	2.20	3.00	38	2023-0.27	●
0.28	1.90	2.20	3.00	38	2023-0.28	●
0.29	1.90	2.20	3.00	38	2023-0.29	●
0.30	1.80	2.40	3.00	38	2023-0.30	●
0.31	1.80	2.40	3.00	38	2023-0.31	●
0.32	1.80	2.40	3.00	38	2023-0.32	●
0.33	1.80	2.40	3.00	38	2023-0.33	●
0.34	1.80	2.40	3.00	38	2023-0.34	●
0.35	2.20	2.80	3.00	38	2023-0.35	●
0.36	2.20	2.80	3.00	38	2023-0.36	●
0.37	2.20	2.80	3.00	38	2023-0.37	●
0.38	2.20	2.80	3.00	38	2023-0.38	●
0.39	2.70	3.60	3.00	38	2023-0.39	●
0.40	2.70	3.60	3.00	38	2023-0.40	●
0.41	2.70	3.60	3.00	38	2023-0.41	●
0.42	2.70	3.60	3.00	38	2023-0.42	●
0.43	2.70	3.60	3.00	38	2023-0.43	●
0.44	2.70	3.60	3.00	38	2023-0.44	●
0.45	2.70	3.60	3.00	38	2023-0.45	●
0.46	2.70	3.60	3.00	38	2023-0.46	●
0.47	2.70	3.60	3.00	38	2023-0.47	●
0.48	2.70	3.60	3.00	38	2023-0.48	●

D1 0 / -0.004	L2	L3	D2 h ₆	L1	Art. N°	z
0.49	3.20	4.00	3.00	38	2023-0.49	●
0.50	3.20	4.00	3.00	38	2023-0.50	●
0.51	3.20	4.00	3.00	38	2023-0.51	●
0.52	3.20	4.00	3.00	38	2023-0.52	●
0.53	3.20	4.00	3.00	38	2023-0.53	●
0.54	3.60	4.50	3.00	38	2023-0.54	●
0.55	3.60	4.50	3.00	38	2023-0.55	●
0.56	3.60	4.50	3.00	38	2023-0.56	●
0.57	3.60	4.50	3.00	38	2023-0.57	●
0.58	3.60	4.50	3.00	38	2023-0.58	●
0.59	3.60	4.50	3.00	38	2023-0.59	●
0.60	3.60	4.50	3.00	38	2023-0.60	●
0.61	3.90	5.00	3.00	38	2023-0.61	●
0.62	3.90	5.00	3.00	38	2023-0.62	●
0.63	3.90	5.00	3.00	38	2023-0.63	●
0.64	3.90	5.00	3.00	38	2023-0.64	●
0.65	3.90	5.00	3.00	38	2023-0.65	●
0.66	3.90	5.00	3.00	38	2023-0.66	●
0.67	3.90	5.00	3.00	38	2023-0.67	●
0.68	4.50	5.60	3.00	38	2023-0.68	●
0.69	4.50	5.60	3.00	38	2023-0.69	●
0.70	4.50	5.60	3.00	38	2023-0.70	●
0.71	4.50	5.60	3.00	38	2023-0.71	●
0.72	4.50	5.60	3.00	38	2023-0.72	●
0.73	4.50	5.60	3.00	38	2023-0.73	●
0.74	4.50	5.60	3.00	38	2023-0.74	●
0.75	4.50	5.60	3.00	38	2023-0.75	●
0.76	5.00	6.30	3.00	38	2023-0.76	●
0.77	5.00	6.30	3.00	38	2023-0.77	●
0.78	5.00	6.30	3.00	38	2023-0.78	●
0.79	5.00	6.30	3.00	38	2023-0.79	●
0.80	5.00	6.30	3.00	38	2023-0.80	●
0.81	5.00	6.30	3.00	38	2023-0.81	●
0.82	5.00	6.30	3.00	38	2023-0.82	●
0.83	5.00	6.30	3.00	38	2023-0.83	●
0.84	5.00	6.30	3.00	38	2023-0.84	●
0.85	5.00	6.30	3.00	38	2023-0.85	●
0.86	5.70	7.10	3.00	38	2023-0.86	●
0.87	5.70	7.10	3.00	38	2023-0.87	●
0.88	5.70	7.10	3.00	38	2023-0.88	●
0.89	5.70	7.10	3.00	38	2023-0.89	●
0.90	5.70	7.10	3.00	38	2023-0.90	●
0.91	5.70	7.10	3.00	38	2023-0.91	●
0.92	5.70	7.10	3.00	38	2023-0.92	●
0.93	5.70	7.10	3.00	38	2023-0.93	●
0.94	5.70	7.10	3.00	38	2023-0.94	●
0.95	5.70	7.10	3.00	38	2023-0.95	●
0.96	6.50	8.00	3.00	38	2023-0.96	●
0.97	6.50	8.00	3.00	38	2023-0.97	●
0.98	6.50	8.00	3.00	38	2023-0.98	●
0.99	6.50	8.00	3.00	38	2023-0.99	●

Micro-forets

Mikrobohrer

Micro drills

Ø 1.00 - Ø 2.00 mm

2023

D1 0 / -0.004	L2	L3	D2 h6	L1	Art. N°	z	D1 0 / -0.004	L2	L3	D2 h6	L1	Art. N°	z
1.00	6.50	8.00	3.00	38	2023-1.00	●	1.51	11.20	13.40	3.00	38	2023-1.51	●
1.01	6.50	8.00	3.00	38	2023-1.01	●	1.52	11.20	13.40	3.00	38	2023-1.52	●
1.02	6.50	8.00	3.00	38	2023-1.02	●	1.53	11.20	13.40	3.00	38	2023-1.53	●
1.03	6.50	8.00	3.00	38	2023-1.03	●	1.54	11.20	13.40	3.00	38	2023-1.54	●
1.04	6.50	8.00	3.00	38	2023-1.04	●	1.55	11.20	13.40	3.00	38	2023-1.55	●
1.05	6.50	8.00	3.00	38	2023-1.05	●	1.56	11.20	13.40	3.00	38	2023-1.56	●
1.06	7.30	9.00	3.00	38	2023-1.06	●	1.57	11.20	13.40	3.00	38	2023-1.57	●
1.07	7.30	9.00	3.00	38	2023-1.07	●	1.58	11.20	13.40	3.00	38	2023-1.58	●
1.08	7.30	9.00	3.00	38	2023-1.08	●	1.59	11.20	13.40	3.00	38	2023-1.59	●
1.09	7.30	9.00	3.00	38	2023-1.09	●	1.60	11.20	13.40	3.00	38	2023-1.60	●
1.10	7.30	9.00	3.00	38	2023-1.10	●	1.61	11.20	13.40	3.00	38	2023-1.61	●
1.11	7.30	9.00	3.00	38	2023-1.11	●	1.62	11.20	13.40	3.00	38	2023-1.62	●
1.12	7.30	9.00	3.00	38	2023-1.12	●	1.63	11.20	13.40	3.00	38	2023-1.63	●
1.13	7.30	9.00	3.00	38	2023-1.13	●	1.64	11.20	13.40	3.00	38	2023-1.64	●
1.14	7.30	9.00	3.00	38	2023-1.14	●	1.65	11.20	13.40	3.00	38	2023-1.65	●
1.15	7.30	9.00	3.00	38	2023-1.15	●	1.66	11.20	13.40	3.00	38	2023-1.66	●
1.16	8.20	10.00	3.00	38	2023-1.16	●	1.67	11.20	13.40	3.00	38	2023-1.67	●
1.17	8.20	10.00	3.00	38	2023-1.17	●	1.68	11.20	13.40	3.00	38	2023-1.68	●
1.18	8.20	10.00	3.00	38	2023-1.18	●	1.69	11.20	13.40	3.00	38	2023-1.69	●
1.19	8.20	10.00	3.00	38	2023-1.19	●	1.70	11.20	13.40	3.00	38	2023-1.70	●
1.20	8.20	10.00	3.00	38	2023-1.20	●	1.71	11.20	13.40	3.00	38	2023-1.71	●
1.21	8.20	10.00	3.00	38	2023-1.21	●	1.72	11.20	13.40	3.00	38	2023-1.72	●
1.22	8.20	10.00	3.00	38	2023-1.22	●	1.73	11.20	13.40	3.00	38	2023-1.73	●
1.23	8.20	10.00	3.00	38	2023-1.23	●	1.74	11.20	13.40	3.00	38	2023-1.74	●
1.24	8.20	10.00	3.00	38	2023-1.24	●	1.75	11.20	13.40	3.00	38	2023-1.75	●
1.25	8.20	10.00	3.00	38	2023-1.25	●	1.76	11.20	13.40	3.00	38	2023-1.76	●
1.26	8.20	10.00	3.00	38	2023-1.26	●	1.77	11.20	13.40	3.00	38	2023-1.77	●
1.27	8.20	10.00	3.00	38	2023-1.27	●	1.78	11.20	13.40	3.00	38	2023-1.78	●
1.28	8.20	10.00	3.00	38	2023-1.28	●	1.79	11.20	13.40	3.00	38	2023-1.79	●
1.29	8.20	10.00	3.00	38	2023-1.29	●	1.80	11.20	13.40	3.00	38	2023-1.80	●
1.30	8.20	10.00	3.00	38	2023-1.30	●	1.81	11.20	13.40	3.00	38	2023-1.81	●
1.31	9.20	11.20	3.00	38	2023-1.31	●	1.82	11.20	13.40	3.00	38	2023-1.82	●
1.32	9.20	11.20	3.00	38	2023-1.32	●	1.83	11.20	13.40	3.00	38	2023-1.83	●
1.33	9.20	11.20	3.00	38	2023-1.33	●	1.84	11.20	13.40	3.00	38	2023-1.84	●
1.34	9.20	11.20	3.00	38	2023-1.34	●	1.85	11.20	13.40	3.00	38	2023-1.85	●
1.35	9.20	11.20	3.00	38	2023-1.35	●	1.86	11.20	13.40	3.00	38	2023-1.86	●
1.36	9.20	11.20	3.00	38	2023-1.36	●	1.87	11.20	13.40	3.00	38	2023-1.87	●
1.37	9.20	11.20	3.00	38	2023-1.37	●	1.88	11.20	13.40	3.00	38	2023-1.88	●
1.38	9.20	11.20	3.00	38	2023-1.38	●	1.89	11.20	13.40	3.00	38	2023-1.89	●
1.39	9.20	11.20	3.00	38	2023-1.39	●	1.90	11.20	13.40	3.00	38	2023-1.90	●
1.40	9.20	11.20	3.00	38	2023-1.40	●	1.91	11.20	13.40	3.00	38	2023-1.91	●
1.41	9.20	11.20	3.00	38	2023-1.41	●	1.92	11.20	13.40	3.00	38	2023-1.92	●
1.42	9.20	11.20	3.00	38	2023-1.42	●	1.93	11.20	13.40	3.00	38	2023-1.93	●
1.43	9.20	11.20	3.00	38	2023-1.43	●	1.94	11.20	13.40	3.00	38	2023-1.94	●
1.44	9.20	11.20	3.00	38	2023-1.44	●	1.95	11.20	13.40	3.00	38	2023-1.95	●
1.45	9.20	11.20	3.00	38	2023-1.45	●	1.96	11.20	13.40	3.00	38	2023-1.96	●
1.46	9.20	11.20	3.00	38	2023-1.46	●	1.97	11.20	13.40	3.00	38	2023-1.97	●
1.47	9.20	11.20	3.00	38	2023-1.47	●	1.98	11.20	13.40	3.00	38	2023-1.98	●
1.48	9.20	11.20	3.00	38	2023-1.48	●	1.99	11.20	13.40	3.00	38	2023-1.99	●
1.49	9.20	11.20	3.00	38	2023-1.49	●	2.00	11.20	13.40	3.00	38	2023-2.00	●
1.50	9.20	11.20	3.00	38	2023-1.50	●							

D1 0 / -0.004	L2	L3	D2 h ₆	L1	Art. N°	z	D1 0 / -0.004	L2	L3	D2 h ₆	L1	Art. N°	z
2.01	12.50	14.00	3.00	38	2023-2.01	●	2.51	14.00	17.00	3.00	38	2023-2.51	●
2.02	12.50	14.00	3.00	38	2023-2.02	●	2.52	14.00	17.00	3.00	38	2023-2.52	●
2.03	12.50	14.00	3.00	38	2023-2.03	●	2.53	14.00	17.00	3.00	38	2023-2.53	●
2.04	12.50	14.00	3.00	38	2023-2.04	●	2.54	14.00	17.00	3.00	38	2023-2.54	●
2.05	12.50	14.00	3.00	38	2023-2.05	●	2.55	14.00	17.00	3.00	38	2023-2.55	●
2.06	12.50	14.00	3.00	38	2023-2.06	●	2.56	14.00	17.00	3.00	38	2023-2.56	●
2.07	12.50	14.00	3.00	38	2023-2.07	●	2.57	14.00	17.00	3.00	38	2023-2.57	●
2.08	12.50	14.00	3.00	38	2023-2.08	●	2.58	14.00	17.00	3.00	38	2023-2.58	●
2.09	12.50	14.00	3.00	38	2023-2.09	●	2.59	14.00	17.00	3.00	38	2023-2.59	●
2.10	12.50	14.00	3.00	38	2023-2.10	●	2.60	14.00	17.00	3.00	38	2023-2.60	●
2.11	12.50	14.00	3.00	38	2023-2.11	●	2.61	14.00	17.00	3.00	38	2023-2.61	●
2.12	12.50	14.00	3.00	38	2023-2.12	●	2.62	14.00	17.00	3.00	38	2023-2.62	●
2.13	12.50	14.00	3.00	38	2023-2.13	●	2.63	14.00	17.00	3.00	38	2023-2.63	●
2.14	12.50	14.00	3.00	38	2023-2.14	●	2.64	14.00	17.00	3.00	38	2023-2.64	●
2.15	12.50	14.00	3.00	38	2023-2.15	●	2.65	14.00	17.00	3.00	38	2023-2.65	●
2.16	12.50	14.00	3.00	38	2023-2.16	●	2.66	14.00	17.00	3.00	38	2023-2.66	●
2.17	12.50	14.00	3.00	38	2023-2.17	●	2.67	14.00	17.00	3.00	38	2023-2.67	●
2.18	12.50	14.00	3.00	38	2023-2.18	●	2.68	14.00	17.00	3.00	38	2023-2.68	●
2.19	12.50	14.00	3.00	38	2023-2.19	●	2.69	14.00	17.00	3.00	38	2023-2.69	●
2.20	12.50	14.00	3.00	38	2023-2.20	●	2.70	14.00	17.00	3.00	38	2023-2.70	●
2.21	12.50	14.00	3.00	38	2023-2.21	●	2.71	14.00	17.00	3.00	38	2023-2.71	●
2.22	12.50	14.00	3.00	38	2023-2.22	●	2.72	14.00	17.00	3.00	38	2023-2.72	●
2.23	12.50	14.00	3.00	38	2023-2.23	●	2.73	14.00	17.00	3.00	38	2023-2.73	●
2.24	12.50	14.00	3.00	38	2023-2.24	●	2.74	14.00	17.00	3.00	38	2023-2.74	●
2.25	12.50	14.00	3.00	38	2023-2.25	●	2.75	14.00	17.00	3.00	38	2023-2.75	●
2.26	12.50	14.00	3.00	38	2023-2.26	●	2.76	14.00	17.00	3.00	38	2023-2.76	●
2.27	12.50	14.00	3.00	38	2023-2.27	●	2.77	14.00	17.00	3.00	38	2023-2.77	●
2.28	12.50	14.00	3.00	38	2023-2.28	●	2.78	14.00	17.00	3.00	38	2023-2.78	●
2.29	12.50	14.00	3.00	38	2023-2.29	●	2.79	14.00	17.00	3.00	38	2023-2.79	●
2.30	12.50	14.00	3.00	38	2023-2.30	●	2.80	14.00	17.00	3.00	38	2023-2.80	●
2.31	12.50	14.00	3.00	38	2023-2.31	●	2.81	14.00	17.00	3.00	38	2023-2.81	●
2.32	12.50	14.00	3.00	38	2023-2.32	●	2.82	14.00	17.00	3.00	38	2023-2.82	●
2.33	12.50	14.00	3.00	38	2023-2.33	●	2.83	14.00	17.00	3.00	38	2023-2.83	●
2.34	12.50	14.00	3.00	38	2023-2.34	●	2.84	14.00	17.00	3.00	38	2023-2.84	●
2.35	12.50	14.00	3.00	38	2023-2.35	●	2.85	14.00	17.00	3.00	38	2023-2.85	●
2.36	12.50	14.00	3.00	38	2023-2.36	●	2.86	14.00	17.00	3.00	38	2023-2.86	●
2.37	12.50	14.00	3.00	38	2023-2.37	●	2.87	14.00	17.00	3.00	38	2023-2.87	●
2.38	12.50	14.00	3.00	38	2023-2.38	●	2.88	14.00	17.00	3.00	38	2023-2.88	●
2.39	12.50	14.00	3.00	38	2023-2.39	●	2.89	14.00	17.00	3.00	38	2023-2.89	●
2.40	12.50	14.00	3.00	38	2023-2.40	●	2.90	14.00	17.00	3.00	38	2023-2.90	●
2.41	12.50	14.00	3.00	38	2023-2.41	●	2.91	14.00	17.00	3.00	38	2023-2.91	●
2.42	12.50	14.00	3.00	38	2023-2.42	●	2.92	14.00	17.00	3.00	38	2023-2.92	●
2.43	12.50	14.00	3.00	38	2023-2.43	●	2.93	14.00	17.00	3.00	38	2023-2.93	●
2.44	12.50	14.00	3.00	38	2023-2.44	●	2.94	14.00	17.00	3.00	38	2023-2.94	●
2.45	12.50	14.00	3.00	38	2023-2.45	●	2.95	14.00	17.00	3.00	38	2023-2.95	●
2.46	12.50	14.00	3.00	38	2023-2.46	●	2.96	14.00	17.00	3.00	38	2023-2.96	●
2.47	12.50	14.00	3.00	38	2023-2.47	●	2.97	14.00	17.00	3.00	38	2023-2.97	●
2.48	12.50	14.00	3.00	38	2023-2.48	●	2.98	14.00	17.00	3.00	38	2023-2.98	●
2.49	12.50	14.00	3.00	38	2023-2.49	●	2.99	14.00	17.00	3.00	38	2023-2.99	●
2.50	14.00	17.00	3.00	38	2023-2.50	●	3.00	14.00	17.00	3.00	38	2023-3.00	●

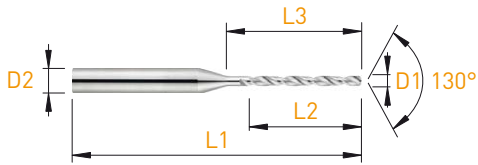
Micro-forets

Mikrobohrer

Micro drills

Ø 0.20 - Ø 1.09 mm

2026



MD VHM HM	λ^{25°	Z=2	12xD1	130°	
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D1 h6	L2	L3	D2 h6	L1	Art. N°	z
0.20	2.40	3.50	3.00	38	2026-0.20	●
0.21	2.50	3.50	3.00	38	2026-0.21	●
0.22	2.70	3.50	3.00	38	2026-0.22	●
0.23	2.80	3.50	3.00	38	2026-0.23	●
0.24	2.90	4.00	3.00	38	2026-0.24	●
0.25	3.00	4.00	3.00	38	2026-0.25	●
0.26	3.10	4.00	3.00	38	2026-0.26	●
0.27	3.30	4.00	3.00	38	2026-0.27	●
0.28	3.40	4.50	3.00	38	2026-0.28	●
0.29	3.50	4.50	3.00	38	2026-0.29	●
0.30	3.60	4.50	3.00	38	2026-0.30	●
0.31	3.70	4.50	3.00	38	2026-0.31	●
0.32	3.90	5.00	3.00	38	2026-0.32	●
0.33	4.00	5.00	3.00	38	2026-0.33	●
0.34	4.10	5.00	3.00	38	2026-0.34	●
0.35	4.20	5.00	3.00	38	2026-0.35	●
0.36	4.30	5.50	3.00	38	2026-0.36	●
0.37	4.50	5.50	3.00	38	2026-0.37	●
0.38	4.60	5.50	3.00	38	2026-0.38	●
0.39	4.70	5.50	3.00	38	2026-0.39	●
0.40	4.80	6.00	3.00	38	2026-0.40	●
0.41	4.90	6.00	3.00	38	2026-0.41	●
0.42	5.10	6.00	3.00	38	2026-0.42	●
0.43	5.20	6.00	3.00	38	2026-0.43	●
0.44	5.30	6.50	3.00	38	2026-0.44	●
0.45	5.40	6.50	3.00	38	2026-0.45	●
0.46	5.50	6.50	3.00	38	2026-0.46	●
0.47	5.70	6.50	3.00	38	2026-0.47	●
0.48	5.80	7.00	3.00	38	2026-0.48	●
0.49	5.90	7.00	3.00	38	2026-0.49	●
0.50	6.00	7.00	3.00	38	2026-0.50	●
0.51	6.10	7.00	3.00	38	2026-0.51	●
0.52	6.30	7.50	3.00	38	2026-0.52	●
0.53	6.40	7.50	3.00	38	2026-0.53	●
0.54	6.50	7.50	3.00	38	2026-0.54	●
0.55	6.60	7.50	3.00	38	2026-0.55	●
0.56	6.70	8.00	3.00	38	2026-0.56	●
0.57	6.90	8.00	3.00	38	2026-0.57	●
0.58	7.00	8.00	3.00	38	2026-0.58	●

D1 h6	L2	L3	D2 h6	L1	Art. N°	z
0.59	7.10	8.00	3.00	38	2026-0.59	●
0.60	7.20	9.00	3.00	38	2026-0.60	●
0.61	7.30	9.00	3.00	38	2026-0.61	●
0.62	7.50	9.00	3.00	38	2026-0.62	●
0.63	7.60	9.00	3.00	38	2026-0.63	●
0.64	7.70	9.50	3.00	38	2026-0.64	●
0.65	7.80	9.50	3.00	38	2026-0.65	●
0.66	7.90	9.50	3.00	38	2026-0.66	●
0.67	8.10	9.50	3.00	38	2026-0.67	●
0.68	8.20	10.00	3.00	38	2026-0.68	●
0.69	8.30	10.00	3.00	38	2026-0.69	●
0.70	8.40	10.00	3.00	38	2026-0.70	●
0.71	8.50	10.00	3.00	38	2026-0.71	●
0.72	8.70	10.50	3.00	38	2026-0.72	●
0.73	8.80	10.50	3.00	38	2026-0.73	●
0.74	8.90	10.50	3.00	38	2026-0.74	●
0.75	9.00	10.50	3.00	38	2026-0.75	●
0.76	9.10	11.00	3.00	38	2026-0.76	●
0.77	9.30	11.00	3.00	38	2026-0.77	●
0.78	9.40	11.00	3.00	38	2026-0.78	●
0.79	9.50	11.00	3.00	38	2026-0.79	●
0.80	9.60	11.50	3.00	38	2026-0.80	●
0.81	9.70	11.50	3.00	38	2026-0.81	●
0.82	9.90	11.50	3.00	38	2026-0.82	●
0.83	10.00	11.50	3.00	38	2026-0.83	●
0.84	10.10	12.00	3.00	38	2026-0.84	●
0.85	10.20	12.00	3.00	38	2026-0.85	●
0.86	10.30	12.00	3.00	38	2026-0.86	●
0.87	10.50	12.00	3.00	38	2026-0.87	●
0.88	10.60	12.50	3.00	38	2026-0.88	●
0.89	10.70	12.50	3.00	38	2026-0.89	●
0.90	10.80	12.50	3.00	38	2026-0.90	●
0.91	10.90	12.50	3.00	38	2026-0.91	●
0.92	11.10	13.00	3.00	38	2026-0.92	●
0.93	11.20	13.00	3.00	38	2026-0.93	●
0.94	11.30	13.00	3.00	38	2026-0.94	●
0.95	11.40	13.00	3.00	38	2026-0.95	●
0.96	11.50	13.50	3.00	38	2026-0.96	●
0.97	11.70	13.50	3.00	38	2026-0.97	●
0.98	11.80	13.50	3.00	38	2026-0.98	●
0.99	11.90	13.50	3.00	38	2026-0.99	●
1.00	12.00	14.50	3.00	38	2026-1.00	●
1.01	12.10	14.50	3.00	38	2026-1.01	●
1.02	12.30	14.50	3.00	38	2026-1.02	●
1.03	12.40	14.50	3.00	38	2026-1.03	●
1.04	12.50	15.00	3.00	38	2026-1.04	●
1.05	12.60	15.00	3.00	38	2026-1.05	●
1.06	12.70	15.00	3.00	38	2026-1.06	●
1.07	12.90	15.00	3.00	38	2026-1.07	●
1.08	13.00	15.50	3.00	38	2026-1.08	●
1.09	13.10	15.50	3.00	38	2026-1.09	●

