

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

**HK
HUK
HM**

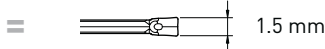
Lames
Stecklinge
Parting-off blades

Very rigid clamping system!



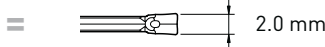
Plaquettes / WSP / Inserts

ET 15

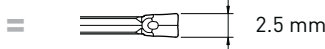


Ø max 32 mm

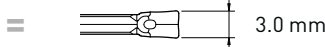
ET 20



ET 25



ET 30



Ø max 44 mm



U



J



T



A

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ohne Kühlung
without coolant > **8.06**

Porte-outils
Halter
Holders **H JET Series** avec arrosage
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with coolant > **8.07**

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Plaquettes de tronçonnage
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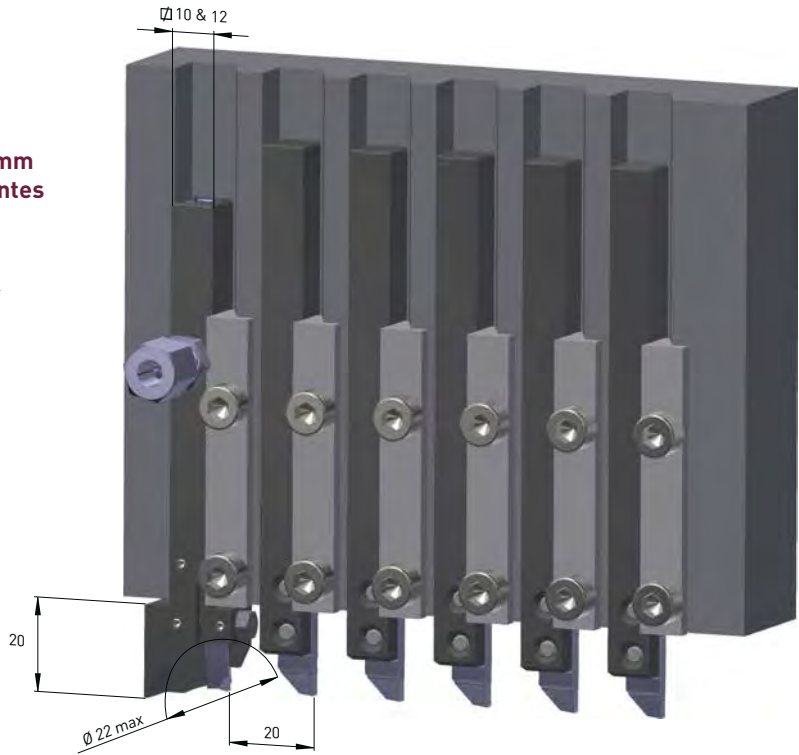
AR Series > **8.19**

Paramètres de coupe indicatifs
Empfohlene Schnittwerte
Standard machining data > **8.20**

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

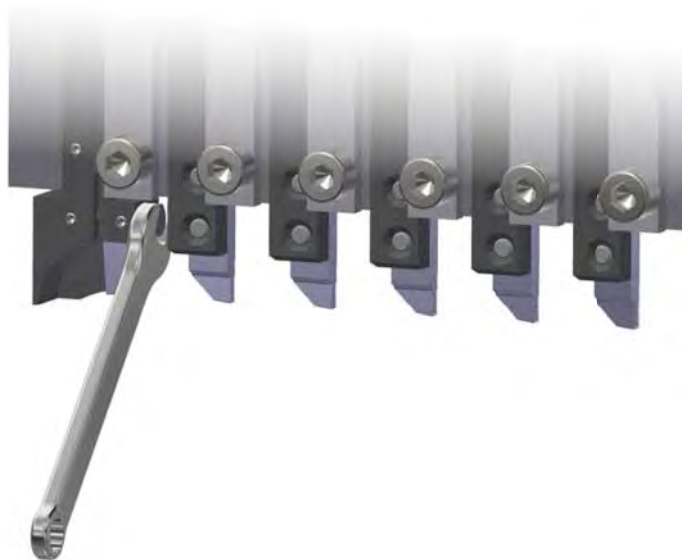
Zugangseichtigkeit

Excellent accessibility

Changement de la plaque sans démontage

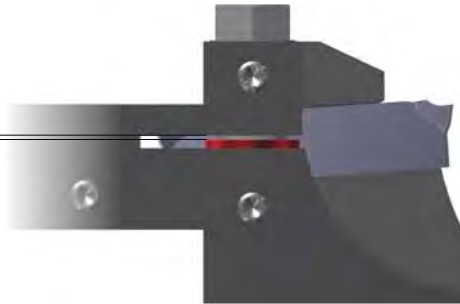
Veränderung der Platte ohne Zerlegung

Change of insert without disassembly

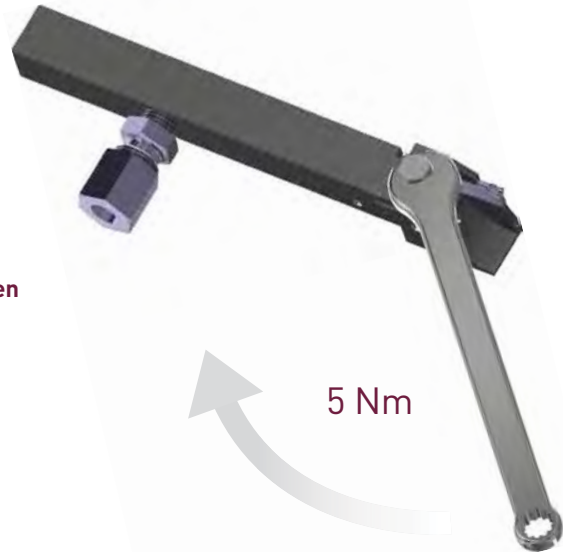


Butée de serrage
Spannungs-Anschlag
Clamping stop

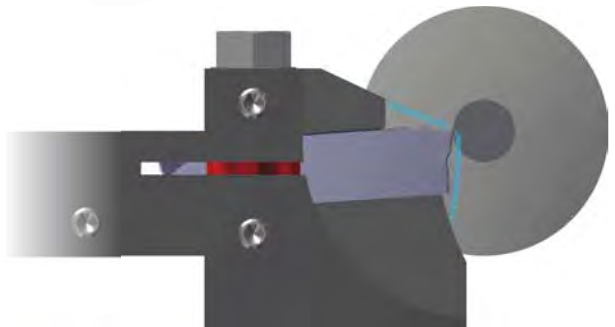
Distance de serrage
 Anschlagabstand
 Distance clamping



Recommendations 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



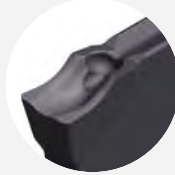
Géométries de coupe

Spanformgeometrie

Cutting geometries

UN

UL
UR



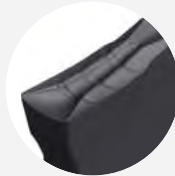
- géométrie positive universelle, faibles efforts de coupe
- bonne maîtrise du copeau
- 1^{er} choix pour l'inox

- 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



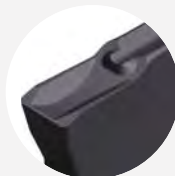
- géométrie universelle
- excellent rétrécissement du copeau pour un meilleur contrôle
- conseillé pour le tronçonnage de pièces à parois minces
- pour acier et inox

- allgemeine Geometrie
- ausgezeichnete Spanversmalerung 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

TN

TR



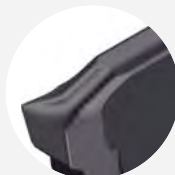
- géométrie négative
- utilisation dans des conditions de rigidité optimale
- pour les matières à haute ténacité
- universel pour les aciers et inox

- 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

AN

AR



- géométrie fortement positive
- roule-copeau 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