D1 h6	L2	L3	D2 h6	L1	Art. N°	z	D1 h6	L2	L3	D2 h6	L1	Art. N°	z
1.10	13.20	15.50	3.00	38	2026-1.10	●	1.61	19.30	22.00	3.00	50	2026-1.61	●
1.11	13.30	15.50	3.00	38	2026-1.11	●	1.62	19.40	22.50	3.00	50	2026-1.62	●
1.12	13.50	16.00	3.00	38	2026-1.12	●	1.63	19.60	22.50	3.00	50	2026-1.63	●
1.13	13.60	16.00	3.00	38	2026-1.13	●	1.64	19.70	22.50	3.00	50	2026-1.64	●
1.14	13.70	16.00	3.00	38	2026-1.14	●	1.65	19.80	22.50	3.00	50	2026-1.65	●
1.15	13.80	16.00	3.00	38	2026-1.15	●	1.66	19.90	23.00	3.00	50	2026-1.66	●
1.16	13.90	16.50	3.00	38	2026-1.16	●	1.67	20.10	23.00	3.00	50	2026-1.67	●
1.17	14.10	16.50	3.00	38	2026-1.17	●	1.68	20.20	23.00	3.00	50	2026-1.68	●
1.18	14.20	16.50	3.00	38	2026-1.18	●	1.69	20.30	23.00	3.00	50	2026-1.69	●
1.19	14.30	16.50	3.00	38	2026-1.19	●	1.70	20.40	23.50	3.00	50	2026-1.70	●
1.20	14.40	17.00	3.00	38	2026-1.20	●	1.71	20.50	23.50	3.00	50	2026-1.71	●
1.21	14.50	17.00	3.00	38	2026-1.21	●	1.72	20.70	23.50	3.00	50	2026-1.72	●
1.22	14.70	17.00	3.00	38	2026-1.22	●	1.73	20.80	23.50	3.00	50	2026-1.73	●
1.23	14.80	17.00	3.00	38	2026-1.23	●	1.74	20.90	24.00	3.00	50	2026-1.74	●
1.24	14.90	17.50	3.00	38	2026-1.24	●	1.75	21.00	24.00	3.00	50	2026-1.75	●
1.25	15.00	17.50	3.00	38	2026-1.25	●	1.76	21.10	24.00	3.00	50	2026-1.76	●
1.26	15.10	17.50	3.00	50	2026-1.26	●	1.77	21.30	24.00	3.00	50	2026-1.77	●
1.27	15.30	17.50	3.00	50	2026-1.27	●	1.78	21.40	24.50	3.00	50	2026-1.78	●
1.28	15.40	18.00	3.00	50	2026-1.28	●	1.79	21.50	24.50	3.00	50	2026-1.79	●
1.29	15.50	18.00	3.00	50	2026-1.29	●	1.80	21.60	25.00	3.00	50	2026-1.80	●
1.30	15.60	18.00	3.00	50	2026-1.30	●	1.81	21.70	25.00	3.00	50	2026-1.81	●
1.31	15.70	18.00	3.00	50	2026-1.31	●	1.82	21.90	25.00	3.00	50	2026-1.82	●
1.32	15.90	18.50	3.00	50	2026-1.32	●	1.83	22.00	25.00	3.00	50	2026-1.83	●
1.33	16.00	18.50	3.00	50	2026-1.33	●	1.84	22.10	25.50	3.00	50	2026-1.84	●
1.34	16.10	18.50	3.00	50	2026-1.34	●	1.85	22.20	25.50	3.00	50	2026-1.85	●
1.35	16.20	18.50	3.00	50	2026-1.35	●	1.86	22.30	25.50	3.00	50	2026-1.86	●
1.36	16.30	19.00	3.00	50	2026-1.36	●	1.87	22.50	25.50	3.00	50	2026-1.87	●
1.37	16.50	19.00	3.00	50	2026-1.37	●	1.88	22.60	26.00	3.00	50	2026-1.88	●
1.38	16.60	19.00	3.00	50	2026-1.38	●	1.89	22.70	26.00	3.00	50	2026-1.89	●
1.39	16.70	19.00	3.00	50	2026-1.39	●	1.90	22.80	26.00	3.00	50	2026-1.90	●
1.40	16.80	19.50	3.00	50	2026-1.40	●	1.91	22.90	26.00	3.00	50	2026-1.91	●
1.41	16.90	19.50	3.00	50	2026-1.41	●	1.92	23.10	26.50	3.00	50	2026-1.92	●
1.42	17.10	19.50	3.00	50	2026-1.42	●	1.93	23.20	26.50	3.00	50	2026-1.93	●
1.43	17.20	19.50	3.00	50	2026-1.43	●	1.94	23.30	26.50	3.00	50	2026-1.94	●
1.44	17.30	20.00	3.00	50	2026-1.44	●	1.95	23.40	26.50	3.00	50	2026-1.95	●
1.45	17.40	20.00	3.00	50	2026-1.45	●	1.96	23.50	27.00	3.00	50	2026-1.96	●
1.46	17.50	20.00	3.00	50	2026-1.46	●	1.97	23.70	27.00	3.00	50	2026-1.97	●
1.47	17.70	20.00	3.00	50	2026-1.47	●	1.98	23.80	27.00	3.00	50	2026-1.98	●
1.48	17.80	20.50	3.00	50	2026-1.48	●	1.99	23.90	27.00	3.00	50	2026-1.99	●
1.49	17.90	20.50	3.00	50	2026-1.49	●	2.00	24.00	27.00	3.00	50	2026-2.00	●
1.50	18.00	21.00	3.00	50	2026-1.50	●							
1.51	18.10	21.00	3.00	50	2026-1.51	●							
1.52	18.30	21.00	3.00	50	2026-1.52	●							
1.53	18.40	21.00	3.00	50	2026-1.53	●							
1.54	18.50	21.50	3.00	50	2026-1.54	●							
1.55	18.60	21.50	3.00	50	2026-1.55	●							
1.56	18.70	21.50	3.00	50	2026-1.56	●							
1.57	18.90	21.50	3.00	50	2026-1.57	●							
1.58	19.00	22.00	3.00	50	2026-1.58	●							
1.59	19.10	22.00	3.00	50	2026-1.59	●							
1.60	19.20	22.00	3.00	50	2026-1.60	●							

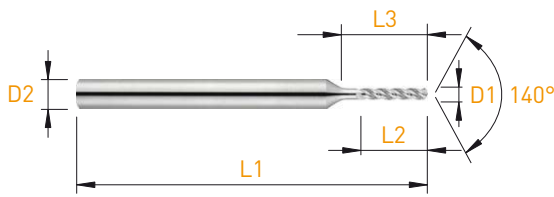
Micro-forets

Mikrobohrer

Micro drills

Ø 0.20 - Ø 1.09 mm

2030



MD VHM HM	$\lambda 35^\circ$	5xD1	Z=3	140°	
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D1 h6	L2	L3	D2 h6	L1	Art. N°	z
0.20	1.00	1.50	3.00	38	2030-0.20	●
0.21	1.05	1.50	3.00	38	2030-0.21	●
0.22	1.10	1.60	3.00	38	2030-0.22	●
0.23	1.15	1.60	3.00	38	2030-0.23	●
0.24	1.20	1.70	3.00	38	2030-0.24	●
0.25	1.25	1.70	3.00	38	2030-0.25	●
0.26	1.30	1.80	3.00	38	2030-0.26	●
0.27	1.35	1.80	3.00	38	2030-0.27	●
0.28	1.40	1.90	3.00	38	2030-0.28	●
0.29	1.45	1.90	3.00	38	2030-0.29	●
0.30	1.50	2.00	3.00	38	2030-0.30	●
0.31	1.55	2.00	3.00	38	2030-0.31	●
0.32	1.60	2.10	3.00	38	2030-0.32	●
0.33	1.65	2.10	3.00	38	2030-0.33	●
0.34	1.70	2.20	3.00	38	2030-0.34	●
0.35	1.75	2.20	3.00	38	2030-0.35	●
0.36	1.80	2.30	3.00	38	2030-0.36	●
0.37	1.85	2.30	3.00	38	2030-0.37	●
0.38	1.90	2.40	3.00	38	2030-0.38	●
0.39	1.95	2.40	3.00	38	2030-0.39	●
0.40	2.00	2.50	3.00	38	2030-0.40	●
0.41	2.05	2.50	3.00	38	2030-0.41	●
0.42	2.10	2.60	3.00	38	2030-0.42	●
0.43	2.15	2.60	3.00	38	2030-0.43	●
0.44	2.20	2.70	3.00	38	2030-0.44	●
0.45	2.25	2.70	3.00	38	2030-0.45	●
0.46	2.30	2.80	3.00	38	2030-0.46	●
0.47	2.35	2.80	3.00	38	2030-0.47	●
0.48	2.40	2.90	3.00	38	2030-0.48	●
0.49	2.45	2.90	3.00	38	2030-0.49	●
0.50	2.50	3.00	3.00	38	2030-0.50	●
0.51	2.55	3.00	3.00	38	2030-0.51	●
0.52	2.60	3.10	3.00	38	2030-0.52	●
0.53	2.65	3.10	3.00	38	2030-0.53	●
0.54	2.70	3.20	3.00	38	2030-0.54	●
0.55	2.75	3.20	3.00	38	2030-0.55	●
0.56	2.80	3.30	3.00	38	2030-0.56	●
0.57	2.85	3.30	3.00	38	2030-0.57	●
0.58	2.90	3.40	3.00	38	2030-0.58	●
0.59	2.95	3.40	3.00	38	2030-0.59	●
0.60	3.00	3.50	3.00	38	2030-0.60	●
0.61	3.05	3.50	3.00	38	2030-0.61	●
0.62	3.10	3.60	3.00	38	2030-0.62	●
0.63	3.15	3.60	3.00	38	2030-0.63	●
0.64	3.20	3.70	3.00	38	2030-0.64	●
0.65	3.25	3.70	3.00	38	2030-0.65	●
0.66	3.30	3.80	3.00	38	2030-0.66	●
0.67	3.35	3.80	3.00	38	2030-0.67	●
0.68	3.40	3.90	3.00	38	2030-0.68	●
0.69	3.45	3.90	3.00	38	2030-0.69	●
0.70	3.50	4.00	3.00	38	2030-0.70	●
0.71	3.55	4.00	3.00	38	2030-0.71	●
0.72	3.60	4.10	3.00	38	2030-0.72	●
0.73	3.65	4.10	3.00	38	2030-0.73	●
0.74	3.70	4.20	3.00	38	2030-0.74	●
0.75	3.75	4.20	3.00	38	2030-0.75	●
0.76	3.80	4.30	3.00	38	2030-0.76	●
0.77	3.85	4.30	3.00	38	2030-0.77	●
0.78	3.90	4.40	3.00	38	2030-0.78	●
0.79	3.95	4.40	3.00	38	2030-0.79	●
0.80	4.00	4.50	3.00	38	2030-0.80	●
0.81	4.05	4.50	3.00	38	2030-0.81	●
0.82	4.10	4.60	3.00	38	2030-0.82	●
0.83	4.15	4.60	3.00	38	2030-0.83	●
0.84	4.20	4.70	3.00	38	2030-0.84	●
0.85	4.25	4.70	3.00	38	2030-0.85	●
0.86	4.30	4.80	3.00	38	2030-0.86	●
0.87	4.35	4.80	3.00	38	2030-0.87	●
0.88	4.40	4.90	3.00	38	2030-0.88	●
0.89	4.45	4.90	3.00	38	2030-0.89	●
0.90	4.50	5.00	3.00	38	2030-0.90	●
0.91	4.55	5.00	3.00	38	2030-0.91	●
0.92	4.60	5.10	3.00	38	2030-0.92	●
0.93	4.65	5.10	3.00	38	2030-0.93	●
0.94	4.70	5.20	3.00	38	2030-0.94	●
0.95	4.75	5.20	3.00	38	2030-0.95	●
0.96	4.80	5.30	3.00	38	2030-0.96	●
0.97	4.85	5.30	3.00	38	2030-0.97	●
0.98	4.90	5.40	3.00	38	2030-0.98	●
0.99	4.95	5.40	3.00	38	2030-0.99	●
1.00	5.00	6.50	3.00	38	2030-1.00	●
1.01	5.05	6.50	3.00	38	2030-1.01	●
1.02	5.10	6.50	3.00	38	2030-1.02	●
1.03	5.15	6.50	3.00	38	2030-1.03	●
1.04	5.20	6.50	3.00	38	2030-1.04	●
1.05	5.25	6.50	3.00	38	2030-1.05	●
1.06	5.30	6.50	3.00	38	2030-1.06	●
1.07	5.35	7.50	3.00	38	2030-1.07	●
1.08	5.40	7.50	3.00	38	2030-1.08	●
1.09	5.45	7.50	3.00	38	2030-1.09	●

2030

Ø 1.10 - Ø 2.11 mm

Micro-forets

Mikrobohrer

Micro drills

D1 h6	L2	L3	D2 h6	L1	Art. N°	z	D1 h6	L2	L3	D2 h6	L1	Art. N°	z
1.10	5.50	7.50	3.00	38	2030-1.10	●	1.61	8.05	10.50	3.00	38	2030-1.61	●
1.11	5.55	7.50	3.00	38	2030-1.11	●	1.62	8.10	10.50	3.00	38	2030-1.62	●
1.12	5.60	7.50	3.00	38	2030-1.12	●	1.63	8.15	10.50	3.00	38	2030-1.63	●
1.13	5.65	7.50	3.00	38	2030-1.13	●	1.64	8.20	10.50	3.00	38	2030-1.64	●
1.14	5.70	7.50	3.00	38	2030-1.14	●	1.65	8.25	10.50	3.00	38	2030-1.65	●
1.15	5.75	7.50	3.00	38	2030-1.15	●	1.66	8.30	10.50	3.00	38	2030-1.66	●
1.16	5.80	7.50	3.00	38	2030-1.16	●	1.67	8.35	10.50	3.00	38	2030-1.67	●
1.17	5.85	7.50	3.00	38	2030-1.17	●	1.68	8.40	10.50	3.00	38	2030-1.68	●
1.18	5.90	8.50	3.00	38	2030-1.18	●	1.69	8.45	10.50	3.00	38	2030-1.69	●
1.19	5.95	8.50	3.00	38	2030-1.19	●	1.70	8.50	10.50	3.00	38	2030-1.70	●
1.20	6.00	8.50	3.00	38	2030-1.20	●	1.71	8.55	11.50	3.00	38	2030-1.71	●
1.21	6.05	8.50	3.00	38	2030-1.21	●	1.72	8.60	11.50	3.00	38	2030-1.72	●
1.22	6.10	8.50	3.00	38	2030-1.22	●	1.73	8.65	11.50	3.00	38	2030-1.73	●
1.23	6.15	8.50	3.00	38	2030-1.23	●	1.74	8.70	11.50	3.00	38	2030-1.74	●
1.24	6.20	8.50	3.00	38	2030-1.24	●	1.75	8.75	11.50	3.00	38	2030-1.75	●
1.25	6.25	8.50	3.00	38	2030-1.25	●	1.76	8.80	11.50	3.00	38	2030-1.76	●
1.26	6.30	8.50	3.00	38	2030-1.26	●	1.77	8.85	11.50	3.00	38	2030-1.77	●
1.27	6.35	8.50	3.00	38	2030-1.27	●	1.78	8.90	11.50	3.00	38	2030-1.78	●
1.28	6.40	8.50	3.00	38	2030-1.28	●	1.79	8.95	11.50	3.00	38	2030-1.79	●
1.29	6.45	8.50	3.00	38	2030-1.29	●	1.80	9.00	11.50	3.00	38	2030-1.80	●
1.30	6.50	8.50	3.00	38	2030-1.30	●	1.81	9.05	11.50	3.00	38	2030-1.81	●
1.31	6.55	8.50	3.00	38	2030-1.31	●	1.82	9.10	11.50	3.00	38	2030-1.82	●
1.32	6.60	8.50	3.00	38	2030-1.32	●	1.83	9.15	11.50	3.00	38	2030-1.83	●
1.33	6.65	9.50	3.00	38	2030-1.33	●	1.84	9.20	11.50	3.00	38	2030-1.84	●
1.34	6.70	9.50	3.00	38	2030-1.34	●	1.85	9.25	11.50	3.00	38	2030-1.85	●
1.35	6.75	9.50	3.00	38	2030-1.35	●	1.86	9.30	11.50	3.00	38	2030-1.86	●
1.36	6.80	9.50	3.00	38	2030-1.36	●	1.87	9.35	11.50	3.00	38	2030-1.87	●
1.37	6.85	9.50	3.00	38	2030-1.37	●	1.88	9.40	11.50	3.00	38	2030-1.88	●
1.38	6.90	9.50	3.00	38	2030-1.38	●	1.89	9.45	11.50	3.00	38	2030-1.89	●
1.39	6.95	9.50	3.00	38	2030-1.39	●	1.90	9.50	11.50	3.00	38	2030-1.90	●
1.40	7.00	9.50	3.00	38	2030-1.40	●	1.91	9.55	12.50	3.00	38	2030-1.91	●
1.41	7.05	9.50	3.00	38	2030-1.41	●	1.92	9.60	12.50	3.00	38	2030-1.92	●
1.42	7.10	9.50	3.00	38	2030-1.42	●	1.93	9.65	12.50	3.00	38	2030-1.93	●
1.43	7.15	9.50	3.00	38	2030-1.43	●	1.94	9.70	12.50	3.00	38	2030-1.94	●
1.44	7.20	9.50	3.00	38	2030-1.44	●	1.95	9.75	12.50	3.00	38	2030-1.95	●
1.45	7.25	9.50	3.00	38	2030-1.45	●	1.96	9.80	12.50	3.00	38	2030-1.96	●
1.46	7.30	9.50	3.00	38	2030-1.46	●	1.97	9.85	12.50	3.00	38	2030-1.97	●
1.47	7.35	9.50	3.00	38	2030-1.47	●	1.98	9.90	12.50	3.00	38	2030-1.98	●
1.48	7.40	9.50	3.00	38	2030-1.48	●	1.99	9.95	12.50	3.00	38	2030-1.99	●
1.49	7.45	9.50	3.00	38	2030-1.49	●	2.00	10.00	12.50	3.00	38	2030-2.00	●
1.50	7.50	9.50	3.00	38	2030-1.50	●	2.01	10.05	12.50	3.00	38	2030-2.01	●
1.51	7.55	10.50	3.00	38	2030-1.51	●	2.02	10.10	12.50	3.00	38	2030-2.02	●
1.52	7.60	10.50	3.00	38	2030-1.52	●	2.03	10.15	12.50	3.00	38	2030-2.03	●
1.53	7.65	10.50	3.00	38	2030-1.53	●	2.04	10.20	12.50	3.00	38	2030-2.04	●
1.54	7.70	10.50	3.00	38	2030-1.54	●	2.05	10.25	12.50	3.00	38	2030-2.05	●
1.55	7.75	10.50	3.00	38	2030-1.55	●	2.06	10.30	12.50	3.00	38	2030-2.06	●
1.56	7.80	10.50	3.00	38	2030-1.56	●	2.07	10.35	12.50	3.00	38	2030-2.07	●
1.57	7.85	10.50	3.00	38	2030-1.57	●	2.08	10.40	12.50	3.00	38	2030-2.08	●
1.58	7.90	10.50	3.00	38	2030-1.58	●	2.09	10.45	12.50	3.00	38	2030-2.09	●
1.59	7.95	10.50	3.00	38	2030-1.59	●	2.10	10.50	12.50	3.00	38	2030-2.10	●
1.60	8.00	10.50	3.00	38	2030-1.60	●	2.11	10.55	12.50	3.00	38	2030-2.11	●

Micro-forets

Mikrobohrer

Micro drills

Ø 2.12 - Ø 2.99 mm

2030

D1 h6	L2	L3	D2 h6	L1	Art. N°	z	D1 h6	L2	L3	D2 h6	L1	Art. N°	z
2.12	10.60	12.50	3.00	38	2030-2.12	●	2.63	13.15	14.50	3.00	38	2030-2.63	●
2.13	10.65	13.50	3.00	38	2030-2.13	●	2.64	13.20	14.50	3.00	38	2030-2.64	●
2.14	10.70	13.50	3.00	38	2030-2.14	●	2.65	13.25	14.50	3.00	38	2030-2.65	●
2.15	10.75	13.50	3.00	38	2030-2.15	●	2.66	13.30	16.50	3.00	38	2030-2.66	●
2.16	10.80	13.50	3.00	38	2030-2.16	●	2.67	13.35	16.50	3.00	38	2030-2.67	●
2.17	10.85	13.50	3.00	38	2030-2.17	●	2.68	13.40	16.50	3.00	38	2030-2.68	●
2.18	10.90	13.50	3.00	38	2030-2.18	●	2.69	13.45	16.50	3.00	38	2030-2.69	●
2.19	10.95	13.50	3.00	38	2030-2.19	●	2.70	13.50	16.50	3.00	38	2030-2.70	●
2.20	11.00	13.50	3.00	38	2030-2.20	●	2.71	13.55	16.55	3.00	38	2030-2.71	●
2.21	11.05	13.50	3.00	38	2030-2.21	●	2.72	13.60	16.50	3.00	38	2030-2.72	●
2.22	11.10	13.50	3.00	38	2030-2.22	●	2.73	13.65	16.50	3.00	38	2030-2.73	●
2.23	11.15	13.50	3.00	38	2030-2.23	●	2.74	13.70	16.50	3.00	38	2030-2.74	●
2.24	11.20	13.50	3.00	38	2030-2.24	●	2.75	13.75	16.50	3.00	38	2030-2.75	●
2.25	11.25	13.50	3.00	38	2030-2.25	●	2.76	13.80	16.50	3.00	38	2030-2.76	●
2.26	11.30	13.50	3.00	38	2030-2.26	●	2.77	13.85	16.50	3.00	38	2030-2.77	●
2.27	11.35	13.50	3.00	38	2030-2.27	●	2.78	13.90	16.50	3.00	38	2030-2.78	●
2.28	11.40	13.50	3.00	38	2030-2.28	●	2.79	13.95	16.50	3.00	38	2030-2.79	●
2.29	11.45	13.50	3.00	38	2030-2.29	●	2.80	14.00	16.50	3.00	38	2030-2.80	●
2.30	11.50	13.50	3.00	38	2030-2.30	●	2.81	14.05	16.50	3.00	38	2030-2.81	●
2.31	11.55	13.50	3.00	38	2030-2.31	●	2.82	14.10	16.50	3.00	38	2030-2.82	●
2.32	11.60	13.50	3.00	38	2030-2.32	●	2.83	14.15	16.50	3.00	38	2030-2.83	●
2.33	11.65	13.50	3.00	38	2030-2.33	●	2.84	14.20	16.50	3.00	38	2030-2.84	●
2.34	11.70	13.50	3.00	38	2030-2.34	●	2.85	14.25	16.50	3.00	38	2030-2.85	●
2.35	11.75	13.50	3.00	38	2030-2.35	●	2.86	14.30	16.50	3.00	38	2030-2.86	●
2.36	11.80	13.50	3.00	38	2030-2.36	●	2.87	14.35	16.50	3.00	38	2030-2.87	●
2.37	11.85	14.50	3.00	38	2030-2.37	●	2.88	14.40	16.50	3.00	38	2030-2.88	●
2.38	11.90	14.50	3.00	38	2030-2.38	●	2.89	14.45	16.50	3.00	38	2030-2.89	●
2.39	11.95	14.50	3.00	38	2030-2.39	●	2.90	14.50	16.50	3.00	38	2030-2.90	●
2.40	12.00	14.50	3.00	38	2030-2.40	●	2.91	14.55	16.50	3.00	38	2030-2.91	●
2.41	12.05	14.50	3.00	38	2030-2.41	●	2.92	14.60	16.50	3.00	38	2030-2.92	●
2.42	12.10	14.50	3.00	38	2030-2.42	●	2.93	14.65	16.50	3.00	38	2030-2.93	●
2.43	12.15	14.50	3.00	38	2030-2.43	●	2.94	14.70	16.50	3.00	38	2030-2.94	●
2.44	12.20	14.50	3.00	38	2030-2.44	●	2.95	14.75	16.50	3.00	38	2030-2.95	●
2.45	12.25	14.50	3.00	38	2030-2.45	●	2.96	14.80	16.50	3.00	38	2030-2.96	●
2.46	12.30	14.50	3.00	38	2030-2.46	●	2.97	14.85	16.50	3.00	38	2030-2.97	●
2.47	12.35	14.50	3.00	38	2030-2.47	●	2.98	14.90	16.50	3.00	38	2030-2.98	●
2.48	12.40	14.50	3.00	38	2030-2.48	●	2.99	14.95	16.50	3.00	38	2030-2.99	●
2.49	12.45	14.50	3.00	38	2030-2.49	●							
2.50	12.50	14.50	3.00	38	2030-2.50	●							
2.51	12.55	14.50	3.00	38	2030-2.51	●							
2.52	12.60	14.50	3.00	38	2030-2.52	●							
2.53	12.65	14.50	3.00	38	2030-2.53	●							
2.54	12.70	14.50	3.00	38	2030-2.54	●							
2.55	12.75	14.50	3.00	38	2030-2.55	●							
2.56	12.80	14.50	3.00	38	2030-2.56	●							
2.57	12.85	14.50	3.00	38	2030-2.57	●							
2.58	12.90	14.50	3.00	38	2030-2.58	●							
2.59	12.95	14.50	3.00	38	2030-2.59	●							
2.60	13.00	14.50	3.00	38	2030-2.60	●							
2.61	13.05	14.50	3.00	38	2030-2.61	●							
2.62	13.10	14.50	3.00	38	2030-2.62	●							

Informations techniques et symboles

Technische Informationen und Symbole

Technical information and symbols

60° Angle
90° Winkel
120° Angle

 Coin vif
Scharfkantige Ecke
Sharp corner

λ 25° Angle d'hélice
Spiralwinkel
Helix angle

 Fraises hémisphériques
Radiusfräser
End mills with ball nose

λ 36° Hélice différente
 λ 38° Unterschiedliche Spirale
 λ 40° Different helix

 Rayon de coin
Eckradius
Corner radius

λ Hélice progressive
35°/38° Progressive Spirale
Progressive helix

 Dents avec coupe centrale
Zähne Zentrumschnitt
Teeth center cutting

Z Nombre de dents
Anzahl der Zähne
Number of teeth

 Denture décalée
Versetzte Verzahnung
Alternated teeth

2xD1 Rapport longueur-diamètre
Länge-Durchmesser Verhältnis
Length to diameter ratio

DHD Denture à pas irrégulier, hélice différente
Ungleiche Teilung, unterschiedliche Spirale
Uneven tooth pitch, different helix

 Lèvres, affûtage à facettes
Schneiden, Facettenschärfen
Flutes, sharpening with facets

DHP Denture à pas irrégulier, hélice progressive
Ungleiche Teilung, progressive Spirale
Uneven tooth pitch, progressive helix

 Taillage demi-lune
Kanonenbohrer Spitze
Gundrills tip

 Usinage torique
Torusbearbeitung
Toroidal machining

 Taillage renforcé 3/4
3/4 genuteter Fräser
3/4 straight fluted

MD Métal dur
VHM Vollhartmetall
HM Hard metal

 Usinage radial, diagonal et axial
Radiale, diagonale und axiale Bearbeitung
Radial, diagonal and axial machining

 Usinage radial et axial
Radiale und axiale Bearbeitung
Radial and axial machining

 Chanfrein
Fase
Chamfer

Informations techniques et symboles
Technische Informationen und Symbole
Technical information and symbols

Diamètre outil Werkzeugdurchmesser Tool diameter	D (mm)		
Nombre de dents Zähnezahl Number of teeth	Z		
Profondeur de coupe Schnitttiefe Cutting depth	ap (mm)		
Largeur de coupe Schnittbreite Cutting width	ae (mm)		
Vitesse de coupe Schnittgeschwindigkeit Cutting speed	(m/min)	Vc =	$\frac{D \times \pi \times n}{1000}$
Nombre de tours Umdrehungen Rotations	(U/min)	n =	$\frac{Vc \times 1000}{\pi \times D}$
Avance par dent Vorschub pro Zahn Cutting feed per teeth	(mm/tooth)	fz =	$\frac{Vf}{n \times Z}$
Vitesse d'avance Vorschubgeschwindigkeit Feed rate	(mm/min)	Vf =	fz x Z x n
Débit d'enlèvement de copeaux Spanvolumen Chip flow rate	(mm ³ /min)	Q =	ap x ae x Vf
Avance par tour Vorschub pro Umdrehung Cutting feed per rotation	(mm/U)	f =	$\frac{Vf}{n}$

Nos propositions techniques s'appliquent à la plupart des utilisations courantes.