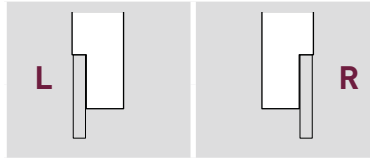
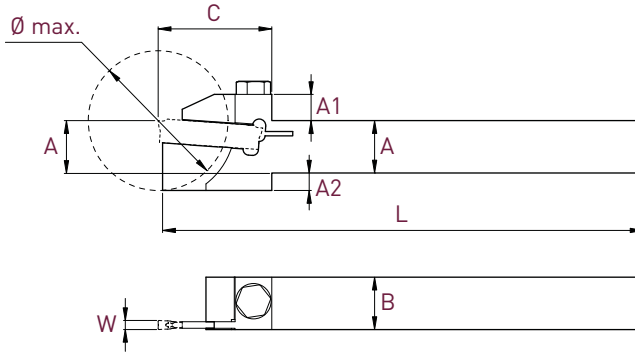
- very positive geometry
- polished chip roller with sharp cutting edge
- 1st choice for aluminium and non-ferrous materials

Nuances

Sorten

Grades

<p>P M N S</p> <p>TiAlN revêtement PVD PVD Beschichtung PVD coating</p> <ul style="list-style-type: none"> • pour l'usinage des aciers, aciers inoxydables et alliages de titane • 1^{er} choix pour les avances faibles à modérées <ul style="list-style-type: none"> • für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen • beste Wahl für niedrige bis mittlere Vorschübe <ul style="list-style-type: none"> • for machining of steel, stainless steel and titanium alloys • first choice for low to average cutting speed 	<p>P M <input type="checkbox"/> <input type="checkbox"/></p> <p>Tmax revêtement PVD PVD Beschichtung PVD coating</p> <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Sorte für mittlere bis hohe Belastung in Stahl und legierter Stahlbearbeitung • gute Bearbeitungswarmfestigkeit • für die Bearbeitung von legiertem Kohlenstahl und hoch legiertem Stahl bestens geeignet <ul style="list-style-type: none"> • 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 	<p>P M <input type="checkbox"/> <input type="checkbox"/></p> <p>Zmax revêtement PVD PVD Beschichtung PVD coating</p> <ul style="list-style-type: none"> • pour l'usinage des aciers, aciers inoxydables et alliages de titane en conditions défavorables • bonne résistance aux chocs à des vitesses de coupe moyenne à faible • 1^{er} choix pour le tronçonnage en coupe interrompue <ul style="list-style-type: none"> • für die Bearbeitung von Stahl, rostfreiem Stahl und Titanlegierungen in schwierige Bearbeitungsfälle • gute Bruchfestigkeit mit durchschnittliche bis niedrige Schnittgeschwindigkeit • für die Bearbeitung in unterbrochenen Schnitte bestens geeignet <ul style="list-style-type: none"> • 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
<p>P M <input type="checkbox"/> <input type="checkbox"/></p> <p>ZTi6 revêtement CVD CVD Beschichtung CVD coating</p> <ul style="list-style-type: none"> • nuance très tenace • grande résistance à la température • 1^{er} choix pour les aciers «haute température» • secondairement pour les aciers inox <ul style="list-style-type: none"> • sehr zähe Sorte • hohe Bearbeitungswarmfestigkeit • 1. Wahl für „hohe Temperatur“ Stähle • sekundär für rostfreie Stähle <ul style="list-style-type: none"> • very strong grade • good wear resistance • 1st choice for "high temperature" steels • secondary for stainless steels 	<p><input type="checkbox"/> <input type="checkbox"/> N S</p> <p>AS revêtement PVD PVD Beschichtung PVD coating</p> <ul style="list-style-type: none"> • nuance pour métaux non ferreux • très faible coefficient de frottement • 1^{er} choix pour l'usinage des aluminiums jusqu'à 5% Si, des cuivres et titanes faiblement alliés <ul style="list-style-type: none"> • Sorte für Nichteisenmetalle • sehr geringer Reibwert • für die Bearbeitung von Aluminium bis 5% Si, Kupfer und niedriglegiertem Titan bestens geeignet <ul style="list-style-type: none"> • grade for non-ferrous materials • very low friction ratio • first choice for aluminium up to 5% Si, copper and low alloyed titanium 	<p><input type="checkbox"/> <input type="checkbox"/> N S</p> <p>N non-revêtu unbeschichtet uncoated</p> <ul style="list-style-type: none"> • nuance non revêtu • recommandé pour l'usinage des matières non-ferreuses • titane, laiton, cuivre, aluminium sans silicium, plastique <ul style="list-style-type: none"> • unbeschichtete Sorte • für die Bearbeitung von Nichteisenmetalle empfohlen • Titan, Messing, Kupfer, Silicium freies Aluminium, Kunststoff <ul style="list-style-type: none"> • uncoated grade • recommended for machining of non-ferrous materials • titanium, brass, bronze, aluminium without silicium, plastic