N'hésitez pas à nous contacter pour des conseils plus précis.

Diese technische Empfehlungen gelten für die Mehrzahl der Standardanwendungen.

Unsere Techniker beraten Sie gerne für spezifische Anliegen.

These technical propositions apply to the majority of standard usages.

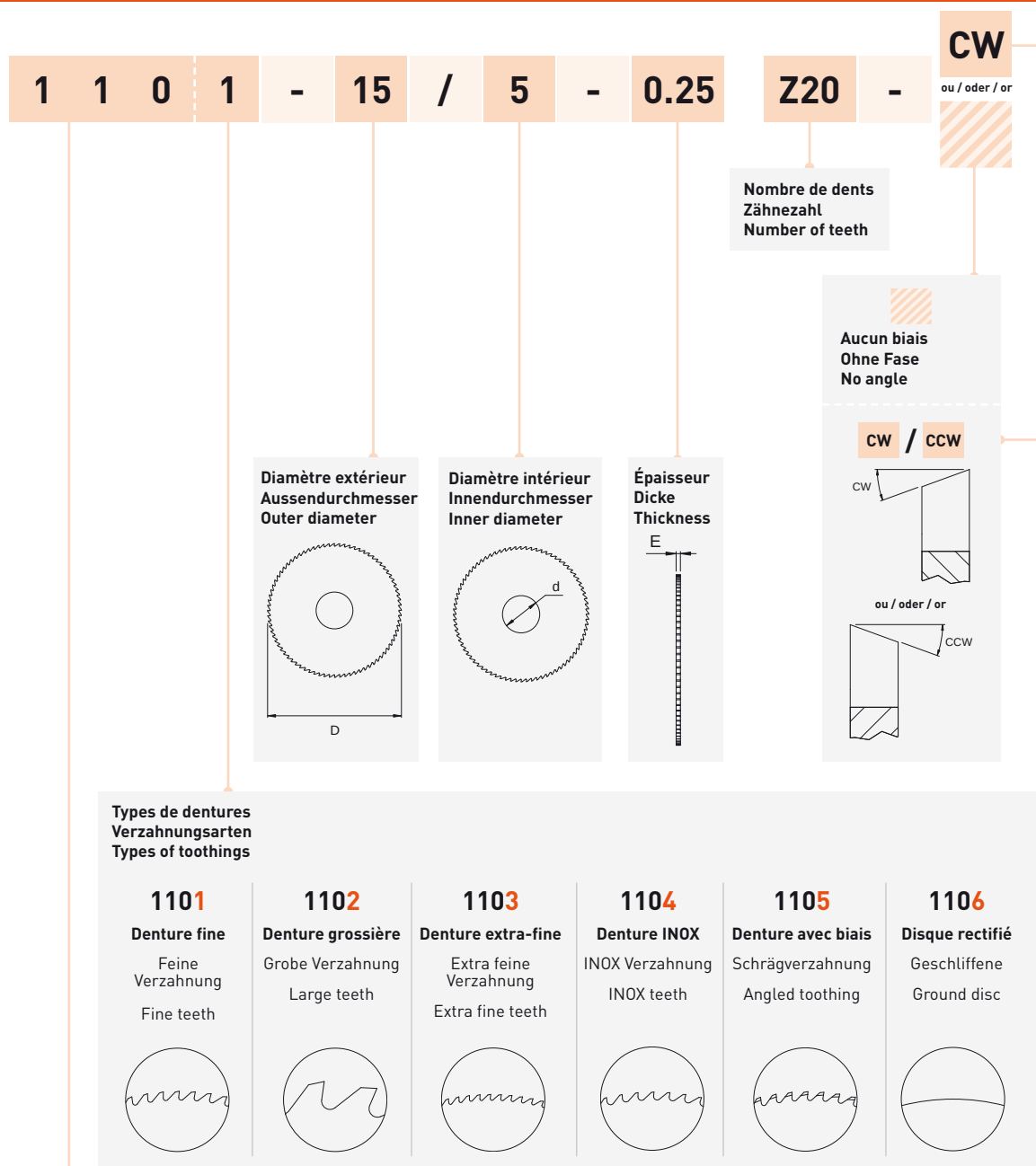
Do not hesitate to contact us for more specific advices.

CIRCO-Line



APPLITEC
CUTTING TOOLS

Codification Kodifizierung Coding guide			> 17.03
Définition du nombre de dents Empfohlene Zähnezahl Recommended number of teeth			> 17.04
Exécutions spéciales Sonderanfertigungen Special executions			> 17.05
Conseils d'utilisation Anwendungsempfehlungen Application recommendations			> 17.06
Nuances Sorten Grades			> 17.07
Fraises circulaires en métal dur – denture fine VHM-Kreissägeblätter – feine Verzahnung Solid carbide slitting saws – fine teeth	1101		> 17.08
Fraises circulaires en métal dur – denture grossière VHM-Kreissägeblätter – grobe Verzahnung Solid carbide slitting saws – large teeth	1102		> 17.10
Fraises circulaires en métal dur – denture extra-fine VHM-Kreissägeblätter – extra feine Verzahnung Solid carbide slitting saws – extra fine teeth	1103		> 17.12
Fraises circulaires en métal dur – denture revêtue pour INOX VHM-Kreissägeblätter – Verzahnung beschichtet für INOX Solid carbide slitting saws – Teeth coated for INOX	1104		> 17.14
Fraises circulaires en métal dur avec un biais – CW-CCW VHM-Kreissägeblätter mit Schräge – CW-CCW Solid carbide angled slitting saws – CW-CCW	1105		> 17.16
Disques en métal dur rectifiés Fertig geschliffene VHM-Ronden Fully ground solid carbide discs	1106		> 17.18
Tasseaux porte-fraise avec serrage avant Fräsdorne mit vorderer Klemmung Milling arbors with front clamping	2810 / 2811 / 2815		> 17.22
Tasseaux porte-fraise avec serrage arrière Fräsdorne mit rückseitiger Klemmung Milling arbors with rear clamping	2820 / 1820		> 17.23
Pièces de rechange Ersatzteile Spare parts			> 17.24



Applitec série 1100 Gamme de fraises circulaires de haute qualité
Applitec 1100 Serie Hochwertige Kreissägeblätter-Serie
Applitec 1100 series High quality slitting saws series

Définition du nombre de dents

Empfohlene Zähnezahl

Recommended number of teeth

Idéalement 2-3 dents en contact

Im Idealfall 2-3 Zähne im Einsatz

Ideally 2-3 teeth in contact

Trop de dents = avance trop faible par dent / pas assez de place pour le copeau

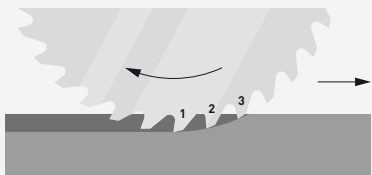
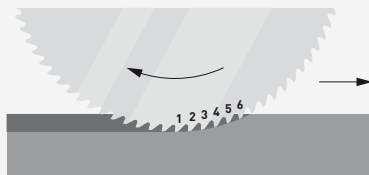
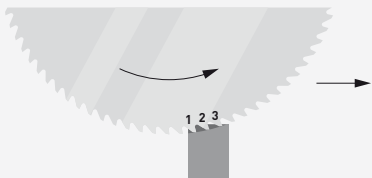
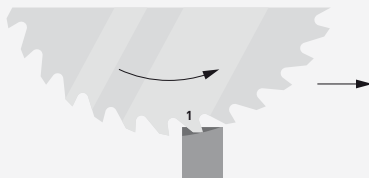
Trop peu de dents = risque de vibration / usure prématurée

Zu viele Zähne = zu geringer Vorschub pro Zahn / zu kleiner Spanraum

Zu wenig Zähne = Vibrationen / Verschleissrisiko

Too many teeth = feed too low per tooth / not enough place for the chips

Not enough teeth = vibration / risk of quick wearout



En complément de l'offre présentée dans le catalogue, des réalisations spéciales peuvent également être effectuées sur demande.

Ergänzend zu unserem Katalogsortiment sind auf Anfrage auch Sonderanfertigungen möglich.

In addition to our catalog range, special executions can also be carried out upon request.

Alésage avec entrée de clavette

Bohrung mit Keilnute

Bore with keyway


Train de fraises

Spezielle Kreissägeblätter
im Satz

Special slitting saws in set


Denture à rayon

Radiusfräser

Radius tooth


Denture forme B

Zahnform B

Tooth form B


Denture alternée forme W

Wechselverzahnung Form W

Alternate teeth form W


Denture isocèle

Prismenfräser

Biconical slitting saws


Denture hélicoïdale

Schrägverzahnung

Helical teeth


Revêtement sur demande

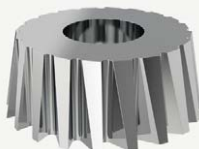
Beschichtung auf Anfrage

Coating on request


Denture conique 1 taille

Winkelfräser 1 Schnitt

Conical single cut saw


Denture conique 2 tailles

Winkelfräser 2 Schnitt

Conical double cut saw



Conseils d'utilisation

Anwendungsempfehlungen

Application recommendations

Fraises circulaires en métal dur VHM-Kreissägeblätter Solid carbide slitting saws			
Matière Werkstoff Material	Lubrifiant* Kühlung* Coolant*	VC (m/min)	Choix de la denture / avance Verzahnungswahl / Vorschub Teeth selection / cutting feed
Acier de décolletage Automatenstahl Free-cutting steel	P	O / E	120 - 240
Acier Stahl Steel < 600 N/mm ²	P	O / E	100 - 200
Acier Stahl Steel < 800 N/mm ²	P	O / E	80 - 160
Acier Stahl Steel < 1000 N/mm ²	P	O / E	60 - 120
Acier Stahl Steel > 1000 N/mm ²	P	O / E	40 - 80
Fonte Gusseisen Cast iron	K	A / E	60 - 120
Acier inoxydable Rostfreistahl Stainless steel	M	O / E	50 - 100
Aluminium Si < 12%	N	O / E	150 - 600
Aluminium Si > 12%	N	O / E	80 - 300
Cuivre, laiton, bronze Kupfer, Messing, Bronze Copper, brass, bronze	N	A / O / E	80 - 300
Thermoplastique Thermoplaste Thermoplastics	N	A	200 - 700
Duroplastique Duroplaste Duroplastics	N	A	150 - 600
Acier réfractaire Warmfester Stahl Heat resistant steel	S	O / E	25 - 60
Titane Titan Titanium	S	O / E	30 - 60

* O = huile de coupe / Schneidöl / cutting oil

* E = Emulsion

* A = sec (air comprimé) / Trocken (Pressluft) / dry (air)

avec revêtement, augmenter les valeurs de 20%

mit Beschichtung, Daten um 20% erhöhen

with coating, increase data by 20%

Type 1101 / 1104 / 1105

- Pour usinage peu profond ou longueur à fendre faible.
Avance par dent : 0.005 - 0.05**
- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen.
Vorschub pro Zahn : 0.005 - 0.05**
- For low machining depth or short slots.
Feed per tooth : 0.005 - 0.05**

Type 1102

- Pour usinage profond ou grande longueur à fendre.
Avance par dent : 0.01 - 0.1**
- Für grosse Bearbeitungstiefen oder grosse Schlitzlängen.
Vorschub pro Zahn : 0.01 - 0.1**
- For deep machining or long slots.
Feed per tooth : 0.01 - 0.1**

Type 1103

- Pour usinage de pièces fragiles ou fines.
Avance par dent : 0.002 - 0.02**
- Für die Bearbeitung von empfindlichen oder dünnwandigen Werkstücken.
Vorschub pro Zahn : 0.002 - 0.02**
- For machining of fragile or thin workpieces.
Feed per tooth : 0.002 - 0.02**

** selon la matière, l'épaisseur ainsi que la rigidité globale

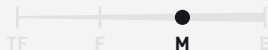
** je nach Werkstoff, Dicke und Gesamtstarrheit

** according to material, thickness and global rigidity

MAXINOX**Revêtement PVD**

PVD Beschichtung

PVD coating



P	★★★★★
M	★★★★★
N	★☆☆☆☆
S	★★★☆☆

- 1^{er} choix pour l'usinage des aciers inoxydables
- recommandé également pour les aciers alliés contenant : chrome nickel, vanadium, molybdène, ...

- erste Wahl für die Bearbeitung von rostfreiem Stahl
- auch empfohlen für legierte Stähle mit Chrom-Nickel, Vanadium, Molybdän, ...

- first choice for stainless machining
- also recommended for alloy steels with : Chrome-Nickel, Vanadium, Molybdenum, ...

Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible

- Avance par dent:
0.005 - 0.05 mm

- Revêtement sur demande

- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen

- Vorschub pro Zahn:
0.005 - 0.05 mm

- Beschichtung auf Anfrage

- For low machining depth or short slots

- Feed per tooth:
0.005 - 0.05 mm

- Coating on request



Fraises circulaires en métal dur

VHM-Kreissägeblätter

Solid carbide slitting saws

1101

MD
VHM
HMArt. N° ex:
1101-20/5-1.7 Z32

Denture fine Feine Verzahnung Fine teeth												DIN 1837
D js12	15	20	25	30	40	50	63	80	100	125	160	D js12
d H7	5	5	8	8	10	13	16	22	22	22	32	d H7
Epaisseur Dicke Thickness E ±0.01	$Z =$ Nombre de dents Zähnezahl Number of teeth											Epaisseur Dicke Thickness E ±0.01
0.10	64	80	80	100	128							0.10
0.15	64	80	80	100	128							0.15
0.20	64	80	80	100	128	128	160					0.20
0.25	64	64	80	100	100	128	128					0.25
0.30	64	64	80	80	100	128	128	160				0.30
0.35	64	64	64	80	100	100	128	160				0.35
0.40	64	64	64	80	100	100	128	160				0.40
0.45	48	48	64	80	80	100	128	128				0.45
0.50	48	48	64	80	80	100	128	128	160			0.50
0.60	48	48	64	64	80	100	100	128	160	160		0.60
0.70	48	48	48	64	80	80	100	128	128	160		0.70
0.80	40	40	48	64	80	80	100	128	128	160		0.80
0.90	40	40	48	64	64	80	100	100	128	160		0.90
1.00	40	40	48	64	64	80	100	100	128	160	160	1.00
1.10	40	40	48	48	64	80	80	100	128	128		1.10
1.20	40	40	48	48	64	80	80	100	128	128	160	1.20
1.30	40	40	40	48	64	64	80	100	100			1.30
1.40	40	40	40	48	64	64	80	100	100	128		1.40
1.50	40	40	40	48	64	64	80	100	100	128	160	1.50
1.60	40	40	40	48	64	64	80	100	100	128	160	1.60
1.70	40	32	40	48	48	64	80	80	100			1.70
1.80	40	32	40	48	48	64	80	80	100	128	128	1.80
1.90	40	32	40	48	48	64	80	80	100			1.90
2.00	40	32	40	48	48	64	80	80	100	128	128	2.00
2.50	40	32	40	40	48	64	64	80	100	100	128	2.50
3.00	40	32	32	40	48	48	64	80	80	100	128	3.00
3.50	24	24	32	40	40	48	64	64	80	100		3.50
4.00	24	24	32	40	40	48	64	64	80	100		4.00
5.00	24	24	32	32	40	48	48	64	80	100		5.00
6.00	24	24	24	32	40	40	48	64	64	100		6.00

Denture grossièreGrobe Verzahnung
Large teeth

DIN 1838

- Pour usinage profond ou grande longueur à fendre
- Für grosse Bearbeitungstiefen oder grosse Schlitzlängen
- For deep machining or long slots
- Avance par dent: 0.01 - 0.1 mm
- Vorschub pro Zahn: 0.01 - 0.1 mm
- Feed per tooth: 0.01 - 0.1 mm
- Revêtement sur demande
- Beschichtung auf Anfrage
- Coating on request



Fraises circulaires en métal dur

VHM-Kreissägeblätter

Solid carbide slitting saws

1102

MD
VHM
HMArt. N° ex:
1102-40/10-0.8 Z32

Denture grossière Grobe Verzahnung Large teeth												DIN 1838
D js12	15	20	25	30	40	50	63	80	100	125	160	D js12
d H7	5	5	8	8	10	13	16	22	22	22	32	d H7
Epaisseur Dicke Thickness E ±0.01	$Z = \frac{\text{Nombre de dents}}{\text{Zähnezahl}} = \frac{\text{Number of teeth}}{\text{Zahl}}$											Epaisseur Dicke Thickness E ±0.01
0.20	20	20	20	30	40							0.20
0.25	20	20	20	30	40							0.25
0.30	20	20	20	30	40		64					0.30
0.40	20	20	20	30	40	48	64					0.40
0.50	20	20	20	30	40	48	64					0.50
0.60	20	20	20	30	40	48	48	64	80			0.60
0.70	20	20	20	30	40	40	48	64	64			0.70
0.80	20	20	20	24	32	40	48	64	64	80		0.80
0.90	20	20	20	24	32	40	48	48	64	80		0.90
1.00	20	20	20	24	32	40	48	48	64	80	80	1.00
1.20	20	20	20	24	32	40	40	48	64	64	80	1.20
1.50	20	20	20	24	32	32	40	48	48	64	80	1.50
1.60	20	20	20	24	32	32	40	48	48	64		1.60
1.80	20	20	20	24	24	32	40	40	48	64		1.80
2.00	20	20	20	24	24	32	40	40	48	64	80	2.00
2.50	20	20	20	24	24	32	32	40	48	48	80	2.50
3.00	20	20	20	24	24	24	32	40	40	48	64	3.00
4.00	20	20	20	24	20	24	32	32	40	48		4.00
5.00	20	20	20	24	20	24	24	32	40	40		5.00
6.00	20	20	20	24	20	20	24	32	32	40		6.00

Denture extra-fine
Extra feine Verzahnung
Extra fine teeth

- Pour usinage de pièces fragiles ou fines
 - Avance par dent : 0.002 - 0.03 mm
 - Idéal pour le décolletage
 - Revêtement sur demande
- Für die Bearbeitung von empfindlichen oder dünnwandigen Werkstücken
 - Vorschub pro Zahn : 0.002 - 0.03 mm
 - Für Langdrehautomaten besonders empfehlenswert
 - Beschichtung auf Anfrage
- For machining of fragile or thin workpieces
 - Feed per tooth : 0.002 - 0.03 mm
 - Recommended on automatic lathes
 - Coating on request



MD
VHM
HM

Art. N° ex :
1103-15/5-0.2 Z80

Denture extra-fine Extra feine Verzahnung Extra fine teeth					
D js12	8	10	12	15	D js12
d H7	3	3	5	5	d H7
Epaisseur Dicke Thickness E ±0.005	Z = Nombre de dents Zähnezahl Number of teeth				Epaisseur Dicke Thickness E ±0.005
0.10	48	64	64	80	0.10
0.11	48	64	64	80	0.11
0.12	48	64	64	80	0.12
0.13	48	64	64	80	0.13
0.14	48	64	64	80	0.14
0.15	48	64	64	80	0.15
0.16	48	64	64	80	0.16
0.17	48	64	64	80	0.17
0.18	48	64	64	80	0.18
0.19	48	64	64	80	0.19
0.20	48	64	64	80	0.20

Fraises circulaires en métal dur

VHM-Kreissägeblätter

Solid carbide slitting saws

1103

Denture extra-fine Extra feine Verzahnung Extra fine teeth													
D js12	8	10	12	15	20	20	20	25	25	25	30	32	D js12
d H7	3	3	5	5	5	5	6	5	6	8	8	8	d H7
Epaisseur Dicke Thickness E ±0.01	$Z =$ <div> Nombre de dents Zähnezahl Number of teeth </div>												Epaisseur Dicke Thickness E ±0.01
0.10	**	**	**	**	*	100	80	80			*		0.10
0.15	**	**	**	**	*	100	80	80	100	100	*	80	0.15
0.20	**	**	**	**	*	100	80	80	100	100	*	80	0.20
0.25	48	64	64	80	80	100	80	80	100	100	*	80	0.25
0.30	48	64	64	80	80	100	80	80	100	100	100	80	0.30
0.35	48	64	64	80	80		80	80	100	100	100	80	0.35
0.40	48	64	64	80	80	100	80	80	100	100	100	80	0.40
0.50	48	64	64	80	80	100	80	80	100	100	100	80	0.50
0.60	48	64	64	80	80		80	80	100	100	100	80	0.60
0.70	48	64	64	80	80		80	80	100	100	100	80	0.70
0.80	48	64	64	80	80		80	80	100	100	100	80	0.80
0.90	48	64	64	80	80		80	80	100	100	100	80	0.90
1.00	48	64	64	80	80		80	80	100	100	100	80	1.00
1.20				80	80		80	80	100	100	100	80	1.20
1.50				80	80		80	80	100	100	100	80	1.50
2.00				80	80		80	80	100	100	100	80	2.00
2.50				80	80		80	80	100	100	100	80	2.50
3.00				80	80		80	80	100	100	100	80	3.00

D js12	35	40	40	40	40	45	45	50	50	63	80	D js12
d H7	8	8	8	10	10	8	8	10	13	16	16	d H7
0.10												0.10
0.15	96	100	160	100	160	100	160					0.15
0.20	96	100	160	100	160	100	160	100				0.20
0.25	96	100	160	*	160	100	160	100	120	120		0.25
0.30	96	100	160	*	160	100	160	100	120	120		0.30
0.35	96	100	160	*	160	100	160	100	120	120		0.35
0.40	96	100	160	*	160	100	160	100	120	120		0.40
0.50	96	100	160	100	160	100	160	100	120	120	128	0.50
0.60	96	100	160	100	160	100	160	100	120	120	128	0.60
0.70	96	100	160	100	160	100	160	100	120	120	128	0.70
0.80	96	100	160	100	160	100	160	100	120	120	128	0.80
0.90	96	100	160	100	160	100	160	100	120	120	128	0.90
1.00	96	100	160	100	160	100	160	100	120	120	128	1.00
1.20	96	100	160	100	160	100	160	100	120	120	128	1.20
1.50	96	100	160	100	160	100	160	100	120	120	128	1.50
2.00	96	100	160	100	160	100	160	100	120	120	128	2.00
2.50	96	100	160	100	160	100	160	100	120	120	128	2.50
3.00	96	100	160	100	160	100	160	100	120	120	128	3.00

** voir page 17.12 / siehe Seite 17.12 / see page 17.12

* voir type 1101 / siehe Typ 1101 / see type 1101

Denture fine
 Feine Verzahnung
 Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible

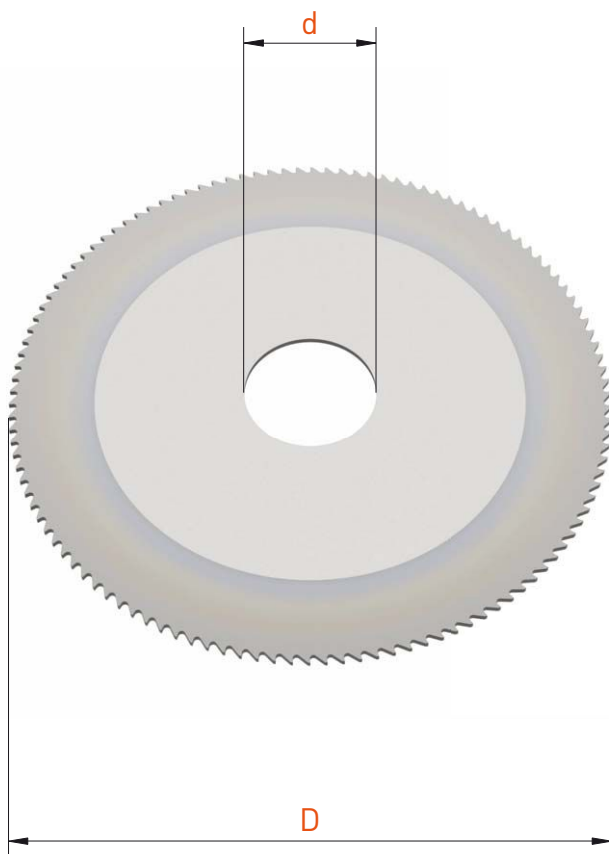
- Avance par dent :
0.005 - 0.05 mm

- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen

- Vorschub pro Zahn :
0.005 - 0.05 mm

- For low machining depth or short slots

- Feed per tooth :
0.005 - 0.05 mm



Fraises circulaires en métal dur optimisées pour INOX

VHM-Kreissägeblätter mit optimierter INOX-Verzahnung

Solid carbide slitting saws with optimized INOX teeth

1104

MD VHM HM	Art. N° ex : 1104-63/16-0.8 Z80-MAXINOX				
Denture fine Feine Verzahnung Fine teeth					DIN 1837
D js12	63	80	100	D js12	MAXINOX
d H7	16	22	22	d H7	
Epaisseur Dicke Thickness E ±0.01	Z = Nombre de dents Zähnezahl Number of teeth			Epaisseur Dicke Thickness E ±0.01	
0.80	80	100	120	0.80	●
1.00	80	100	120	1.00	●

Denture fine
Feine Verzahnung
Fine teeth

DIN 1837

- Pour usinage peu profond ou longueur à fendre faible

- Avance par dent:
0.005 - 0.05 mm

- Autre revêtement sur demande

- Für geringe Bearbeitungstiefen oder kurze Schlitzlängen

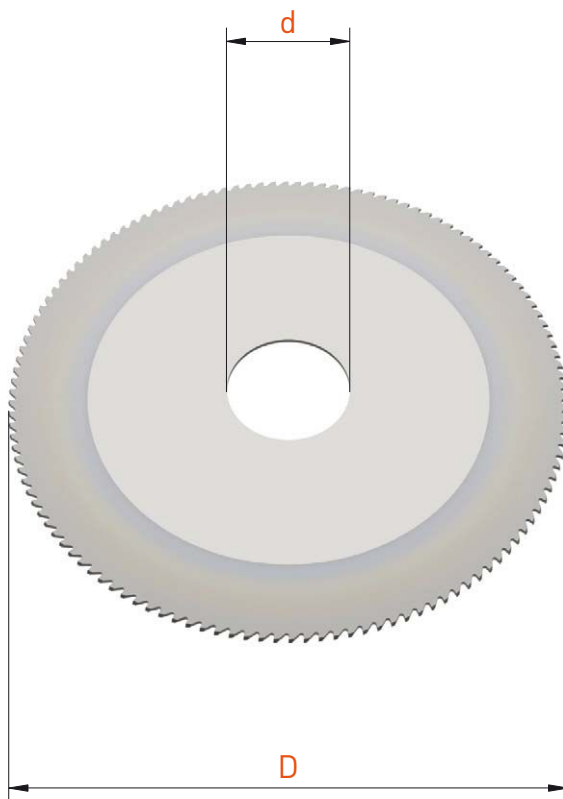
- Vorschub pro Zahn:
0.005 - 0.05 mm

- Andere Beschichtung auf Anfrage

- For low machining depth or short slots

- Feed per tooth:
0.005 - 0.05 mm

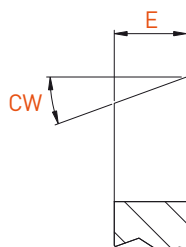
- Other coating on request



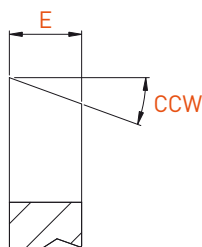
Fraises circulaires en métal dur avec un biais - CW-CCW

VHM-Kreissägeblätter mit Schräge - CW-CCW

Solid carbide angled slitting saws - CW-CCW

1105MD
VHM
HMArt. N° ex:
1105-100/22-0.6-CW20 Z160-N

Denture fine Feine Verzahnung Fine teeth				DIN 1837	
D js12	63	80	100	z	MAXINOX
d H7	16	22	22		
CW	20°	20°	20°		
<div>Epaisseur Dicke Thickness</div> <div>E ±0.01</div>				<div>Z =</div> <div>Nombre de dents Zähnezahl Number of teeth</div>	
0.60	100	128	160	●	●
0.80	100	128	128	●	●
1.00	100	100	128	●	●
1.20	80	100	128	●	●

MD
VHM
HMArt. N° ex:
1105-100/22-0.6-CCW20 Z160-N

Denture fine Feine Verzahnung Fine teeth				DIN 1837	
D js12	63	80	100	z	MAXINOX
d H7	16	22	22		
CCW	20°	20°	20°		
Epaisseur Dicke Thickness	Z = <div>Nombre de dents Zähnezahl Number of teeth</div>			z	MAXINOX
E ±0.01					
0.60	100	128	160		
0.80	100	128	128		
1.00	100	100	128		
1.20	80	100	128		

Prêt pour le taillage de la denture

Bereit zum Verzahnen
Ready for teeth grinding

- Finition poli miroir des deux faces avec dépouille
- Alésage tolérance H7
- Diamètre surdimensionné ~0.15 mm

- Hochglanzpoliert beidseitig mit Hohlsliff
- H7 Bohrung Toleranz
- Aussendurchmesser mit ~0.15 mm Übermass

- Mirror finish on both sides with clearance
- Bore with H7 tolerance
- Outside diameter with ~0.15 mm oversize



Disques en métal dur rectifiés
 Fertig geschliffene VHM-Ronden
 Fully ground solid carbide discs

Ø 8-35 mm

1106

MD
VHM
HM

Art. N° ex:
1106-20/6-0.8

Prêt pour le taillage de la denture Bereit zum Verzahnen Ready for teeth grinding													
D +0.20/+0.10	8	10	12	15	20	20	25	25	25	30	32	35	D +0.20/+0.10
d H7	3	3	5	5	5	6	5	6	8	8	8	8	d H7
Epaisseur Dicke Thickness E ±0.01	Epaisseurs et alésages spéciaux sur demande Andere Dicken und Bohrungen auf Anfrage Other thicknesses and bores on request												Epaisseur Dicke Thickness E ±0.01
0.10	●	●	●	●	●	●	●	●	●	●			0.10
0.15	●	●	●	●	●	●	●	●	●	●	●	●	0.15
0.20	●	●	●	●	●	●	●	●	●	●	●	●	0.20
0.25	●	●	●	●	●	●	●	●	●	●	●	●	0.25
0.30	●	●	●	●	●	●	●	●	●	●	●	●	0.30
0.35	●	●	●	●	●	●	●	●	●	●	●	●	0.35
0.40	●	●	●	●	●	●	●	●	●	●	●	●	0.40
0.45				●	●	●	●	●	●	●		●	0.45
0.50	●	●	●	●	●	●	●	●	●	●	●	●	0.50
0.60	●	●	●	●	●	●	●	●	●	●	●	●	0.60
0.70	●	●	●	●	●	●	●	●	●	●	●	●	0.70
0.80	●	●	●	●	●	●	●	●	●	●	●	●	0.80
0.90	●	●	●	●	●	●	●	●	●	●	●	●	0.90
1.00	●	●	●	●	●	●	●	●	●	●	●	●	1.00
1.10				●	●				●	●			1.10
1.20				●	●	●	●	●	●	●	●	●	1.20
1.30				●	●				●	●			1.30
1.40				●	●				●	●			1.40
1.50			●	●	●	●	●	●	●	●	●	●	1.50
1.60				●	●				●	●			1.60
1.70				●	●				●	●			1.70
1.80				●	●				●	●			1.80
1.90				●	●				●	●			1.90
2.00				●	●	●	●	●	●	●	●	●	2.00
2.50				●	●	●	●	●	●	●	●	●	2.50
3.00				●	●	●	●	●	●	●	●	●	3.00
3.50													3.50
4.00													4.00
5.00													5.00
6.00													6.00

Prêt pour le taillage de la denture

Bereit zum Verzahnen
Ready for teeth grinding

- Finition poli miroir des deux faces avec dépouille
- Alésage tolérance H7
- Diamètre surdimensionné ~0.15 mm

- Hochglanzpoliert beidseitig mit Hohlsliff
- H7 Bohrung Toleranz
- Aussendurchmesser mit ~0.15 mm Übermass

- Mirror finish on both sides with clearance
- Bore with H7 tolerance
- Outside diameter with ~0.15 mm oversize



Disques en métal dur rectifiés
 Fertig geschliffene VHM-Ronden
 Fully ground solid carbide discs

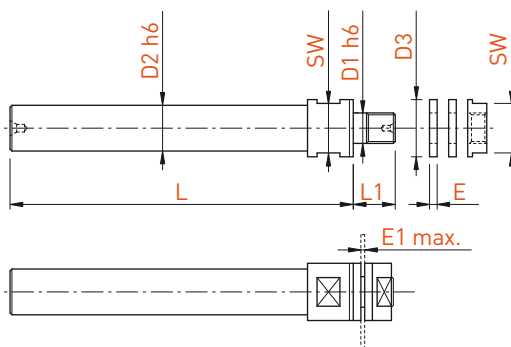
Ø 40-160 mm

1106

MD
VHM
HM

Art. N° ex:
1106-63/16-0.35

Prêt pour le taillage de la denture Bereit zum Verzahnen Ready for teeth grinding													
D +0.20/+0.10	40	40	45	50	50	63	80	80	100	125	160	160	D +0.20/+0.10
d H7	8	10	8	10	13	16	16	22	22	22	22	32	d H7
Epaisseur Dicke Thickness E ±0.01	Epaisseurs et alésages spéciaux sur demande Andere Dicken und Bohrungen auf Anfrage Other thicknesses and bores on request												Epaisseur Dicke Thickness E ±0.01
0.10		•											0.10
0.15	•	•	•										0.15
0.20	•	•	•	•	•	•							0.20
0.25	•	•	•	•	•	•							0.25
0.30	•	•	•	•	•	•		•					0.30
0.35	•	•	•	•	•	•		•					0.35
0.40	•	•	•	•	•	•		•					0.40
0.45	•	•		•	•	•		•					0.45
0.50	•	•	•	•	•	•	•	•					0.50
0.60	•	•	•	•	•	•	•	•					0.60
0.70	•	•	•	•	•	•	•	•					0.70
0.80	•	•	•	•	•	•	•	•					0.80
0.90	•	•	•	•	•	•	•	•					0.90
1.00	•	•	•	•	•	•	•	•					1.00
1.10		•			•	•		•					1.10
1.20	•	•	•	•	•	•	•	•					1.20
1.30	•	•			•	•		•					1.30
1.40	•	•			•	•		•					1.40
1.50	•	•	•	•	•	•	•	•					1.50
1.60		•			•	•							1.60
1.70		•			•	•							1.70
1.80		•			•	•							1.80
1.90		•			•	•							1.90
2.00	•	•	•	•	•	•							2.00
2.50	•	•	•	•	•	•							2.50
3.00	•	•	•	•	•	•							3.00
3.50													3.50
4.00													4.00
5.00													5.00
6.00													6.00



Type 2810	Rotation à droite (filet à droite) Drehrichtung rechts (Rechtsgewinde) Right hand rotation (right hand thread)							
	D1 h6	D2 h6	D3	L	L1	E	SW	Art. N°
	5.0	6.0	10.0	70	9.0	2.0	8.0	2810-5-6
	5.0	10.0	10.0	80	9.0	2.0	8.0	2810-5-10
	6.0	10.0	12.0	80	9.5	2.0	10.0	2810-6-10
	8.0	10.0	15.0	80	10.0	2.0	13.0	2810-8-10
	8.0	12.0	15.0	90	10.0	2.0	13.0	2810-8-12
	10.0	6.0	18.0	80	10.5	2.0	15.0	2810-10-6
	10.0	10.0	18.0	80	10.5	2.0	15.0	2810-10-10
	10.0	16.0	18.0	100	10.5	2.0	15.0	2810-10-16
	13.0	16.0	22.0	110	11.0	2.0	19.0	2810-13-16
	16.0	20.0	26.0	120	12.0	2.0	22.0	2810-16-20
	22.0	16.0	32.0	120	12.0	2.0	27.0	2810-22-16

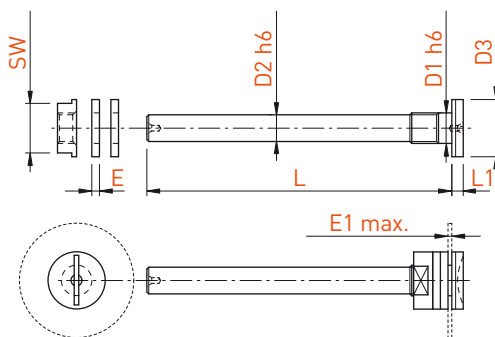
Type 2811	Rotation à droite (filet à droite) Drehrichtung rechts (Rechtsgewinde) Right hand rotation (right hand thread)							
	D1 h6	D2 h6	D3	L	L1	E	SW	Art. N°
	16.0	10.0	22.0	80	8.0	2.0	19.0	2811-16-10

Type 2815	Pour petites fraises circulaires (filet à droite) Für kleine Kreissägeblätter (Rechtsgewinde) For small slitting saws (right hand thread)							
	D1 h6	D2 h6	D3	L	L1	E	SW	Art. N°
	3.0	5.0	5.0	60	7.0	1.0	4.0	2815-3-5
	5.0	6.0	7.5	70	7.0	1.0	6.0	2815-5-6

Tasseaux porte-fraise avec serrage arrière

Fräsdorne mit rückseitiger Klemmung

Milling arbors with rear clamping

2820 / 1820

Type 2820	Rotation à droite (filet à gauche) Drehrichtung rechts (Linksgewinde) Right hand rotation (left hand thread)							Art. N°
	D1 h6	D2 h6	D3	L	L1	E	SW	
	5.0	4.0	10.0	50	3.0	2.0	8.0	2820-5-4
	6.0	5.0	12.0	60	3.0	2.0	10.0	2820-6-5
	8.0	6.0	15.0	80	3.0	2.0	13.0	2820-8-6
	8.0	7.0	15.0	80	3.0	2.0	13.0	2820-8-7
	10.0	6.0	18.0	70	3.5	2.0	15.0	2820-10-6
	10.0	8.0	18.0	90	3.5	2.0	15.0	2820-10-8
	13.0	10.0	22.0	110	3.5	2.0	19.0	2820-13-10
	16.0	12.0	26.0	120	3.5	2.0	22.0	2820-16-12

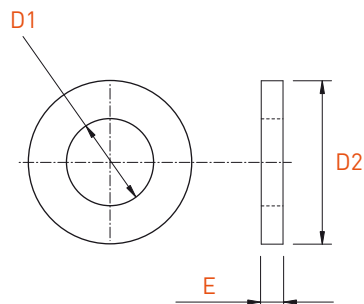
Type 1820	Rotation à gauche (filet à droite) Drehrichtung links (Rechtsgewinde) Left hand rotation (right hand thread)							Art. N°
	D1 h6	D2 h6	D3	L	L1	E	SW	
	5.0	4.0	10.0	50	3.0	2.0	8.0	1820-5-4
	6.0	5.0	12.0	60	3.0	2.0	10.0	1820-6-5
	8.0	6.0	15.0	70	3.0	2.0	13.0	1820-8-6
	10.0	6.0	18.0	70	3.5	2.0	15.0	1820-10-6

Chaque tasseau est livré avec 2 entretoises et 1 écrou

Jeder Fräsdorn wird mit 2 Abstandsrings und 1 Mutter geliefert

2 distance rings and 1 nut are included with each arbor

Entretoise Abstandsring Ring				
Correspondance tasseaux Passende Fräsdorne Matching milling arbors		E	D2	Art. N°
Type	D1			
1820	5	1.0	10.0	1820-5-A1
		2.0		1820-5-A2
	6	1.0	12.0	1820-6-A1
		2.0		1820-6-A2
	8	1.0	15.0	1820-8-A1
		2.0		1820-8-A2
	10	1.0	18.0	1820-10-A1
		2.0		1820-10-A2
2810	5	1.0	10.0	2810-5-A1
		2.0		2810-5-A2
	6	1.0	12.0	2810-6-A1
		2.0		2810-6-A2
	8	1.0	15.0	2810-8-A1
		2.0		2810-8-A2
	10	1.0	18.0	2810-10-A1
		2.0		2810-10-A2
	13	1.0	22.0	2810-13-A1
		2.0		2810-13-A2
	16	1.0	26.0	2810-16-A1
		2.0		2810-16-A2
	22	1.0	32.0	2810-22-A1
		2.0		2810-22-A2
2811	16	1.0	22.0	2811-16-A1
		2.0		2811-16-A2
2815	3	1.0	5.0	2815-3-A1
	5		7.5	2815-5-A1
2820	5	1.0	10.0	2820-5-A1
		2.0		2820-5-A2
	6	1.0	12.0	2820-6-A1
		2.0		2820-6-A2
	8	1.0	15.0	2820-8-A1
		2.0		2820-8-A2
	10	1.0	18.0	2820-10-A1
		2.0		2820-10-A2
	13	1.0	22.0	2820-13-A1
		2.0		2820-13-A2
	16	1.0	26.0	2820-16-A1
		2.0		2820-16-A2

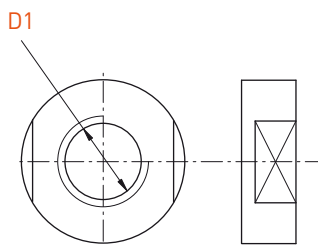


Pièces de rechange

Ersatzteile

Spare parts

18-B / 28-B

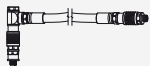


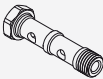
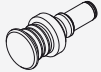
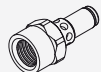
Écrou Mutter Nut			
Correspondance tasseaux Passende Fräsdorne Matching milling arbors			
Type	D1	M	Art. N°
1820	5.0	M5x0.5	1820-5-B
	6.0	M6x0.5	1820-6-B
	8.0	M8x0.75	1820-8-B
	10.0	M10x0.75	1820-10-B
2810	5.0	M5x0.5	2810-5-B
	6.0	M6x0.5	2810-6-B
	8.0	M8x0.75	2810-8-B
	10.0	M10x0.75	2810-10-B
	13.0	M13x1	2810-13-B
	16.0	M16x1	2810-16-B
2811	22.0	M22x1	2810-22-B
2815	16.0	M16x1	2811-16-B
	3.0	M3x0.5	2815-3-B
2820	5.0	M5x0.5	2815-5-B
	5.0	M5x0.5	2820-5-B
	6.0	M6x0.5	2820-6-B
	8.0	M8x0.75	2820-8-B
	10.0	M10x0.75	2820-10-B
	13.0	M13x1	2820-13-B
	16.0	M16x1	2820-16-B

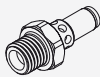
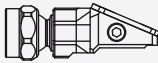
JET-Line

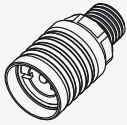


APPLITEC
CUTTING TOOLS

Infos et avantages Infos und Vorteile Infos and advantages			> 18.05
JKIT			> 18.08
STARTER-KIT			> 18.14
JS	Raccords rapides Schnellkupplungen Quick connectors		> 18.16
JSFA	Raccords rapides Banjos avec régulateur de débit Schnellkupplungen-Banjos mit Durchflussregler Banjo quick couplings with flow regulators		> 18.17
JSR	Raccords rapides rotatifs Drehbare Schnellkupplungen Rotating quick couplings		> 18.18
JO	Joints d'étanchéité en cuivre Kupferdichtungsringe Copper sealing gaskets		> 18.19
JTS-AC	Tubes de distribution flexibles en acier avec fiche de connexion rapide Stahlflex-Verteilschläuche mit Schnellkupplungsstecker Flexible distribution tubes of steel with quick connection plug		> 18.20
JTX-AC	Tubes de distribution flexibles en acier inoxydable tressé Rostfreier Stahlflex-Schlauch Flexible distribution tubes of stainless steel braiding		> 18.21
JT-CU	Tubes de distribution en cuivre Kupferrohre Copper distribution tubes		> 18.22
JRMF	Connecteurs mâles/femelles Gewindeadapter Innen und Außengewinde Male/female connectors		> 18.23
JRFF	Connecteurs femelles/femelles Gewindeadapter Innengewinde Female connectors		> 18.25

JRMM	Connecteurs mâles/mâles Gewintheadapter Außengewinde Male connectors		> 18.26
JN	Écrous d'étanchéité Dichtungsmuttern Sealing nuts		> 18.27
JNG	Bagues d'étanchéité Dichtungsringe Sealing rings		> 18.28
JCBF	Banjos courts femelles Kurzer Innengewinde-Banjo Short female Banjo		> 18.29
JCBM	Banjos courts mâles Kurze Außengewinde-Banjo Short male Banjo		> 18.30
JABF	Banjos longs droits femelles Lange Innengewinde-Banjo Long straight female Banjo		> 18.31
JABF-45°	Banjos longs coudés femelles Lange 45° Innengewinde-Banjos Long curved female banjos		> 18.32
JEB	Vis Banjo Hohlschrauben einfach Banjo screws		> 18.33
JEB-DUO	Vis Banjo doubles Hohlschrauben doppelt Double banjo screws		> 18.34
JVB	Fiches de verrouillage Verschlußstecker Sealing connecting plugs		> 18.35
JVF	Fiches de connexion Innengewindestecker Connecting plugs		> 18.36
JWF	Fiches de connexion fixes femelles Innengewindestecker mit Verdrehsicherung Female positioning connection plugs		> 18.37

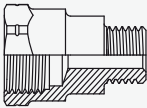
JWM	Fiches de connexion fixes mâles Aussengewindestecker mit Verdrehsicherung Male positioning connection plugs		> 18.38
JK	Blocs de distribution Kühlmittelverteiler Distribution blocks		> 18.39
JBB	Bouchons d'étanchéité Verschlußstopfen Sealing plugs		> 18.40
Systèmes articulés avec arrosage Gelenksysteme mit Kühlung Articulated systems with coolant			
JKIT-AR	Kits articulés avec buse d'arrosage Gelenkkits mit Kühlungsdüse Articulated kits with coolant nozzles		> 18.41
JKIT-CU	Kits tubes en cuivre avec buse d'arrosage Kits Kupferrohr mit Kühlungsdüse Kit copper tubes with coolant nozzle		> 18.43
JAR	Systèmes articulés Gelenksysteme Articulated systems		> 18.44
JRMM-AR	Connecteurs mâles/mâles Anschlüsse Außengewinde Male connectors		> 18.45
JJ-AR	Buses Düse Nozzle		> 18.46
JJ-AR6	Buses plates Flachdüse Flat nozzle		> 18.47
Accessoires Zubehöre Accessories			> 18.48

Changement rapide
Schnellwechselsystem
Quick change

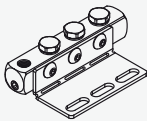
Réduit le temps de préparation et garantit le repositionnement des sorties de liquide de refroidissement
Verkürzung der Rüstzeiten bei gleicher Position der Kühlmittelauslässe
Reduces set-up time and ensures repositioning of coolant outlets

Refroidissement à haute pression
Hochdruckkühlung
High-pressure cooling

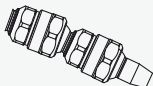
Tuyaux flexibles renforcés garantis jusqu'à 220 bar
Verstärkte Schläuche bis 220 bar garantiert
Reinforced flexible hoses guaranteed up to 220 bar

Facilité d'adaptation
Einfache Anpassungsmöglichkeiten
Easy to adapt

Adaptateurs disponibles pour filetage M5, M6, M8X1 et BSP1/8
Adapter für M5, M6, M8X1 und BSP1/8 erhältlich
Adaptors available for M5, M6, M8X1, and BSP1/8 thread

Multiples possibilités de connexion
Vielfältige Anschlussoptionen
Large range of connection possibilities

Vaste gamme de connecteurs pour tous les types de machines
Grosse Auswahl von Anschlüsse für alle Maschinentypen
Huge range of possible coolant connections to suit all machine types

Système articulé
Gelenksystem
Articulated system

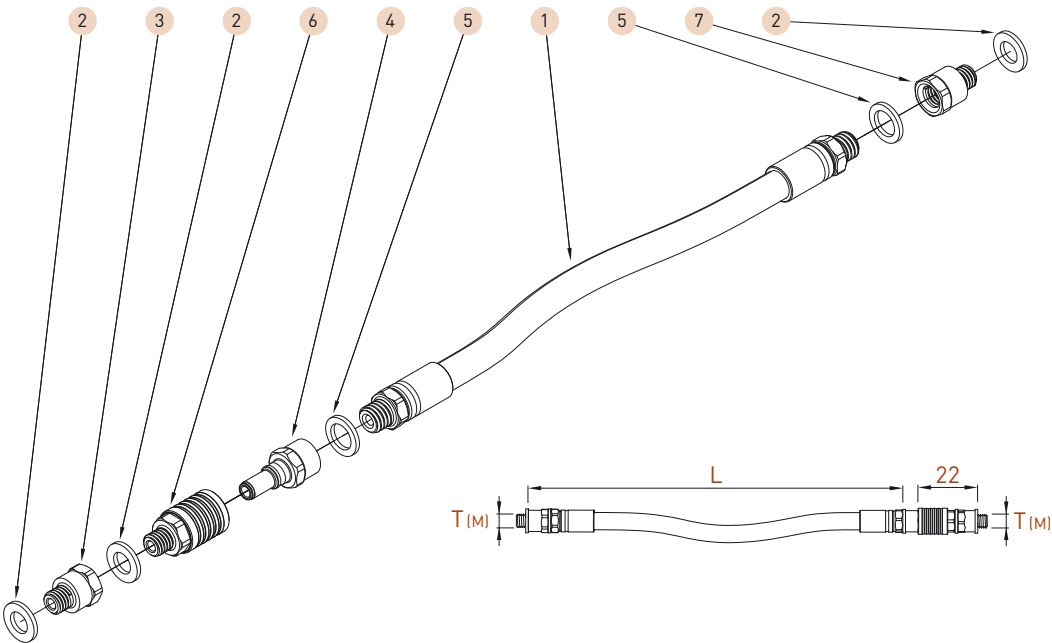
Module flexible d'arrosage en acier pour une meilleure stabilité
Flexibler Stahlkühlmittelmodul für eine bessere Stabilität
Flexible steel coolant unit for better stability

Durée de vie prolongée et performance de coupe optimisée par la maîtrise du flux de copeaux
Verlängerte Werkzeugstandzeit und optimierte Schnittleistung durch kontrollierten Spanfluss
Extended tool life and optimized cutting performance through controlled chip flow

JKIT-M5-D4-...-QF

M5
Quick / Fix

Kits de connexion
Verbindungskits
Connection kits



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M6-L...
2	3	J0-M5
3	1	JRMF-M5-M5-L6.5
4	1	JVF-M6-D4
5	2	J0-M6
6	1	-M5-D4
7	1	JRMF-M5-M6-L7.5

D	T (M)	L	Art. N°
4	M5	102	JKIT-M5-D4-102-QF
		203	JKIT-M5-D4-203-QF
		305	JKIT-M5-D4-305-QF
		406	JKIT-M5-D4-406-QF

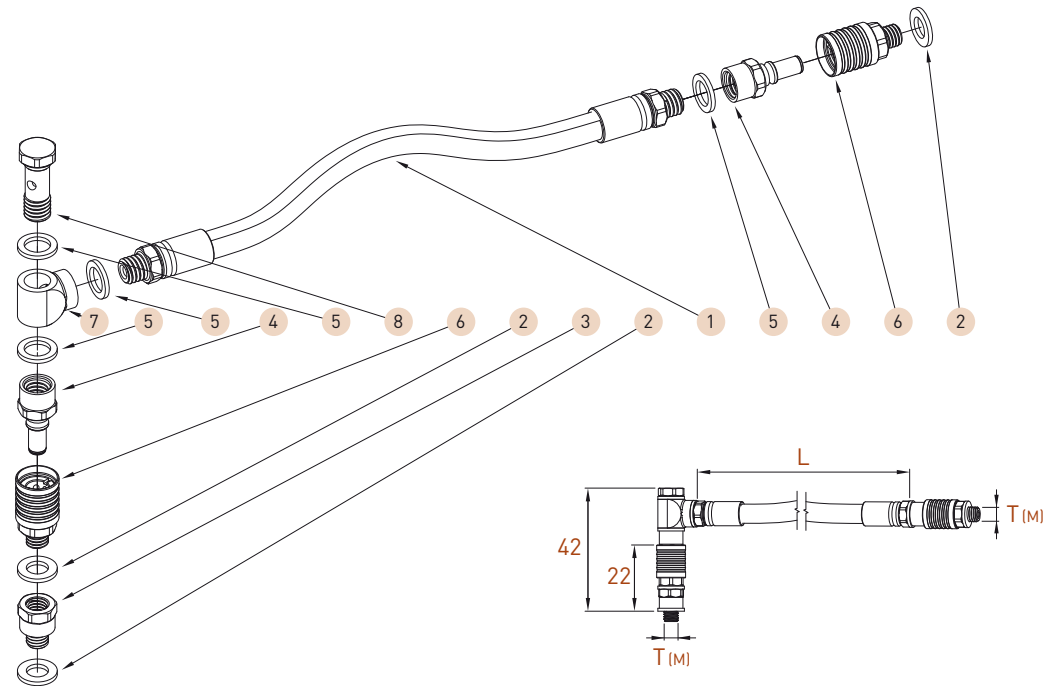
Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder M5
	ISO-Line 8X10 MODU-Line TOP-Line 8X10 TURN-Line 8X10