Pièces de rechange
Ersatzteile
Spare parts



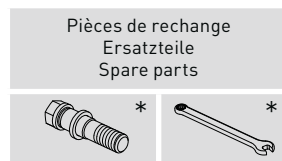
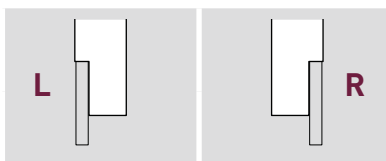
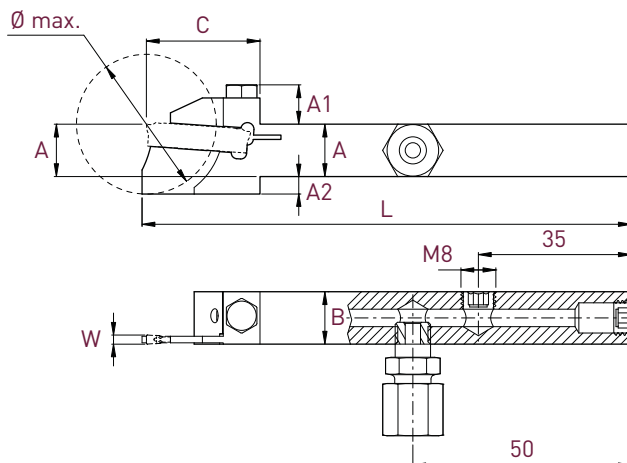
Plaquettes WSP Inserts	A x B x L	Ø max.	C	A1	A2	Art. N°	Art. N°	Art. N°	Art. N°
W 1.5	10x12x110	22	20	5	6	ET15-H1012L-D22	ET15-H1012R-D22	V-M5X20-6P6	C-6PEX-6.0
	12x12x110	22	20	5	4	ET15-H1212L-D22	ET15-H1212R-D22		
	12.7x12.7x110	22	20	5	3	ET15-H12.7L-D22	ET15-H12.7R-D22		
Type ET15	12x12x110	32	26	6	4	ET15-H1212L-D32	ET15-H1212R-D32	V-M5X21-6P7	C-6PEX-7.0
	12.7x12.7x110	32	26	6	3	ET15-H12.7L-D32	ET15-H12.7R-D32		
	16x16x110	32	26	6	-	ET15-H1616L-D32	ET15-H1616R-D32		
W 2.0	10x12x110	22	20	5	6	ET20-H1012L-D22	ET20-H1012R-D22	V-M5X20-6P6	C-6PEX-6.0
	12x12x110	22	20	5	4	ET20-H1212L-D22	ET20-H1212R-D22		
	12.7x12.7x110	22	20	5	3	ET20-H12.7L-D22	ET20-H12.7R-D22		
	12x12x110	32	26	6	4	ET20-H1212L-D32	ET20-H1212R-D32	V-M5X21-6P7	C-6PEX-7.0
	12.7x12.7x110	32	26	6	3	ET20-H12.7L-D32	ET20-H12.7R-D32		
	16x16x110	32	26	6	-	ET20-H1616L-D32	ET20-H1616R-D32		
Type ET20	16x16x130	44	35	8	4	ET20-H1616L-D44	ET20-H1616R-D44	V-M5X27-6P7	C-6PEX-7.0
	20x20x130	44	35	8	-	ET20-H2020L-D44	ET20-H2020R-D44		
	10x12x110	22	20	5	6	ET25-H1012L-D22	ET25-H1012R-D22		
12x12x110	22	20	5	4	ET25-H1212L-D22	ET25-H1212R-D22			
12.7x12.7x110	22	20	5	3	ET25-H12.7L-D22	ET25-H12.7R-D22			
W 2.5	12x12x110	32	26	6	4	ET25-H1212L-D32	ET25-H1212R-D32	V-M5X21-6P7	C-6PEX-7.0
	12.7x12.7x110	32	26	6	3	ET25-H12.7L-D32	ET25-H12.7R-D32		
	16x16x110	32	26	6	-	ET25-H1616L-D32	ET25-H1616R-D32		
Type ET25	16x16x130	44	35	8	4	ET25-H1616L-D44	ET25-H1616R-D44	V-M5X27-6P7	C-6PEX-7.0
	20x20x130	44	35	8	-	ET25-H2020L-D44	ET25-H2020R-D44		
	16x16x110	32	26	6	-	ET30-H1616L-D32	ET30-H1616R-D32		
16x16x130	44	35	8	4	ET30-H1616L-D44	ET30-H1616R-D44			
20x20x130	44	35	8	-	ET30-H2020L-D44	ET30-H2020R-D44			
W 3.0 Type ET30	16x16x110	32	26	6	-	ET30-H1616L-D32	ET30-H1616R-D32	V-M5X27-6P7	C-6PEX-7.0
	16x16x130	44	35	8	4	ET30-H1616L-D44	ET30-H1616R-D44		
	20x20x130	44	35	8	-	ET30-H2020L-D44	ET30-H2020R-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 m