Options		
	Art. N°	Art. N°
	JK-M5-1010-4T	C-SW8-E2.5
	voir page 18.39 siehe Seite 18.39 see page 18.39	voir page 18.51 siehe Seite 18.51 see page 18.51

Kits de connexion
Verbindungskits
Connection kits

M5
Quick / Quick

JKIT-M5-D4-...-QQ



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M6-L...
2	3	JO-M5
3	1	JRMF-M5-M5-L6.5
4	2	JVF-M6-D4
5	4	JO-M6
6	2	JS-M5-D4
7	1	JCBF-Ø6-M6
8	1	JEB-M6-L19

D	T (M)	L	Art. N°
4	M5	102	JKIT-M5-D4-102-QQ
		203	JKIT-M5-D4-203-QQ
		305	JKIT-M5-D4-305-QQ
		406	JKIT-M5-D4-406-QQ

Compatibilité
Kompatibilität
Compatibility

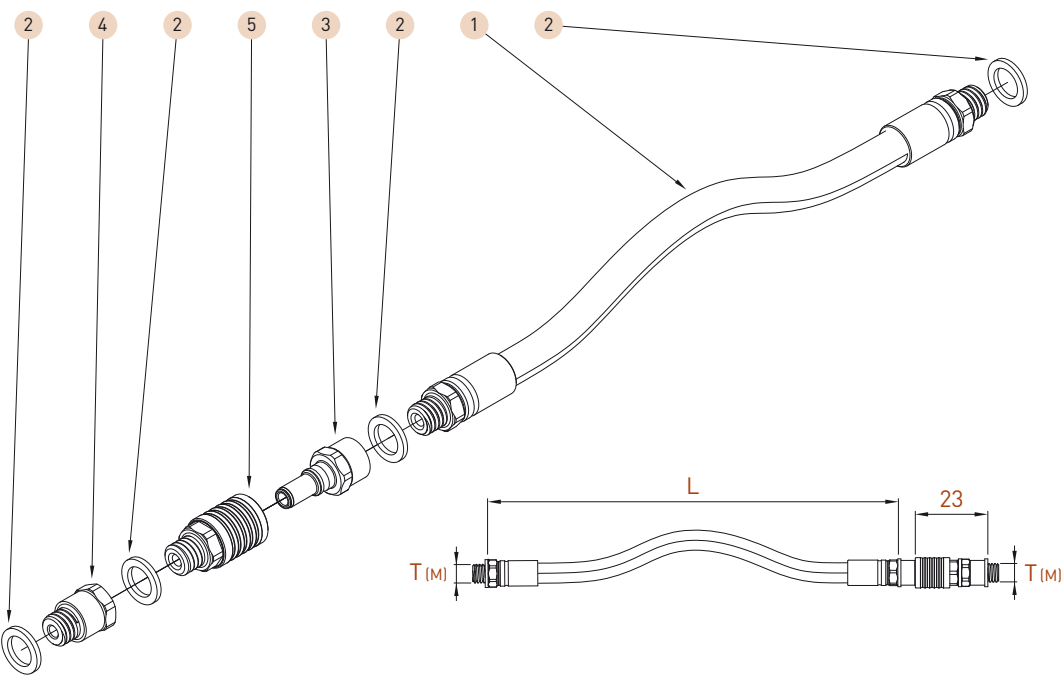
Porte-outil/Halter/Holder M5

ISO-Line 8X10
MODU-Line
TOP-Line 8X10
TURN-Line 8X10

Options

Art. N°
JK-M5-1010-4T
voir page 18.39
siehe Seite 18.39
see page 18.39

Art. N°
C-SW8-E2.5
voir page 18.51
siehe Seite 18.51
see page 18.51



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M6-L...
2	4	JO-M6
3	1	JVF-M6-D4
4	1	JRMF-M6-M6-L7.5
5	1	JS-M6-D4

D	T (M)	L	Art. N°
4	M6	102	JKIT-M6-D4-102-QF
		203	JKIT-M6-D4-203-QF
		305	JKIT-M6-D4-305-QF
		406	JKIT-M6-D4-406-QF

Compatibilité
Kompatibilität
Compatibility


Porte-outil/Halter/Holder M6

Options


Art. N°
JK-M6-1010-4T
voir page 18.39
siehe Seite 18.39
see page 18.39

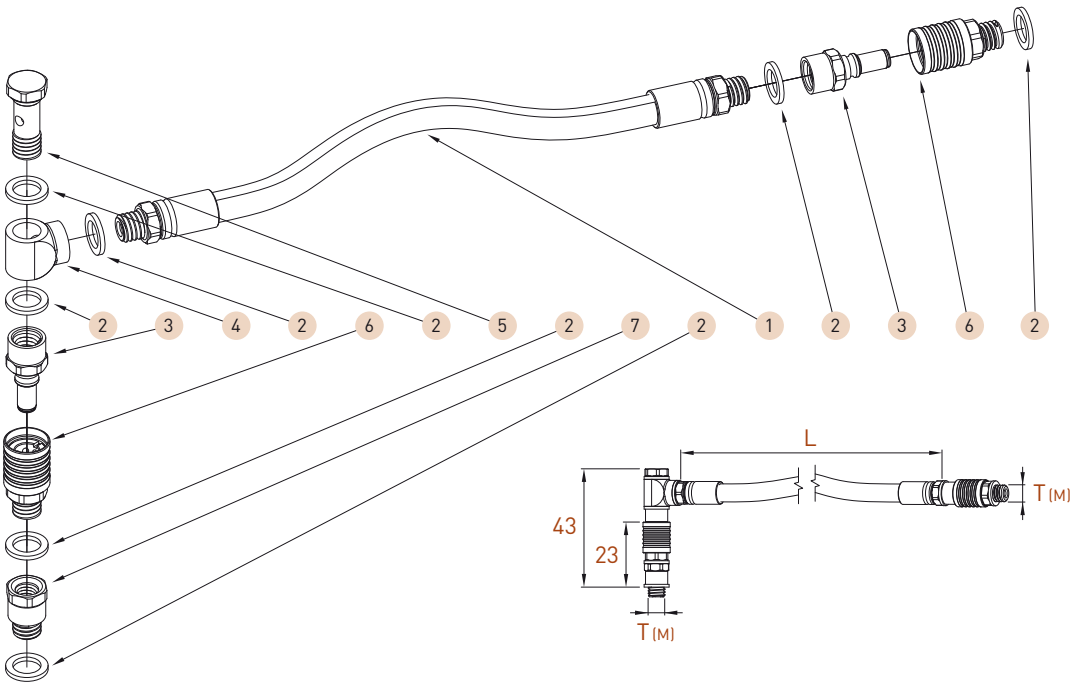

Art. N°
C-SW8-E2.5
voir page 18.51
siehe Seite 18.51
see page 18.51

Kits de connexion

Verbindungskits
Connection kits

M6
Quick / Quick

JKIT-M6-D4-...-QQ



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M6-L...
2	7	JO-M6
3	2	JVF-M6-D4
4	1	JCBF-Ø6-M6
5	1	JEB-M6-L19
6	2	JS-M6-D4
7	1	JRMF-M6-M6-L7.5

D	T (M)	L	Art. N°
4	M6	102	JKIT-M6-D4-102-QQ
		203	JKIT-M6-D4-203-QQ
		305	JKIT-M6-D4-305-QQ
		406	JKIT-M6-D4-406-QQ

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder M6

Options



Art. N°
JK-M6-1010-4T
voir page 18.39
siehe Seite 18.39
see page 18.39

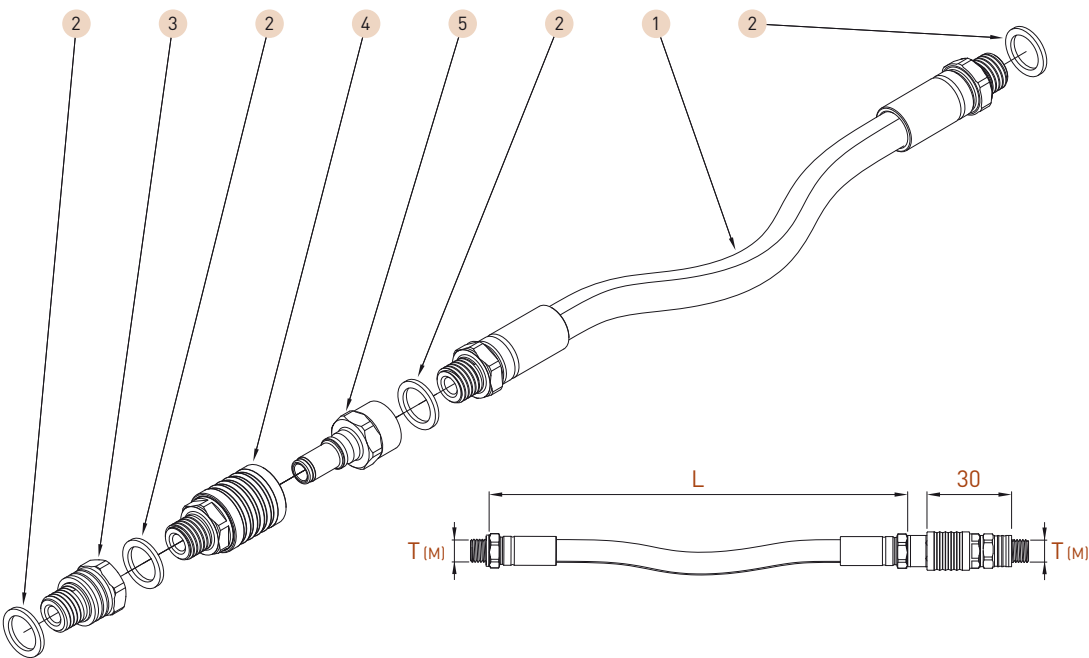


Art. N°
C-SW8-E2.5
voir page 18.51
siehe Seite 18.51
see page 18.51

JKIT-M8X1-D6-...-QF

M8X1
Quick / Fix

Kits de connexion
Verbindungskits
Connection kits



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M8X1-L...
2	4	JO-M8X1
3	1	JRMF-M8X1-M8X1-L9.5
4	1	JS-M8X1-D6
5	1	JVF-M8X1-D6

D	T (M)	L	Art. N°
6	M8X1	102	JKIT-M8X1-D6-102-QF
		203	JKIT-M8X1-D6-203-QF
		305	JKIT-M8X1-D6-305-QF
		406	JKIT-M8X1-D6-406-QF

Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder M8X1 CUT-Line 16X16 - 25X25 ECO-Line 10X12 - 20X20 EVOCUT-Line 10X12 - 20X20 IN-Line Ø12 - Ø28 ISO-Line 10X10 - 20X20 MODU-Line PRO-Line 10X12 - 20X20 TOP-Line 10X12 - 20X20 TURN-Line 10X12 - 20X20

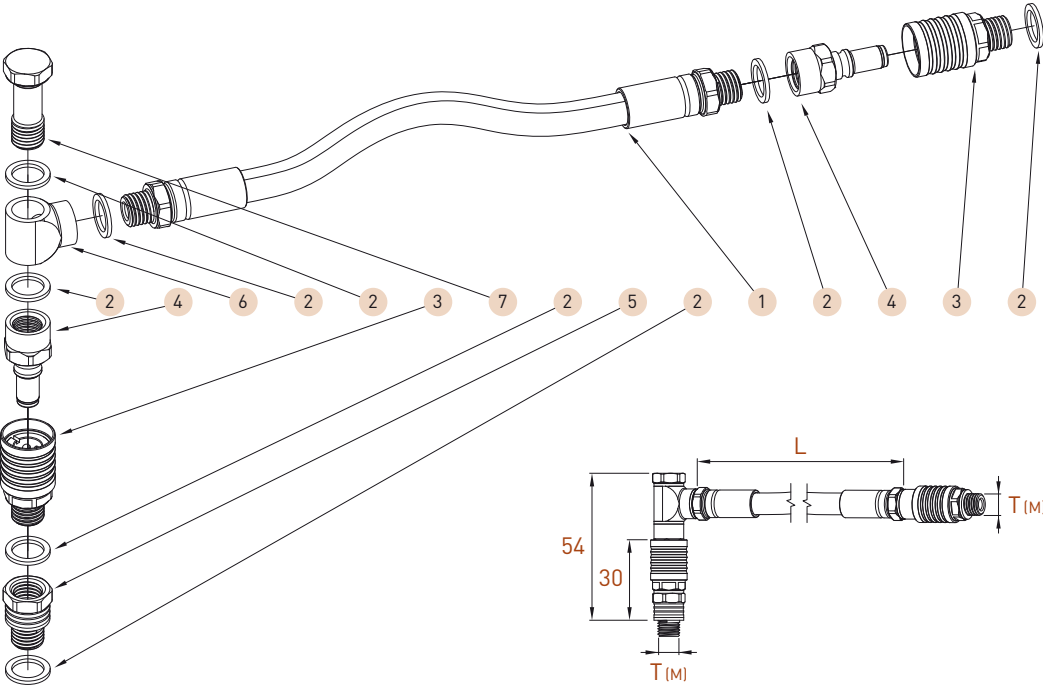
Options		
	Art. N° JK-M8X1-1515-4T voir page 18.39 siehe Seite 18.39 see page 18.39	Art. N° C-SW11-E3.7 voir page 18.51 siehe Seite 18.51 see page 18.51

Kits de connexion

Verbindungskits
Connection kits

M8X1
Quick / Quick

JKIT-M8X1-D6-...-QQ

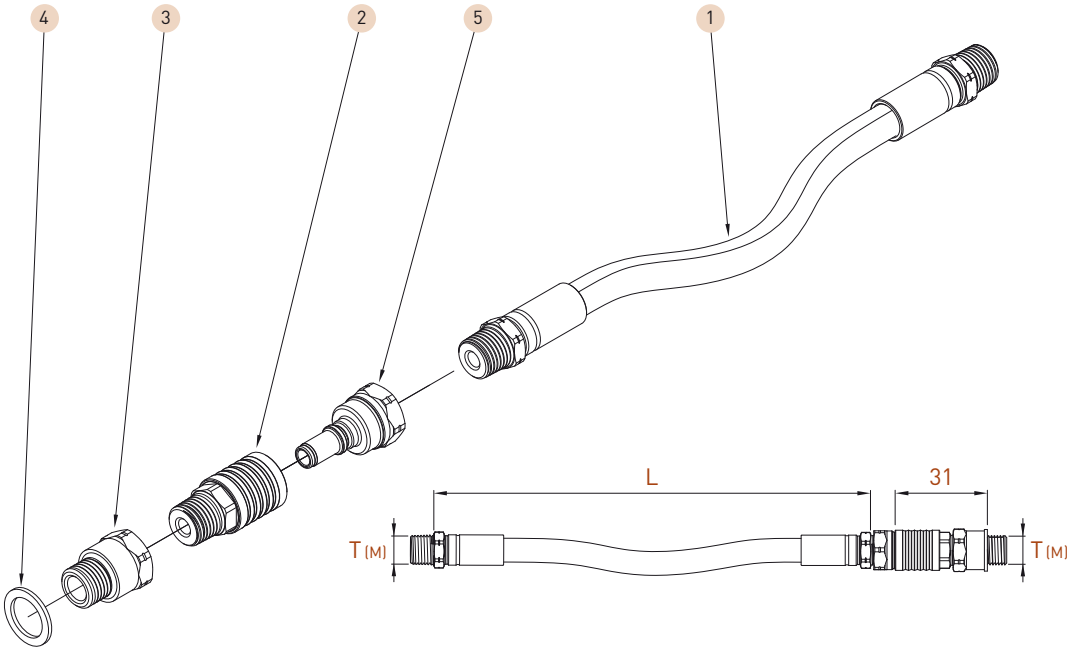


Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-M8X1-L...
2	7	JO-M8X1
3	2	JS-M8X1-D6
4	2	JVF-M8X1-D6
5	1	JRMF-M8X1-M8X1-L9.5
6	1	JCBF-Ø8-M8X1
7	1	JEB-M8X1-L24

D	T (M)	L	Art. N°
6	M8X1	102	JKIT-M8X1-D6-102-QQ
		203	JKIT-M8X1-D6-203-QQ
		305	JKIT-M8X1-D6-305-QQ
		406	JKIT-M8X1-D6-406-QQ

Compatibilité Kompatibilität Compatibility	
	Porte-outil/Halter/Holder M8X1 CUT-Line 16X16 - 25X25 ECO-Line 10X12 - 20X20 EVOCUT-Line 10X12 - 20X20 IN-Line Ø12 - Ø28 ISO-Line 10X10 - 20X20 MODU-Line PRO-Line 10X12 - 20X20 TOP-Line 10X12 - 20X20 TURN-Line 10X12 - 20X20

Options		
	Art. N° JK-M8X1-1515-4T voir page 18.39 siehe Seite 18.39 see page 18.39	Art. N° C-SW11-E3.7 voir page 18.51 siehe Seite 18.51 see page 18.51



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-BSPT1/8-L...
2	1	JS-BSPT1/8-D6
3	1	JRMF-BSP1/8-BSP1/8-L10.5
4	1	J0-BSP1/8
5	1	JVF-BSP1/8-D6

D	T (M)	L	Art. N°
6	BSP1/8	102	JKIT-BSP1/8-D6-102-QF
		203	JKIT-BSP1/8-D6-203-QF
		305	JKIT-BSP1/8-D6-305-QF
		406	JKIT-BSP1/8-D6-406-QF

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder BSP1/8

Options



Art. N°
JK-BSP1/8-1515-4T
voir page 18.39
siehe Seite 18.39
see page 18.39



Art. N°
C-SW11-E3.7
voir page 18.51
siehe Seite 18.51
see page 18.51

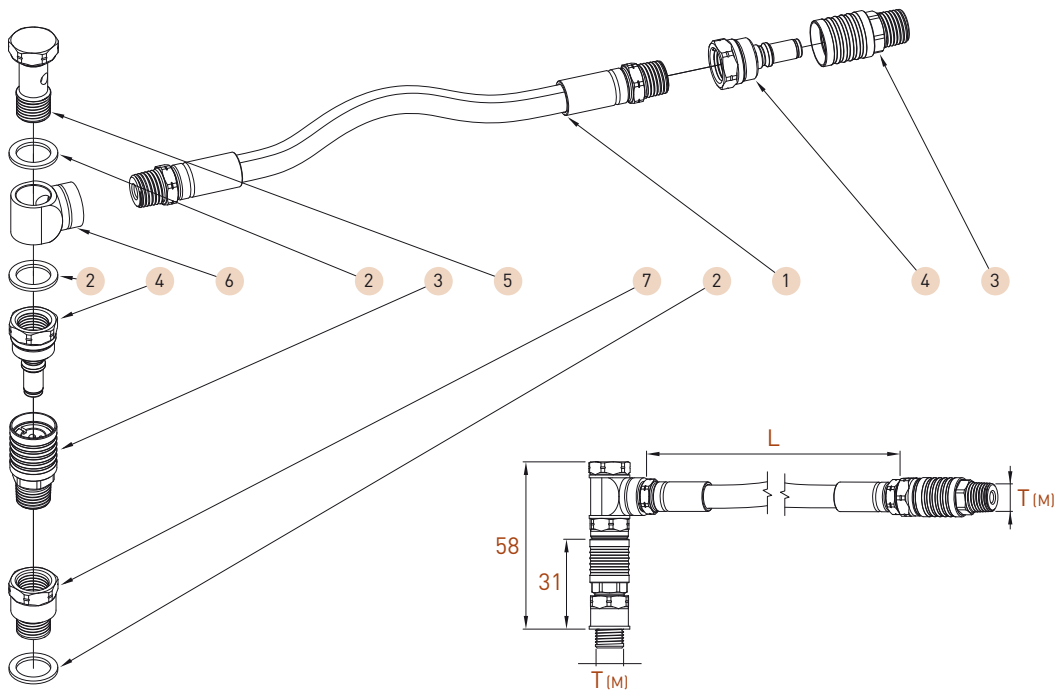
Kits de connexion

Verbindungskits
Connection kits

BSP1/8

Quick / Quick

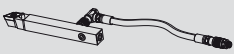
JKIT-BSP1/8-D6-...-QQ



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JTX-AC-BSPT1/8-L...
2	3	JO-BSP1/8
3	2	JS-BSPT1/8-D6
4	2	JVF-BSP1/8-D6
5	1	JEB-BSP1/8-L26
6	1	JCBF-Ø10-BSP1/8
7	1	JRMF-BSP1/8-BSP1/8-L10.5

D	T (M)	L	Art. N°
6	BSP1/8	102	JKIT-BSP1/8-D6-102-QQ
		203	JKIT-BSP1/8-D6-203-QQ
		305	JKIT-BSP1/8-D6-305-QQ
		406	JKIT-BSP1/8-D6-406-QQ

Compatibilité
Kompatibilität
Compatibility



Porte-outil/Halter/Holder BSP1/8

Options



Art. N°
JK-BSP1/8-1515-4T
voir page 18.39
siehe Seite 18.39
see page 18.39



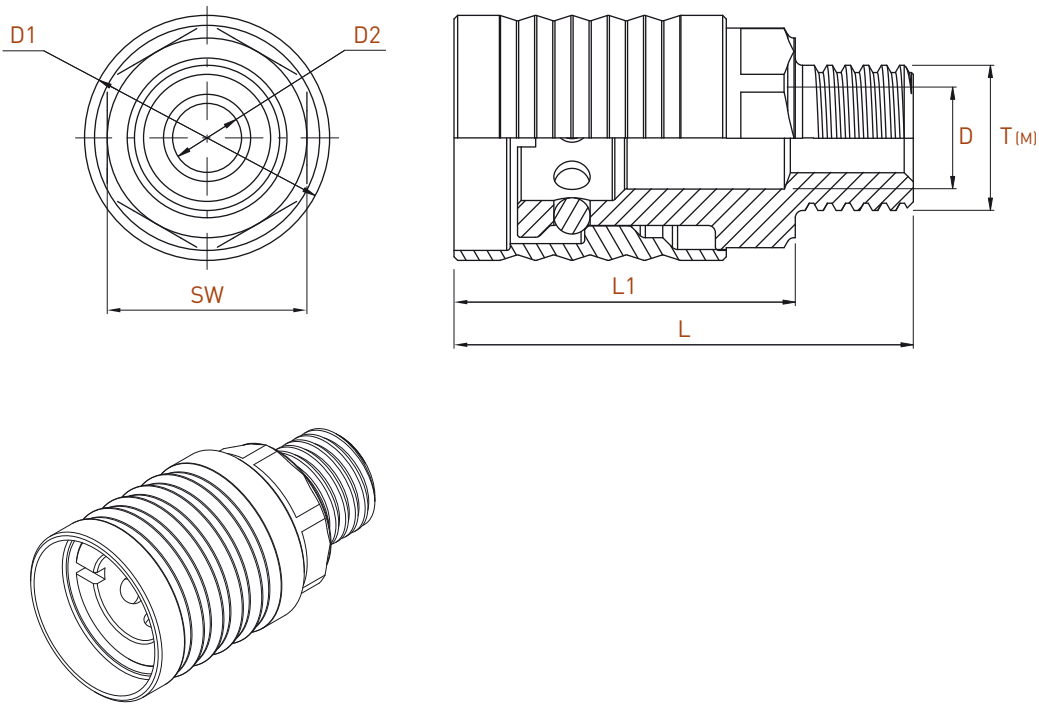
Art. N°
C-SW11-E3.7
voir page 18.51
siehe Seite 18.51
see page 18.51



Qty	Composition du kit Zusammensetzung Kit Kit composition	Art. N°
2	C-SW8-E2.5	JSTART-D4
4	JO-M6	
2	JO-M5	
2	JK-M6-1010-4T	
10	JS-M6-D4	
2	JTX-AC-M6-102	
2	JTX-AC-M6-203	
2	JTX-AC-M6-305	
2	JTX-AC-M6-406	
10	JVF-M6-D4	
2	JVB-D4	
2	JWF-M6-D4	
2	JRMF-M6-M6-L7.5	
2	JRMF-M6-M6-L12.5	
2	JRMF-M6-M6-L17.5	
10	JRMF-M5-M6-L7.5	
2	JRFF-M6-L9.0	
5	JCBF-Ø6-M6	
2	JABF-Ø6-M6-45°	
5	JEB-M6-L19	
2	JEB-M6-L30-DUO	
1	JT-CU-M6-102	
1	JT-CU-M6-203	



Qty	Composition du kit Zusammensetzung Kit Kit composition	Art. N°
2	C-SW11-E3.7	JSTART-D6
4	JO-M8X1	
2	JK-M8X1-1515-4T	
10	JS-M8X1-D6	
2	JTX-AC-M8X1-102	
2	JTX-AC-M8X1-203	
2	JTX-AC-M8X1-305	
2	JTX-AC-M8X1-406	
10	JVF-M8X1-D6	
2	JVB-D6	
2	JWF-M8X1-D6	
2	JRMF-M8X1-M8X1-L9.5	
2	JRMF-M8X1-M8X1-L14.5	
2	JRMF-M8X1-M8X1-L19.5	
10	JRMF-BSPT1/8-M8X1-L9.0	
2	JRFF-M8X1-L12.0	
5	JCBF-Ø8-M8X1	
2	JABF-Ø8-M8X1-45°	
5	JEB-M8X1-L24	
2	JEB-M8X1-L38-DUO	
1	JT-CU-M8X1-102	
1	JT-CU-M8X1-203	



T (M)	L	L1	SW	D	D1	D2	Art. N°
M5	18	14	8	4	9.8	2.3	JS-M5-D4
M6	18	14	8	4	9.8	2.3	JS-M6-D4
M8X1KEG	20	14	8	4	9.8	2.3	JS-M8X1KEG-D4
M8X1	25	19	11	6	13.5	3.8	JS-M8X1-D6
BSPT1/8	29.3	19	11	6	13.5	3.8	JS-BSPT1/8-D6

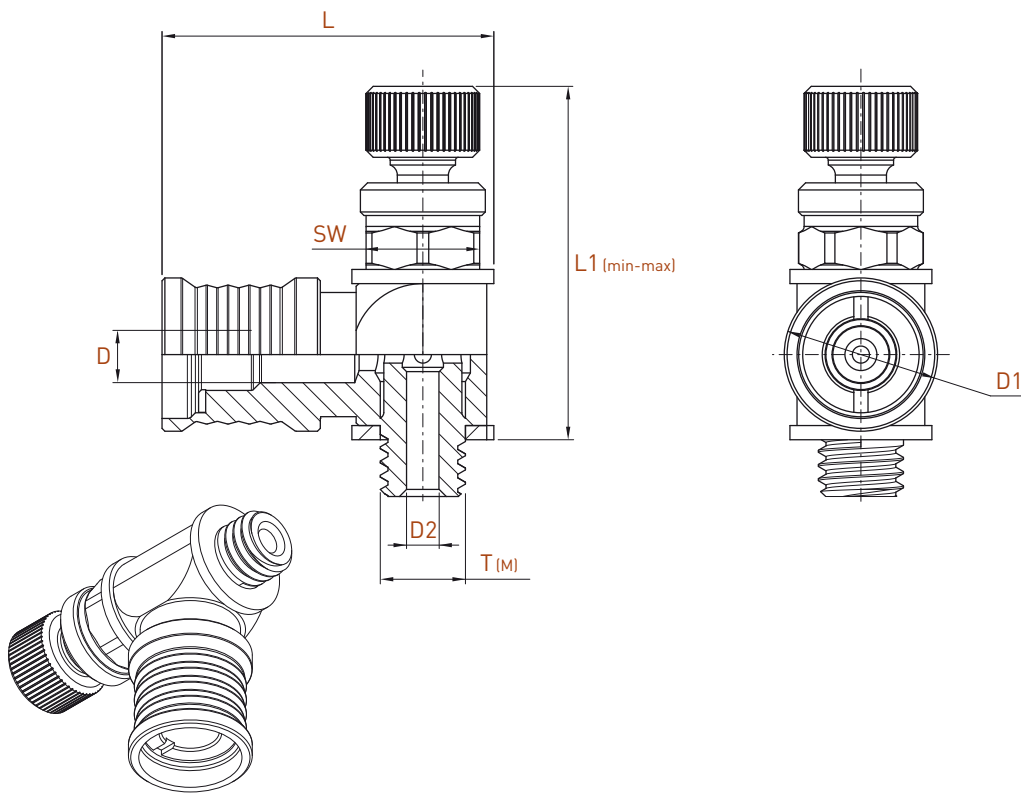
Pression max Max. Druck Max. pressure	KEG =	BSPT =
= 220 Bar (3.190 PSI)	filetage conique konisches Gewinde conical thread	filetage conique konisches Gewinde conical thread

Raccords rapides Banjos avec régulateur de débit

Schnellkupplungen-Banjos mit Durchflussregler

Banjo quick couplings with flow regulators

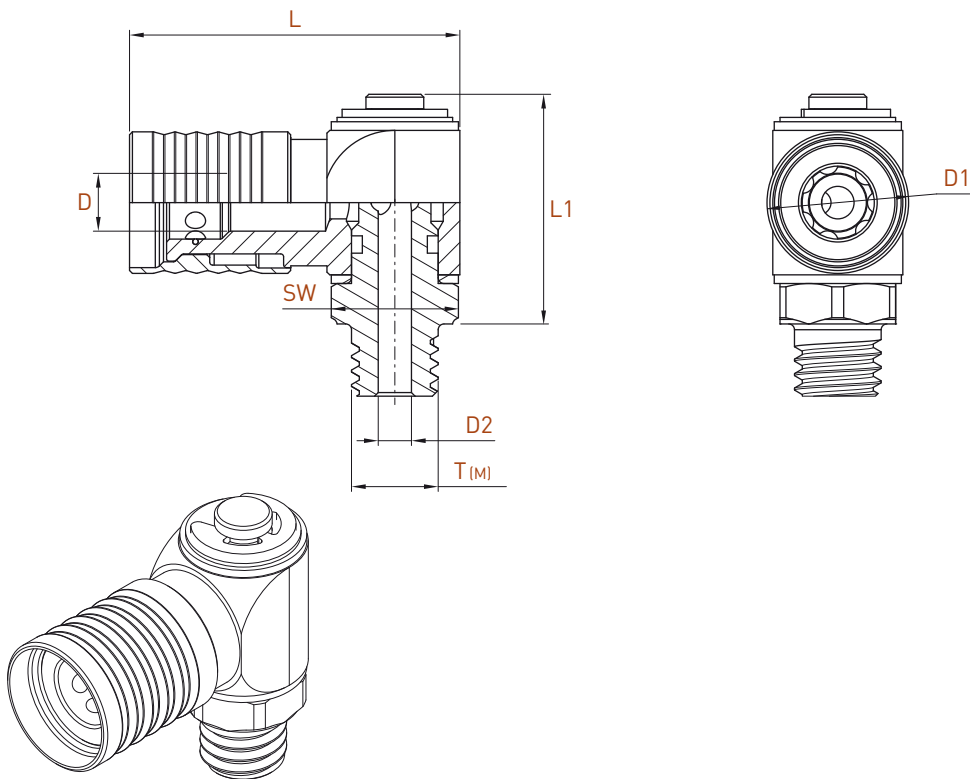
JSFA



T (M)	L	L1 (min-max)	SW	D	D1	D2	Art. N°
M6	23.4	23.1-24.9	8	4	10.8	2.3	JSFA-M6-D4
M8x1	30.5	29.4-32.1	11	6	14.5	3.8	JSFA-M8x1-D6

Pression max
Max. Druck
Max. pressure

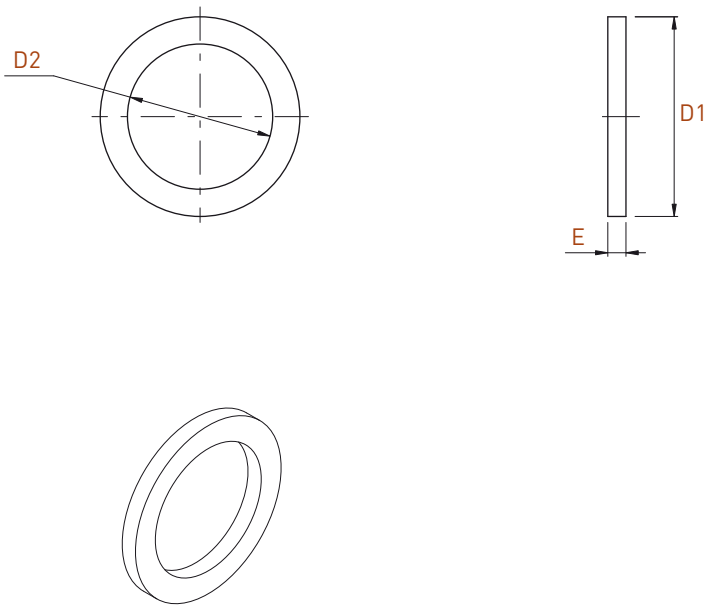
= 220 Bar (3.190 PSI)



T (M)	L	L1	SW	D	D1	D2	Art. N°
M5	22.9	15.2	8	4	9.8	2.3	JSR-M5-D4
M6	22.9	15.9	8	4	9.8	2.3	JSR-M6-D4
M8x1	29.9	21	11	6	13.5	3.8	JSR-M8x1-D6
BSP1/8"	29.9	22	13	6	13.5	3.8	JSR-BSP1/8"-D6

Pression max
Max. Druck
Max. pressure

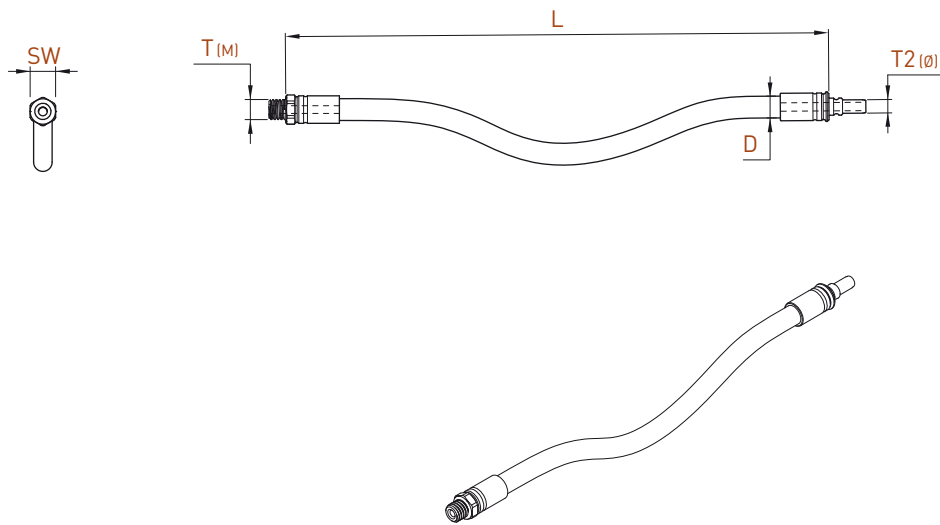
= 220 Bar (3.190 PSI)



D1	D2	E	Art. N°
9	5	1	J0-M5*
9	6	1	J0-M6*
11	8	1	J0-M8X1*
14	10	1	J0-BSP1/8*

* vendu par 10 pièces
verkauft in 10 Stück
sold by 10 pieces

Tubes de distribution flexibles en acier avec fiche de connexion rapide
 Stahlflex-Verteilschläuche mit Schnellschließungsstecker
 Flexible distribution tubes of steel with quick connection plug



T (M)	T2 (Ø)	L*	SW	D	Art. N°
M6	4	102	8	6.5	JTS-AC-M6-102
		152			JTS-AC-M6-152
		203			JTS-AC-M6-203
		305			JTS-AC-M6-305
		406			JTS-AC-M6-406
M8x1	6	102	11	8	JTS-AC-M8x1-102
		152			JTS-AC-M8x1-152
		203			JTS-AC-M8x1-203
		305			JTS-AC-M8x1-305
		406			JTS-AC-M8x1-406

* Longueur spécifique possible sur demande
 Spezifische Länge auf Anfrage möglich
 Specific length possible on request

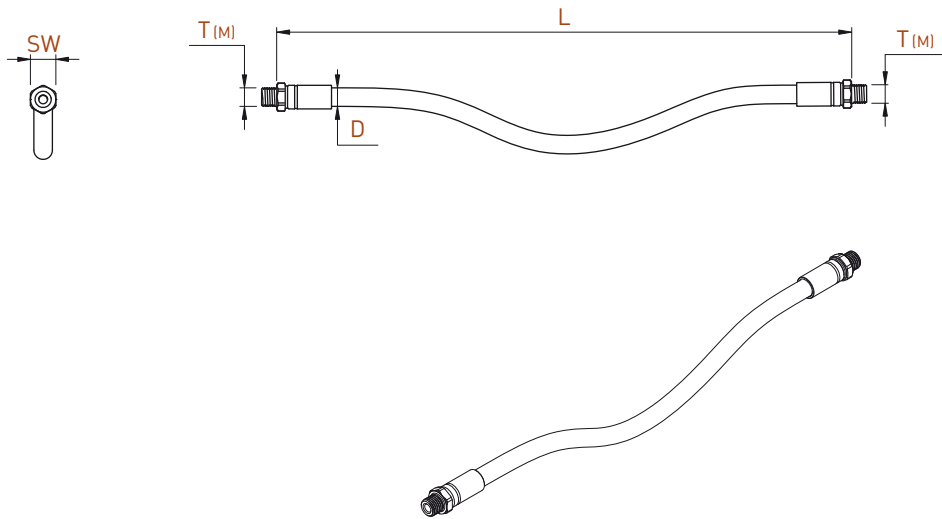
Pression max Max. Druck Max. pressure	Couple de serrage Anzugsmoment Torque setting
= 150 Bar (2.175 PSI)	1.8 Nm

Tubes de distribution flexibles en acier inoxydable tressé

Rostfreier Stahlflex-Schlauch

Flexible distribution tubes of stainless steel braiding

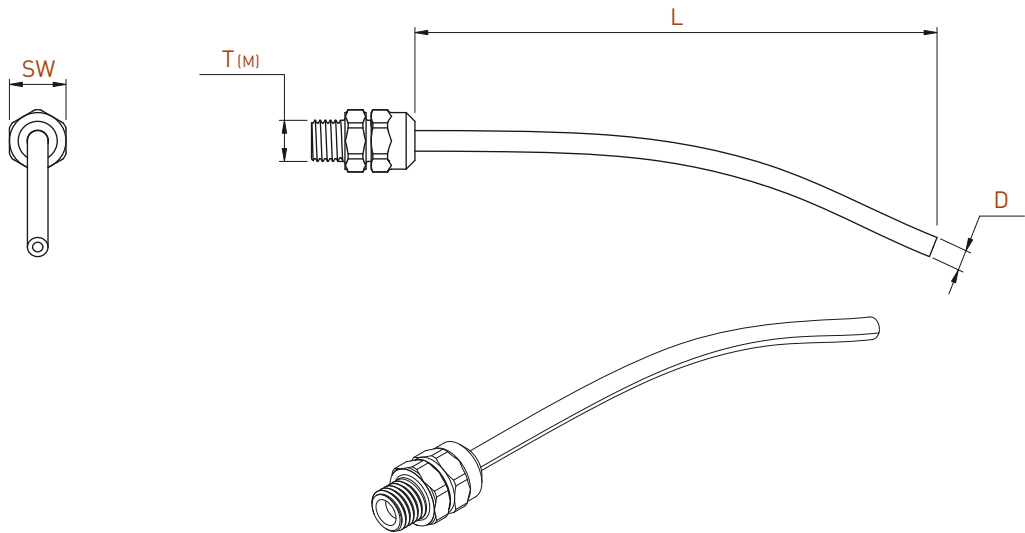
JTX-AC



T (M)	L*	SW	D	Art. N°
M6	102	8	Ø6.5	JTX-AC-M6-102
	203	8	Ø6.5	JTX-AC-M6-203
	305	8	Ø6.5	JTX-AC-M6-305
	406	8	Ø6.5	JTX-AC-M6-406
M8X1	102	11	Ø8	JTX-AC-M8X1-102
	203	11	Ø8	JTX-AC-M8X1-203
	305	11	Ø8	JTX-AC-M8X1-305
	406	11	Ø8	JTX-AC-M8X1-406
BSPT1/8	102	11	Ø8	JTX-AC-BSPT1/8-102
	203	11	Ø8	JTX-AC-BSPT1/8-203
	305	11	Ø8	JTX-AC-BSPT1/8-305
	406	11	Ø8	JTX-AC-BSPT1/8-406

* Longueur spécifique possible sur demande
 Spezifische Länge auf Anfrage möglich
 Specific length possible on request

Pression max Max. Druck Max. pressure	KEG =	BSPT =	Pression (bar)	Ø 6.5 (l/min)	Ø 8 (l/min)
= 220 Bar (3.190 PSI)	filetage conique	filetage conique	2	3.5	9.5
	konisches Gewinde	konisches Gewinde	8	7.0	19.0
			15	9.6	26.0
	conical thread	conical thread	20	11.0	30.1
			30	13.5	36.9
			50	17.5	47.6
			80	22.1	60.3
			100	24.7	67.4
			150	30.2	82.5



T (M)	L*	SW	D	Art. N°
M6	102	8	Ø3	JT-CU-M6-102
	203	8	Ø3	JT-CU-M6-203
	305	8	Ø3	JT-CU-M6-305
	406	8	Ø3	JT-CU-M6-406
M8X1	102	11	Ø4	JT-CU-M8X1-102
	203	11	Ø4	JT-CU-M8X1-203
	305	11	Ø4	JT-CU-M8X1-305
	406	11	Ø4	JT-CU-M8X1-406

* Longueur spécifique possible sur demande
 Spezifische Länge auf Anfrage möglich
 Specific length possible on request

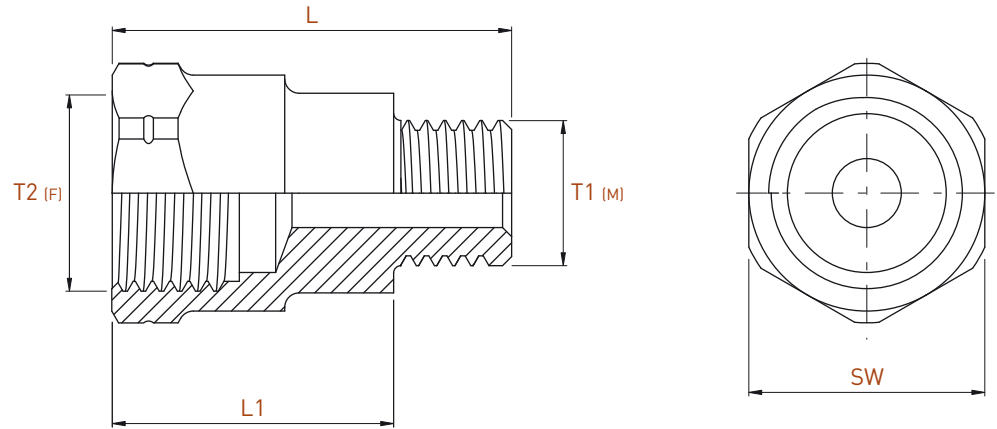
Pression max
 Max. Druck
 Max. pressure

= 220 Bar
 (3.190 PSI)

Connecteurs mâles/femelles

Gewindeadapter Innen und Außengewinde
Male/female connectors

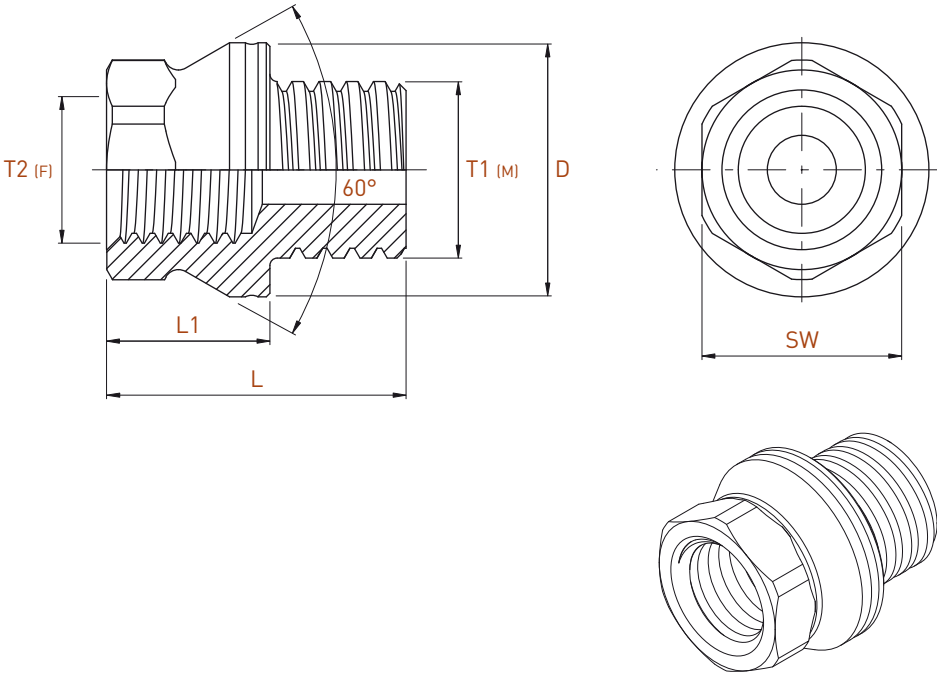
JRMF



T1 (M)	T2 (F)	L1	L	SW	Art. N°
M5	M5	6.5	11	8	JRMF-M5-M5-L6.5
		11.5	16	8	JRMF-M5-M5-L11.5
		16.5	21	8	JRMF-M5-M5-L16.5
	M6	7.5	12	8	JRMF-M5-M6-L7.5
	M8X1	9.5	14	11	JRMF-M5-M8X1-L9.5
M6	M6	7.5	12.5	8	JRMF-M6-M6-L7.5
		12.5	17.5	8	JRMF-M6-M6-L12.5
		17.5	22.5	8	JRMF-M6-M6-L17.5
	M8X1	9.5	14.5	11	JRMF-M6-M8X1-L9.5
M8X1KEG	M6	6	12	8	JRMF-M8X1KEG-M6-L6.0
	M8X1	9.5	16.5	11	JRMF-M8X1KEG-M8X1-L9.5
	M5	5.5	12	11	JRMF-M8X1-M5-L5.5
M8X1	M6	7	13.5	11	JRMF-M8X1-M6-L7.0
		9.5	16	11	JRMF-M8X1-M8X1-L9.5
		14.5	21	11	JRMF-M8X1-M8X1-L14.5
		19.5	26	11	JRMF-M8X1-M8X1-L19.5
	BSP1/8	10.5	17	13	JRMF-M8X1-BSP1/8-L10.5
		15.5	22	13	JRMF-M8X1-BSP1/8-L15.5
		20.5	27	13	JRMF-M8X1-BSP1/8-L20.5
		11	17.5	13	JRMF-M8X1-NPT1/8-L11
M8X1.25	M8X1	9.5	16	11	JRMF-M8X1.25-M8X1-L9.5
BSPT1/8	M5	3.5	14.6	11	JRMF-BSPT1/8-M5-L3.5
	M6	3.5	14.6	11	JRMF-BSPT1/8-M6-L3.5
	M8X1	9	20.3	11	JRMF-BSPT1/8-M8X1-L9.0
BSP1/8	BSP1/8	10.5	18	13	JRMF-BSP1/8-BSP1/8-L10.5
		15.5	23	13	JRMF-BSP1/8-BSP1/8-L15.5
		20.5	28	13	JRMF-BSP1/8-BSP1/8-L20.5
NPT1/8	M8X1	7	17	13	JRMF-NPT1/8-M8X1-L7.0
	BSP1/8	9	20.3	13	JRMF-NPT1/8-BSP1/8-L9.0
NTP1/16	M6	6	15	11	JRMF-NPT1/16-M6-L6.0
	M8X1	9	18	13	JRMF-NPT1/16-M8X1-L9.0
SAE7/16-20	M6	4.5	12	13	JRMF-SAE7/16-20-M6-L4.5
	M8X1	7	14.5	13	JRMF-SAE7/16-20-M8X1-L7

JRMF-A60°

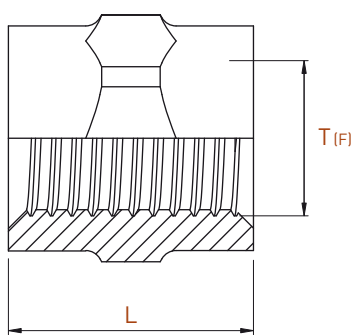
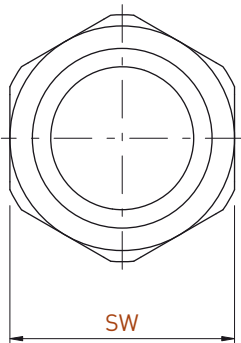
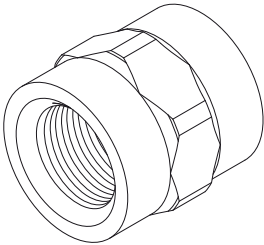
Connecteurs mâles/femelles avec cône 60°
Gewindeadapter Innen und Außengewinde mit 60°-Kegel
Male/female connectors with cone 60°



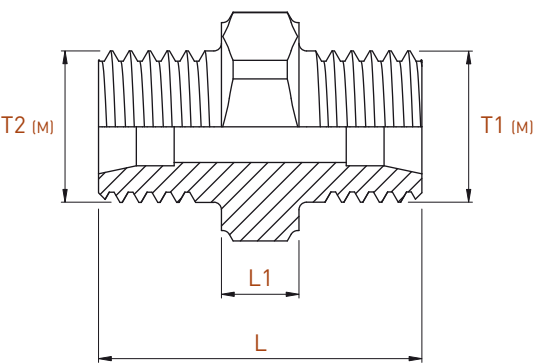
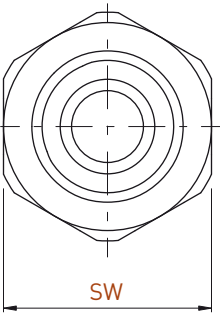
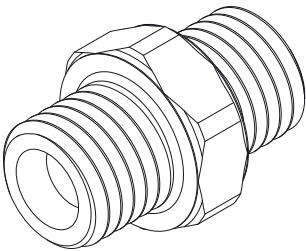
T1 [M]	T2 [F]	L1	L	D	SW	Art. N°
BSP1/8	M8X1	9	16.5	14	11	JRMF-BSP1/8-M8X1-A60°-L9.0

Connecteurs femelles/femelles
Gewindeadapter Innengewinde
Female connectors

JRFF



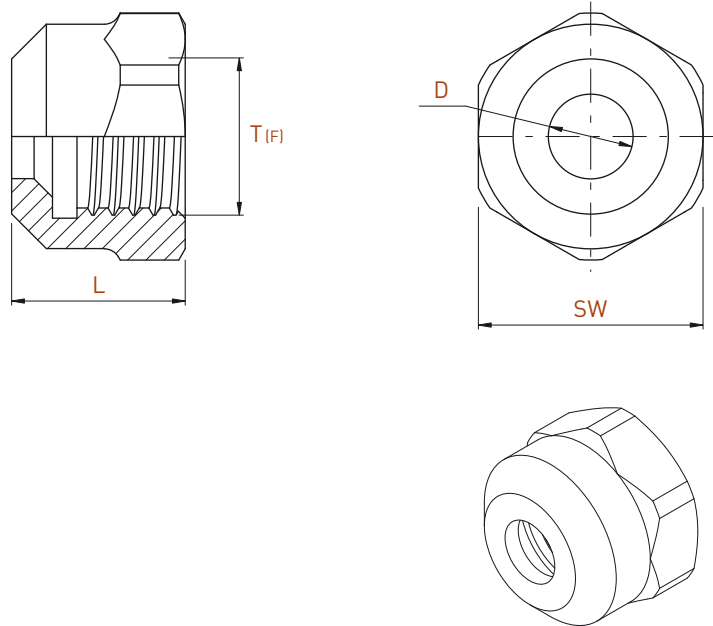
T (F)	L	SW	Art. N°
M6	9	8	JRFF-M6-L9.0
M8X1	12	11	JRFF-M8X1-L12.0



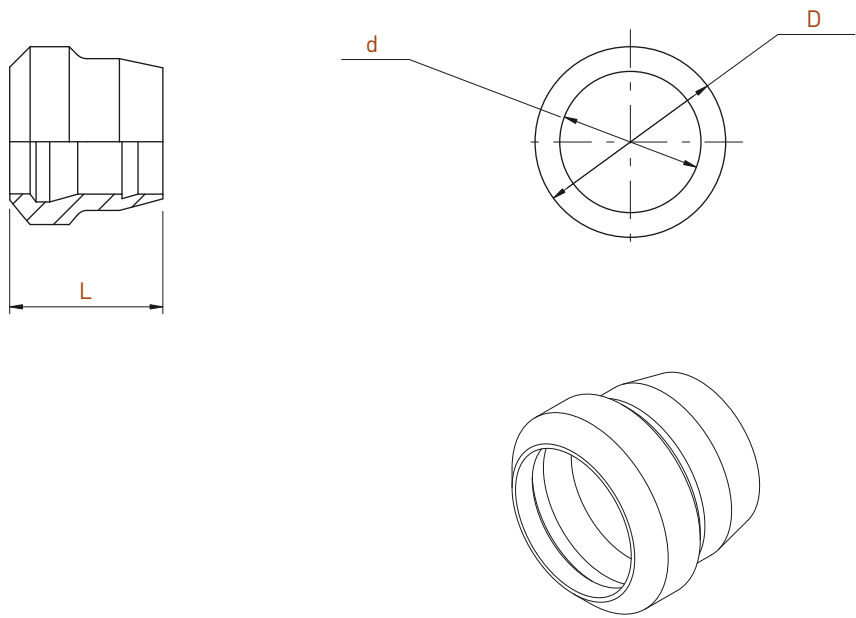
T1 (M)	T2 (M)	L1	L	SW	Art. N°
M6	M6	3	13	8	JRMM-M6-M6-L3.0
M8X1	M8X1	4	17	11	JRMM-M8X1-M8X1-L4.0
M10	M8X1	3.5	17.5	11	JRMM-M10-M8X1-3.5

Écrous d'étanchéité
Dichtungsmutter
Sealing nuts

JN



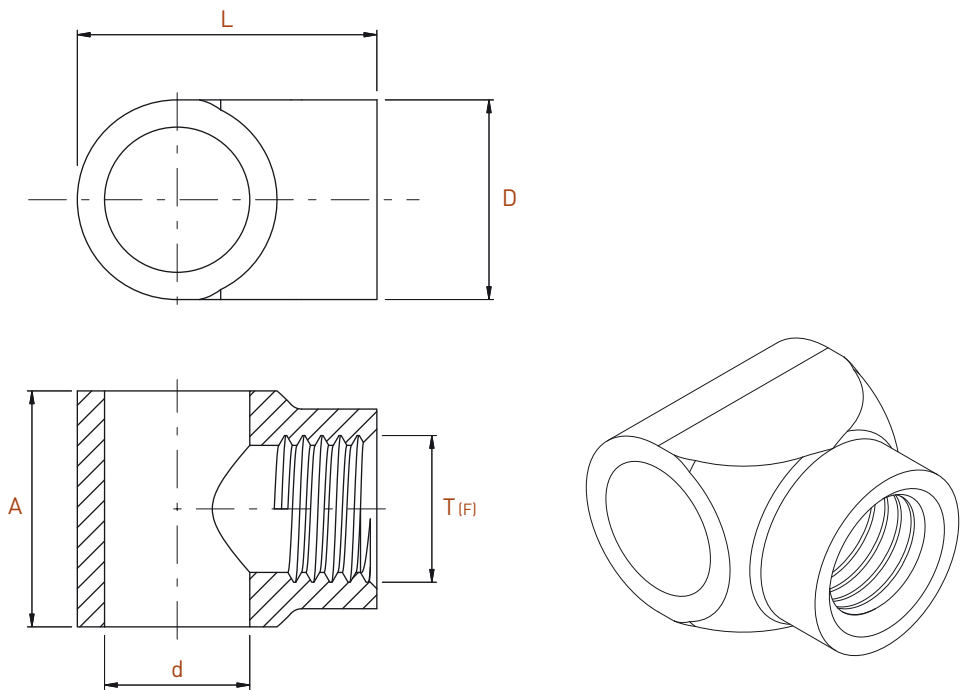
T (F)	L	D	SW	Art. N°
M6	6.5	3	8	JN-M6-D3
M8X1	8.5	4	11	JN-M8X1-D4
M10	11.5	6	12	JN-M10-D6



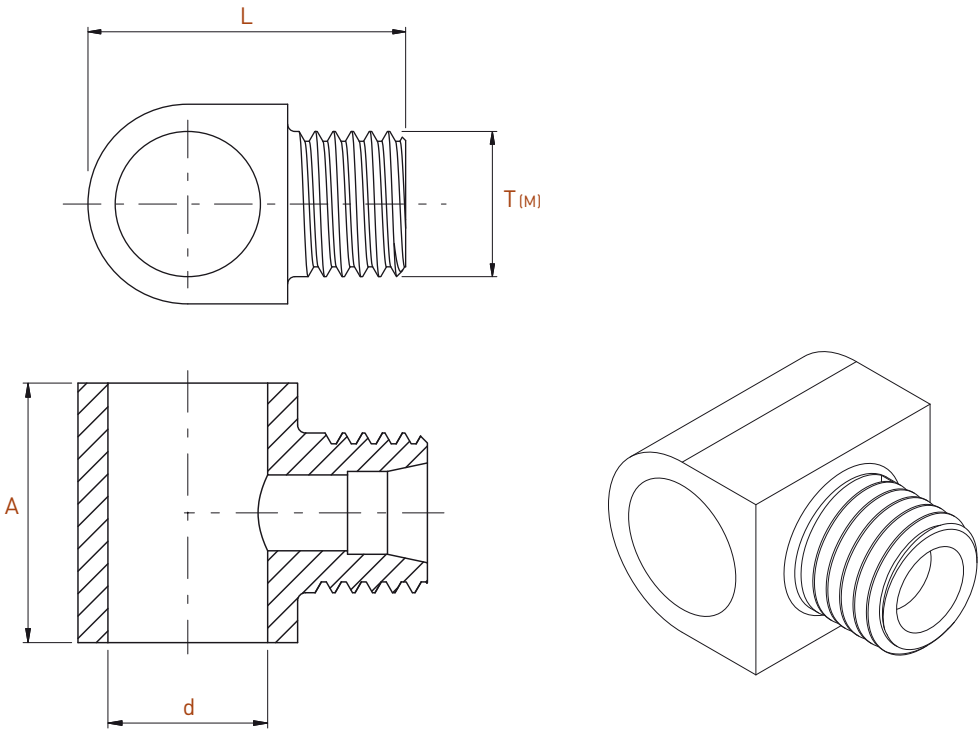
d	D	L	Art. N°
3	4	3.3	JNG-D3
4	5.5	4.5	JNG-D4
6	8.5	7	JNG-D6

Banjos courts femelles
Kurzer Innengewinde-Banjo
Short female Banjo

JCBF



T (F)	A	L	d	D	Art. N°
M6	10	12.5	6	9	JCBF-Ø6-M6
M8X1	13	16.5	8	11	JCBF-Ø8-M8X1
	13	18.5	10	11	JCBF-Ø10-M8X1
BSP1/8	13	19.5	10	13	JCBF-Ø10-BSP1/8



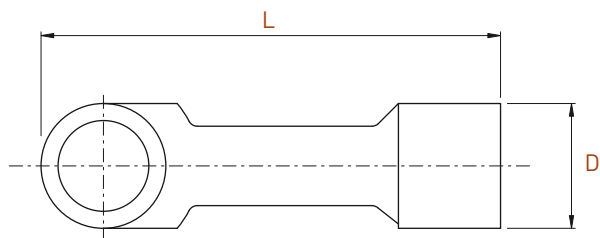
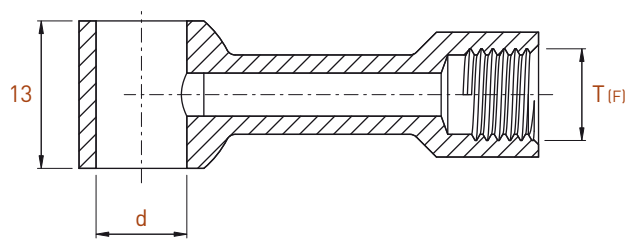
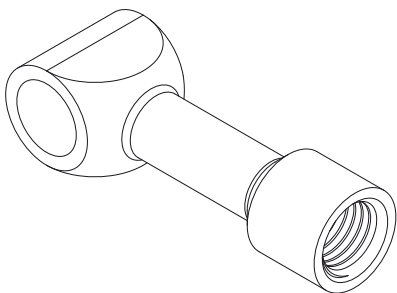
T (M)	A	L	d	Art. N°
M6	10	14	6	JCBM-Ø6-M6
M8X1	13	17.5	8	JCBM-Ø8-M8X1
	13	19.5	10	JCBM-Ø10-M8X1

Banjos longs droits femelles

Lange Innengewinde-Banjo

Long straight female Banjo

JABF



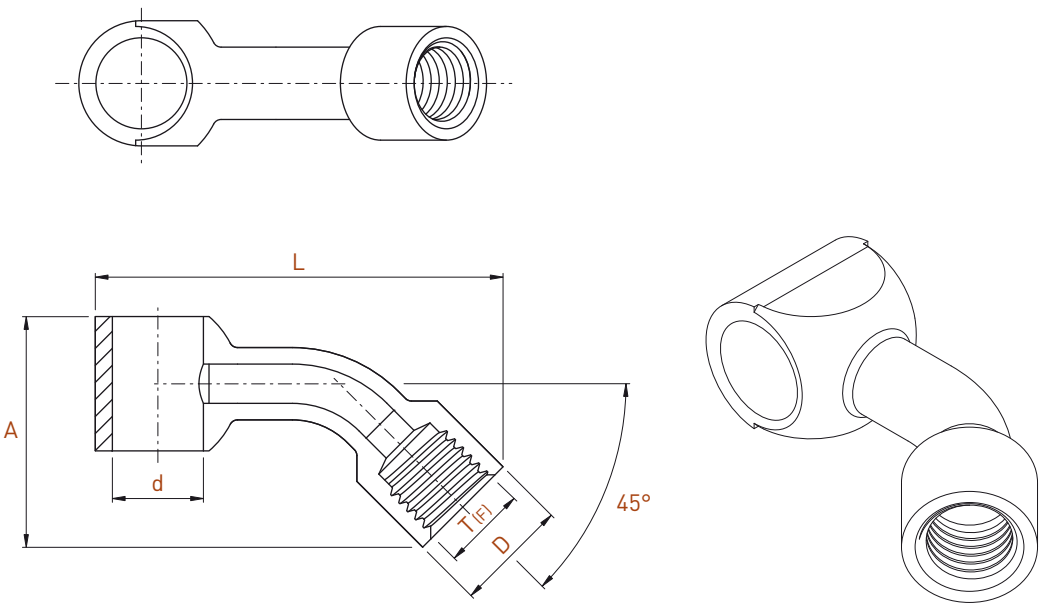
T (F)	A	L	d	D	Art. N°
M6	10	31.5	6	9	JABF-Ø6-M6
M8X1	13	40.5	8	11	JABF-Ø8-M8X1
	13	42.5	10	11	JABF-Ø10-M8X1
BSP1/8	13	42.5	10	13	JABF-Ø10-BSP1/8

JABF-45°

Banjos longs coudés femelles

Lange 45° Innengewinde-Banjos

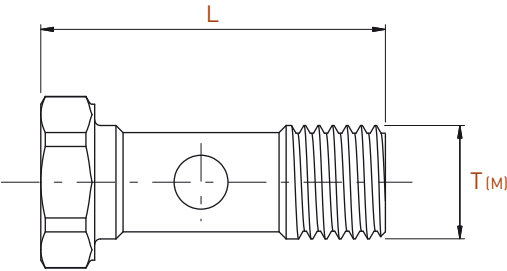
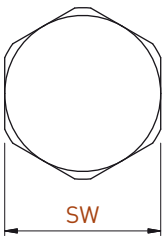
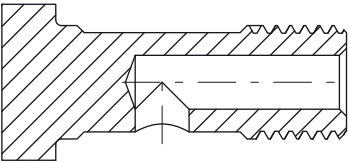
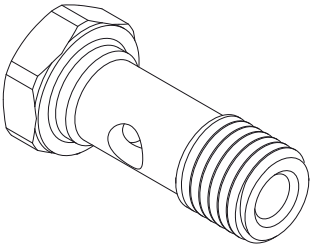
Long curved female banjos



T (F)	A	L	d	D	Art. N°
M6	10	33	6	9	JABF-Ø6-M6-45°
M8X1	11.8	40	8	11	JABF-Ø8-M8X1-45°
	13	40.5	10	11	JABF-Ø10-M8X1-45°

Vis Banjo
Hohlschrauben einfach
Banjo screws

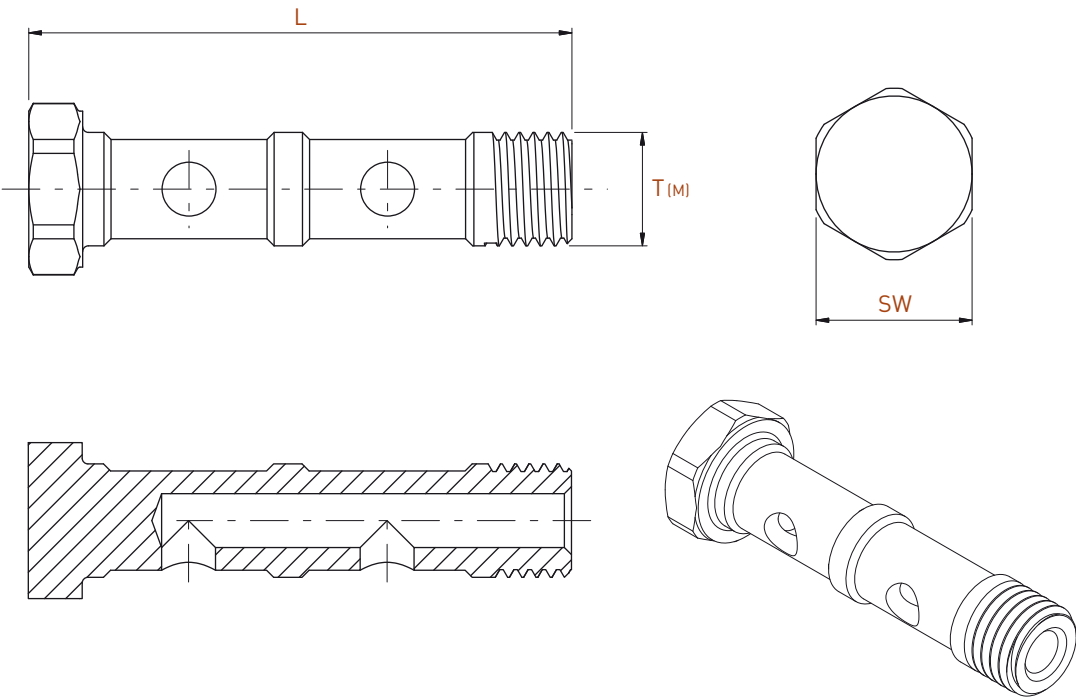
JEB



T (M)	L	SW	Art. N°
M5	18.3	8	JEB-M5-L18
M6	18.8	8	JEB-M6-L19
M8X1	24.3	11	JEB-M8X1-L24
BSP1/8	26	13	JEB-BSP1/8-L26

JEB-DUO

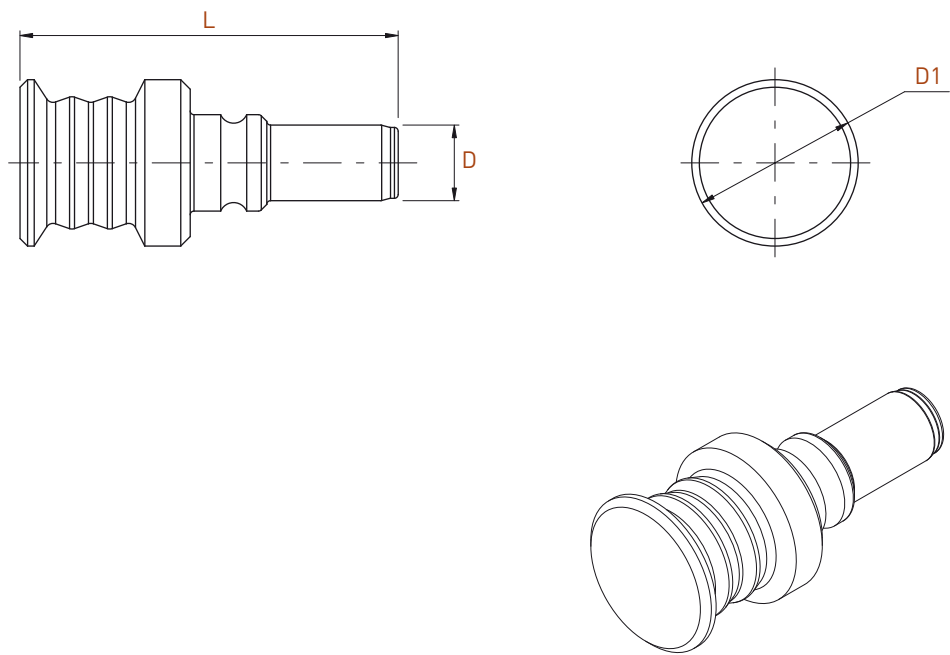
Vis Banjo doubles
Hohlschrauben doppelt
Double banjo screws



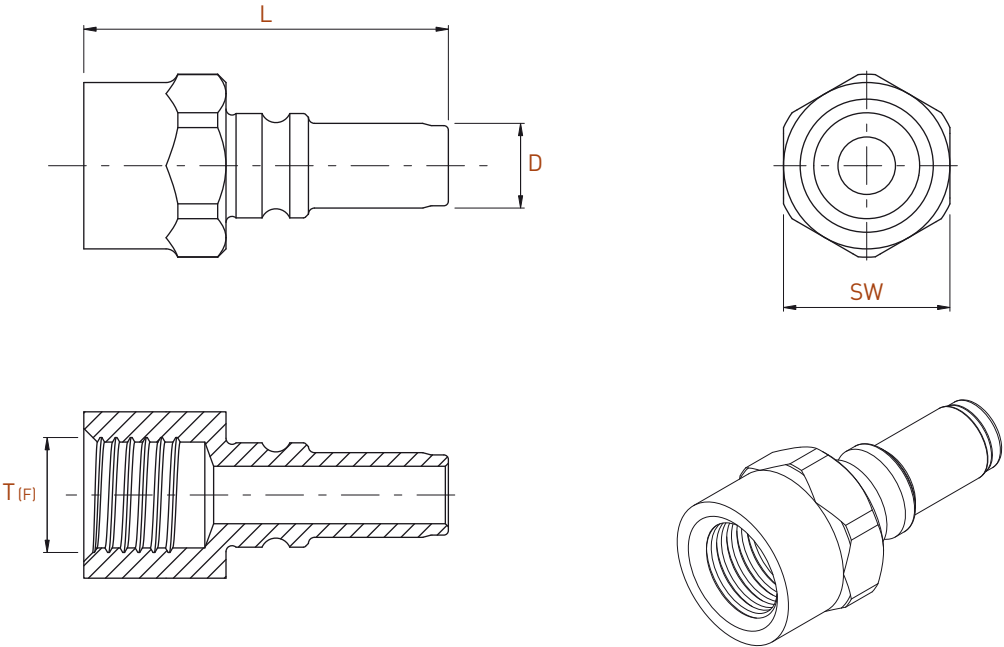
T (M)	L	SW	Art. N°
M6	29.8	8	JEB-M6-L30-DUO
M8X1	38.3	11	JEB-M8X1-L38-DUO
BSP1/8	40	13	JEB-BSP1/8-L40-DUO

Fiches de verrouillage
Verschlußstecker
Sealing connecting plugs

JVB



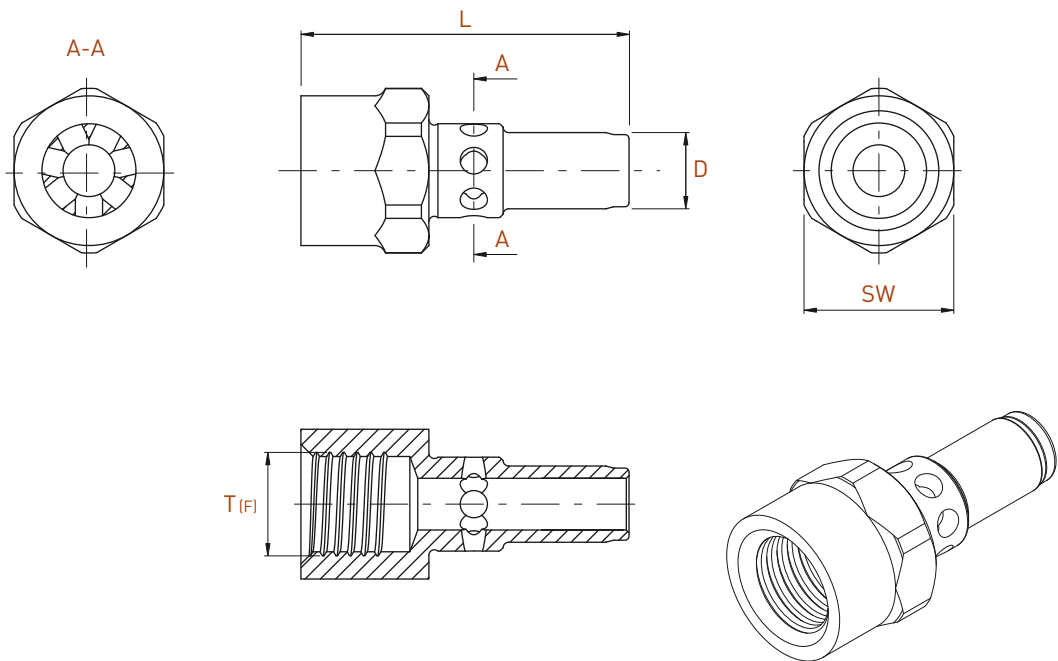
D	D1	L	Art. N°
4	8.8	20	JVB-D4
6	12	27	JVB-D6



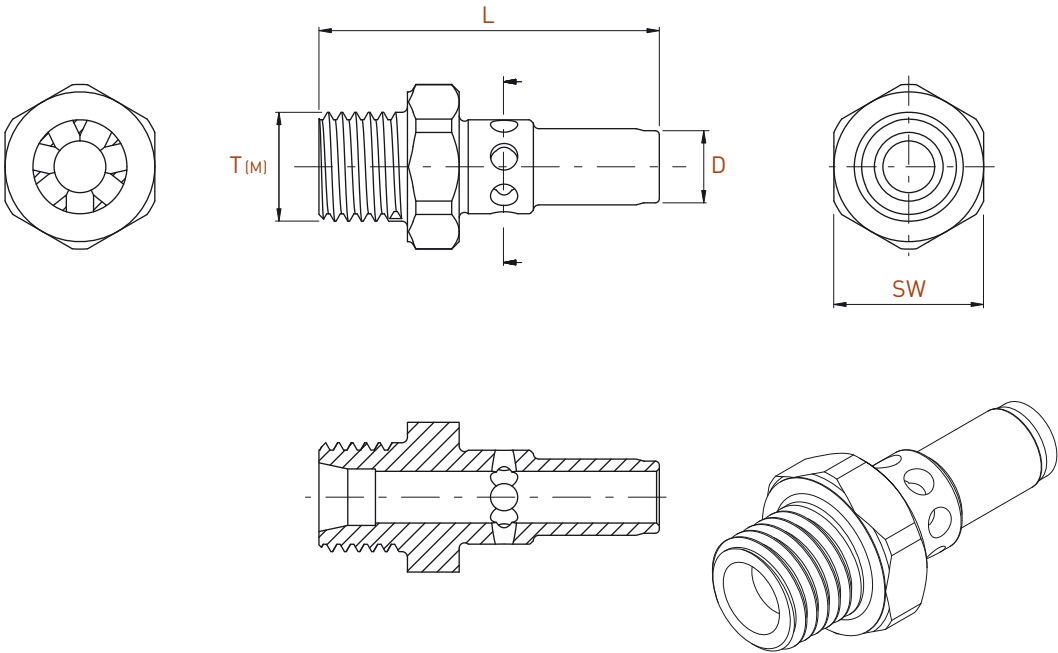
D	T (F)	L	SW	Art. N°
4	M6	18.3	8	JVF-M6-D4
6	M8X1	24	11	JVF-M8X1-D6
6	BSP1/8	25.5	11	JVF-BSP1/8-D6

Fiches de connexion fixes femelles
Innengewindestecker mit Verdrehsicherung
Female positioning connection plugs

JWF



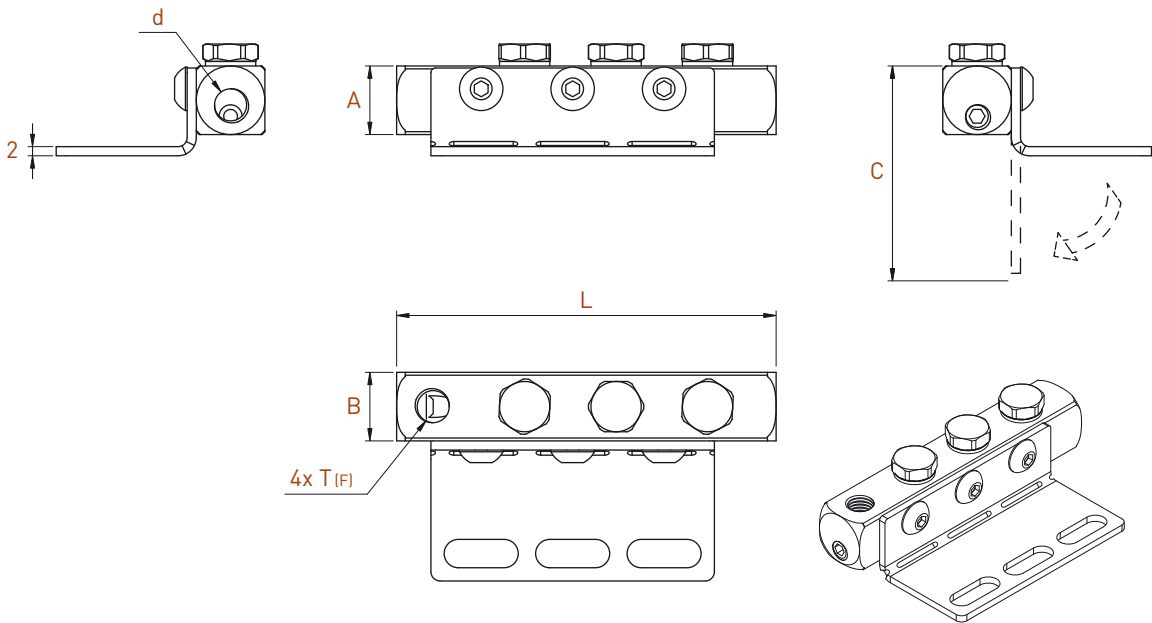
D	T (F)	L	SW	Art. N°
4	M6	18.3	8	JWF-M6-D4
6	M8X1	24	11	JWF-M8X1-D6



D	T (M)	L	SW	Art. N°
4	M6	18.3	8	JWM-M6-D4
6	M8X1	25	11	JWM-M8X1-D6

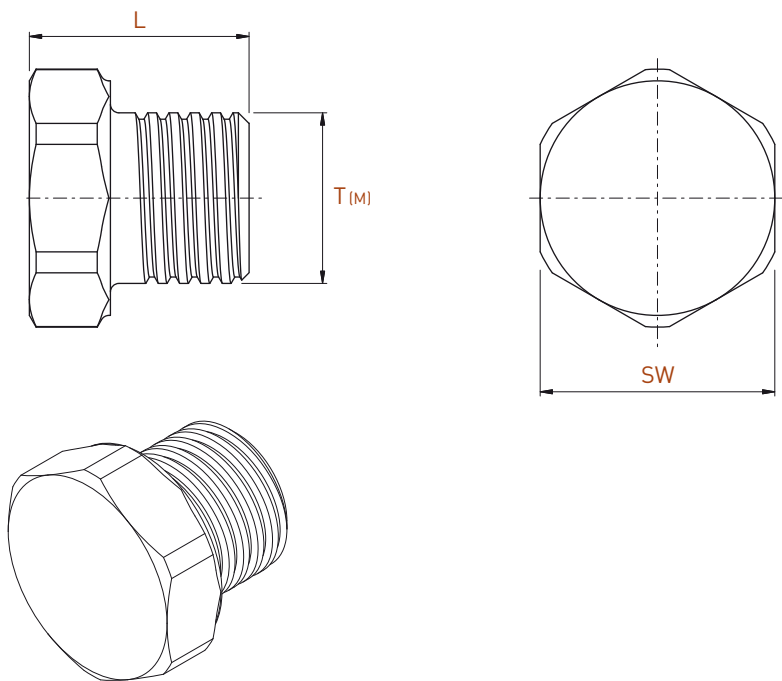
Blocs de distribution
Kühlmittelverteiler
Distribution blocks

JK



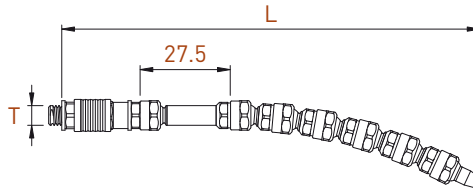
T (F)	A	B	C	d	L	Art. N°
M5	10	10	37	M5	62	JK-M5-1010-4T
M6	10	10	37	M6	62	JK-M6-1010-4T
M8X1	15	15	47	M8X1	83	JK-M8X1-1515-4T
BSP1/8	15	15	47	BSP1/8	83	JK-BSP1/8-1515-4T

Qty	Livré avec	Mitgeliefert	Supplied with
1	Plaque de serrage pliable	Faltbare Klemmplatte	Foldable clamping plate
3	Vis bombée	Linienkopfschraube	Domed clamping screw
3	Vis sans tête bouchon	Dichtungsschraube	Sealing screw
3	Joint d'étanchéité en cuivre	Kupferdichtungsringe	Copper sealing basket
1	Vis sans tête bouchon	Dichtungsschraube	Sealing screw



SW	T (M)	L	Art. N°
8	M5	7.3	JBB-M5-L7.0
8	M6	7.8	JBB-M6-L8.0
11	M8X1	10.3	JBB-M8X1-L10.0
11	BSP1/8	10.3	JBB-BSP1/8-L10.0

Articulated kit with coolant nozzle

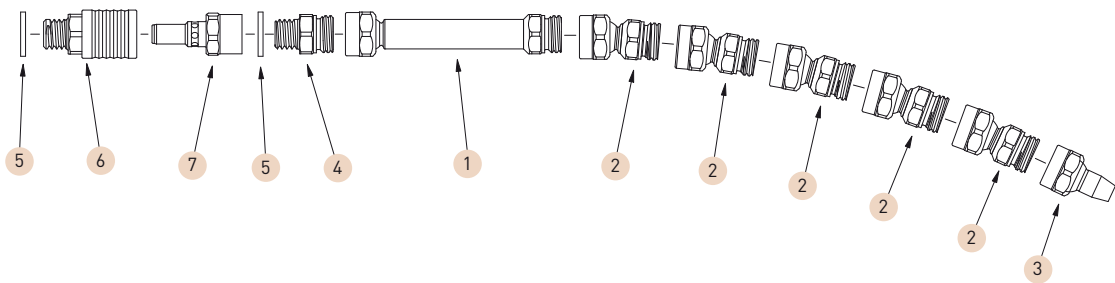
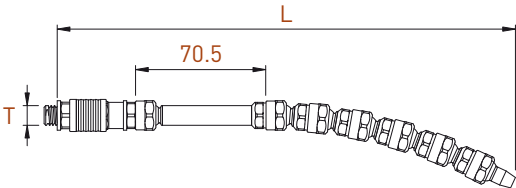


T (M)	L	Art. N°
M6	130	JKIT-AR3-M6-D3-130

Option recommandée Empfohlene Option Recommended option		Page Seite Page
C-AR3		18.51

JKIT-AR6

Kit articulé avec buse d'arrosage
Gelenkkit mit Kühlungsdüse
Articulated kit with coolant nozzle



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JAR6-L70.5
2	5	JAR6-L20.5
3	1	JJ-AR6-D6-L16
4	1	JRMM-AR6-M8X1-L4
5	2	J0-M8X1
6	1	JS-M8X1-D6
7	1	JWF-M8X1-D6

T (M)	L	Art. N°
M8X1	225	JKIT-AR6-M8X1-D6-225

Pression max Max. Druck Max. pressure	Couple de serrage Anzugsmoment Torque setting
100 bar (1.450 psi)	6 Nm

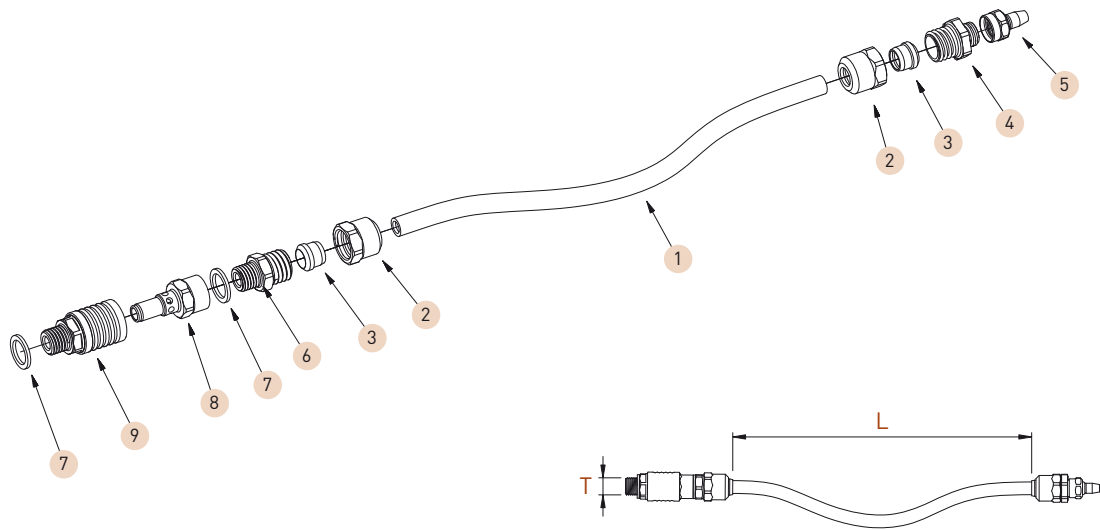
Option recommandée Empfohlene Option Recommended option	Page Seite Page
C-AR6	18.51

Kit tube en cuivre avec buse d'arrosage

Kit Kupferrohr mit Kühlungsdüse

Kit copper tube with coolant nozzle

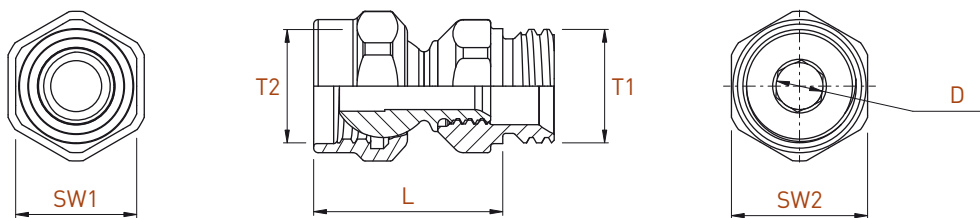
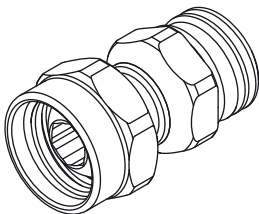
JKIT-CU



Ref	Qty	Composition du kit Zusammensetzung Kit Kit composition
1	1	JT-CU
2	2	JN-M10-D6
3	2	JNG-D6
4	1	JRMM-AR3-M10-L3.0
5	1	JJ-AR3-D3-L9
6	1	JRMM-M10-M8X1-L3.5
7	2	JO-M8X1-D6
8	1	JWF-M8X1-D6
9	1	JS-M8X1-D6

T (M)	L	Art. N°
M8X1	305	JKIT-CU-AR3-M8X1-D3-305

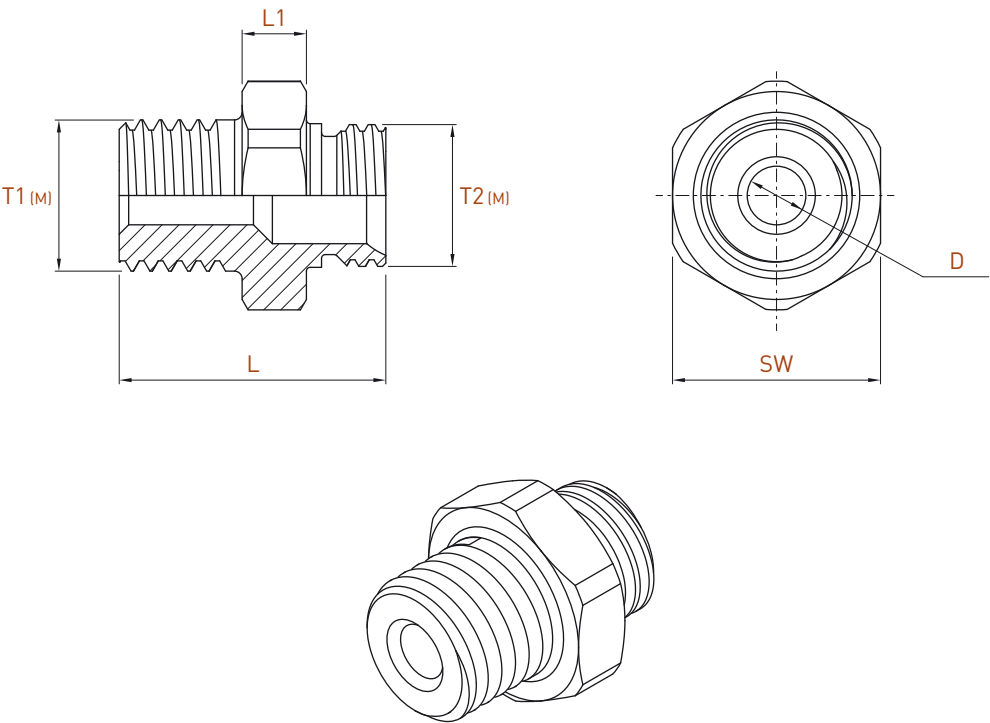
Pression max Max. Druck Max. pressure
= 220 Bar (3.190 PSI)



T1 (M)	T2 (F)	L	D	SW1	SW2	Art. N°
M7.5	M7.5	12.5	3	8	9	JAR3-L12.5
		27.5	3			JAR3-L27.5
		42.5	3			JAR3-L42.5
M13	M13	20.5	6	13	15	JAR6-L20.5
		45.5	6			JAR6-L45.5
		70.5	6			JAR6-L70.5

Connecteurs mâles/mâles
Anschlüsse Außengewinde
Male connectors

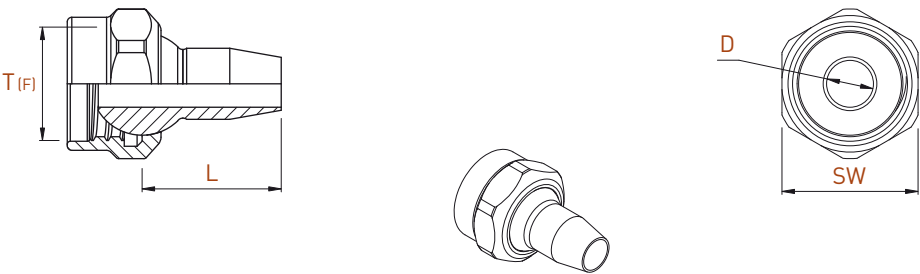
JRMM-AR



T1 (M)	T2 (M)	L	L1	D	SW	Art. N°
M6	M7.5	12	3	3	8	JRMM-AR3-M6-L3.0
M8X1	M7.5	14	3.5	3	11	JRMM-AR3-M8X1-L3.5
M10	M7.5	15	3	3	11	JRMM-AR3-M10-L3.0
M8X1	M13	17	4	6	13	JRMM-AR6-M8X1-L4.0
M10X1	M13	18	4	6	13	JRMM-AR6-M10X1-L4.0
BSP 1/8"	M13	18	4	6	13	JRMM-AR6-BSP1/8-L4.0

JJ-AR-SHORT

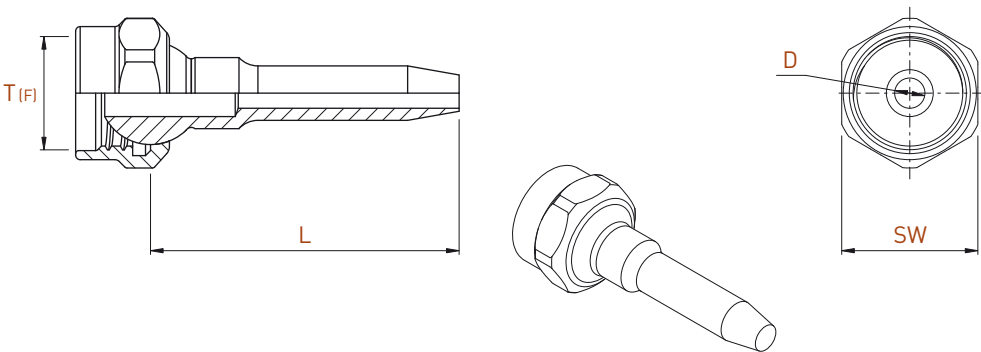
Buses
Düse
Nozzle



T (F)	L	D	SW	Art. N°
M7.5	9	3	9	JJ-AR3-D3-L9
M13	16	6	15	JJ-AR6-D6-L16

JJ-AR-LONG

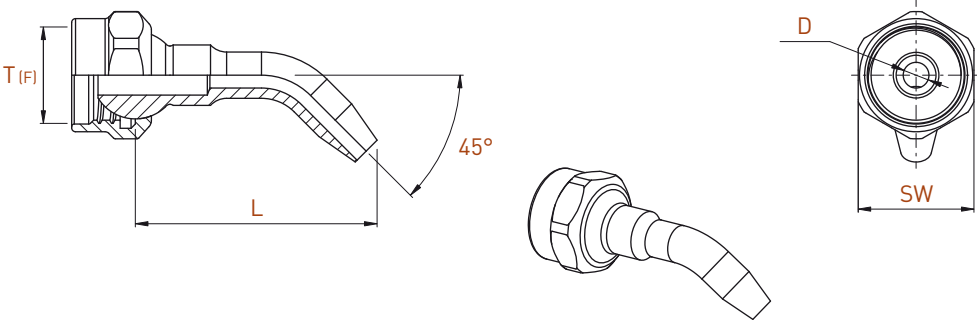
Buses
Düse
Nozzle



T (F)	L	D	SW	Art. N°
M7.5	20	2	9	JJ-AR3-D2-L20
M13	35	3	15	JJ-AR6-D3-L35

Buses
Düse
Nozzle

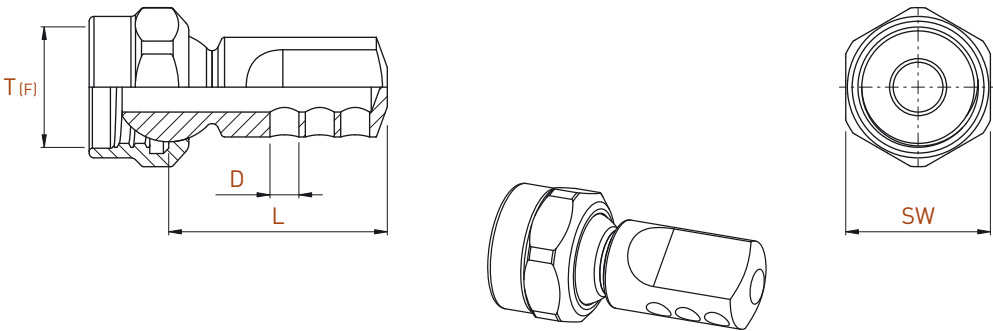
JJ-AR-CURVED



T (F)	L	D	SW	Art. N°
M7.5	19	2	9	JJ-AR3-D2-L19-45°
M13	23,5	6	15	JJ-AR6-D6-L23.5-45°

Buses
Düse
Nozzle

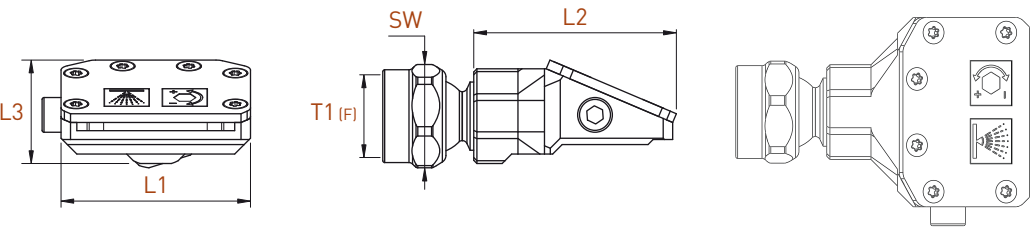
JJ-AR-3XD



T (F)	L	D	SW	Art. N°
M7.5	15	1.8	9	JJ-AR3-3XD1.8-L13.5
M13	24	3.4	15	JJ-AR6-3XD3.4-L24

JJ-AR6-V

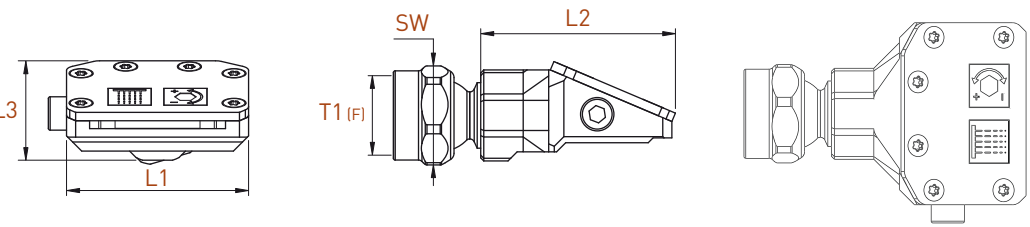
Buses plates jet diffusé
Flachdüse mit breitem Sprühstrahl
Diverging flat nozzle



T1 (F)	L1	L2	L3	SW	Art. N°
ML13	20	30.6	16.4	15	JJ-AR6-V20
	30	32			JJ-AR6-V30
	40	38.5			JJ-AR6-V40
	50	43.5			JJ-AR6-V50

JJ-AR6-W

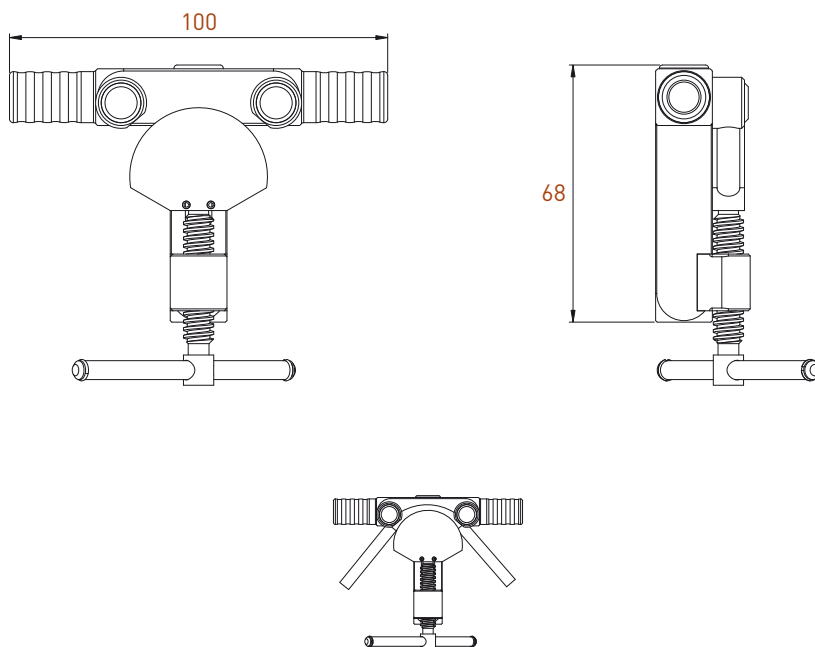
Buses plates jet droit
Flachdüse mit geradem Sprühstrahl
Straight flat nozzle



T1 (F)	L1	L2	L3	SW	Art. N°
M13	20	30.6	16.4	15	JJ-AR6-W20
	30	32			JJ-AR6-W30
	40	38.5			JJ-AR6-W40
	50	43.5			JJ-AR6-W50

Appareil de cintrage

Biegegerät
Bending tool

JTB

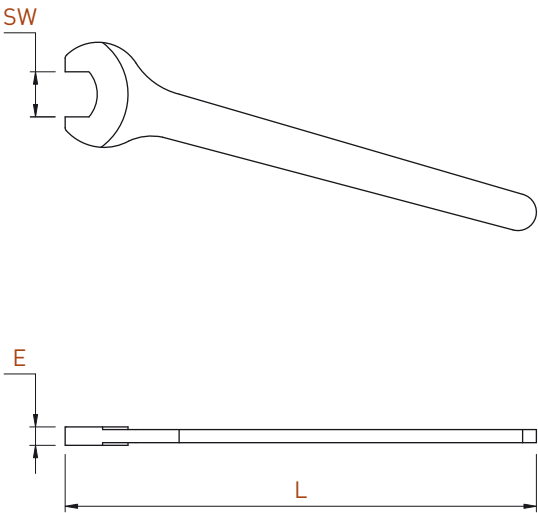
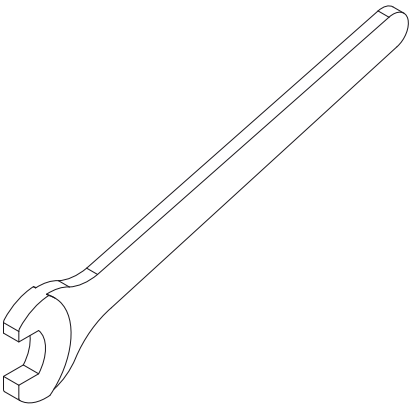
Art. N°

JTB-D6



Clés de serrage
Spannschlüssel
Clamping keys

C



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8	2.5	90	C-SW8-E2.5
11	3.7	110	C-SW11-E3.7
13	5.8	130	C-SW13-E5.8
8	2.5	55	C-AR3
9	3		
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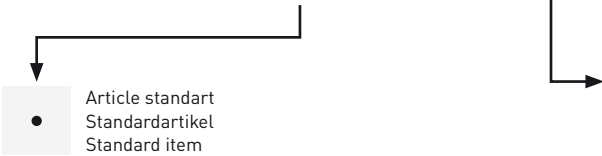
SYMBOL

Légende des symboles

Symbollegende

Symbol Legend

E	L	Art. N°	TiAlN	TiN	N (µK20)	HTA	HTiN	HN (µK10)
1.0	5	731RU-1.0	•	•				
1.2	5	731RU-1.2	•	•				
1.5	7	731RU-1.5	•	•	•	•	•	•
2.0	7	731RU-2.0	•	•				



Acier
Stahl
Steel



Inox
Rostfreistahl
Stainless steel



Alliages d'aluminium et non ferreux
Aluminium- und Nichtisenlegierungen
Aluminium and non-ferrous alloys



Titane et superalliages
Titan und Superlegierungen
Titanium and superalloys



Acier trempé
Gehärteter Stahl
Hardened steel



Fonte
Gusseisen
Cast iron



Matière exotique
Exotisches material
Exotic material

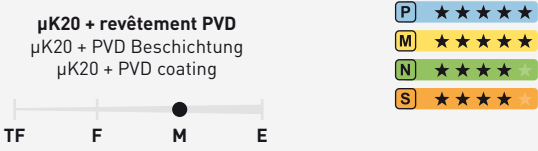


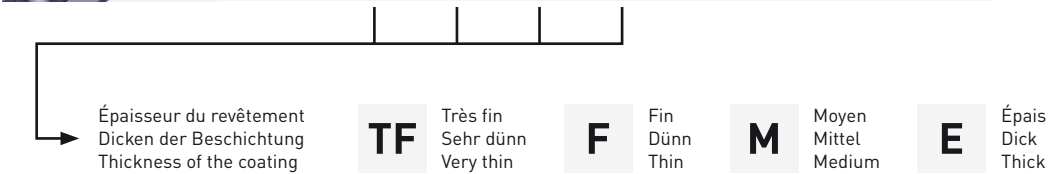
Carbure
Hartmetall
Carbide




K20

µK20 + revêtement PVD
µK20 + PVD Beschichtung
µK20 + PVD coating







NOTES

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Notes page



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APPLITEC MOUTIER S.A.

Rue Industrielle 95
CH - 2740 Moutier
Switzerland

+41 (0)32 494 60 20
info@applitec-tools.com

www.applitec-tools.com