H JET Series



Plaquettes WSP Inserts	A x B x L	Ø max.	A1	C	A2	Art. N°	Art. N°
W 2.0 Type ET20	10x12x110	22	5	20	6	ET20-H1012L-JET22	ET20-H1012R-JET22
	12x12x110	22	5	20	4	ET20-H1212L-JET22	ET20-H1212R-JET22
	12.7x12.7x110	22	20	5	3	ET20-H12.7L-JET22	ET20-H12.7R-JET22
	12x12x110	32	6	26	4	ET20-H1212L-JET32	ET20-H1212R-JET32
	12.7x12.7x110	32	26	6	3	ET20-H12.7L-JET32	ET20-H12.7R-JET32
	16x16x110	32	6	26	-	ET20-H1616L-JET32	ET20-H1616R-JET32
W 2.5 Type ET25	16x16x130	44	8	35	4	ET20-H1616L-JET44	ET20-H1616R-JET44
	20x20x130	44	8	35	-	ET20-H2020L-JET44	ET20-H2020R-JET44
	10x12x110	22	5	20	6	ET25-H1012L-JET22	ET25-H1012R-JET22
	12x12x110	22	5	20	4	ET25-H1212L-JET22	ET25-H1212R-JET22
	12.7x12.7x110	22	20	5	3	ET25-H12.7L-JET22	ET25-H12.7R-JET22
	12x12x110	32	6	26	4	ET25-H1212L-JET32	ET25-H1212R-JET32
W 3.0 Type ET30	12.7x12.7x110	32	26	6	3	ET25-H12.7L-JET32	ET25-H12.7R-JET32
	16x16x110	32	6	26	-	ET25-H1616L-JET32	ET25-H1616R-JET32
	16x16x130	44	8	35	4	ET25-H1616L-JET44	ET25-H1616R-JET44
	20x20x130	44	8	35	-	ET25-H2020L-JET44	ET25-H2020R-JET44
	16x16x110	32	6	26	-	ET30-H1616L-JET32	ET30-H1616R-JET32
	16x16x130	44	8	35	4	ET30-H1616L-JET44	ET30-H1616R-JET44
20x20x130	44	8	35	-	ET30-H2020L-JET44	ET30-H2020R-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

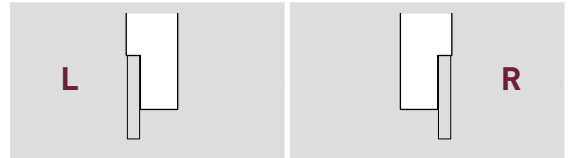
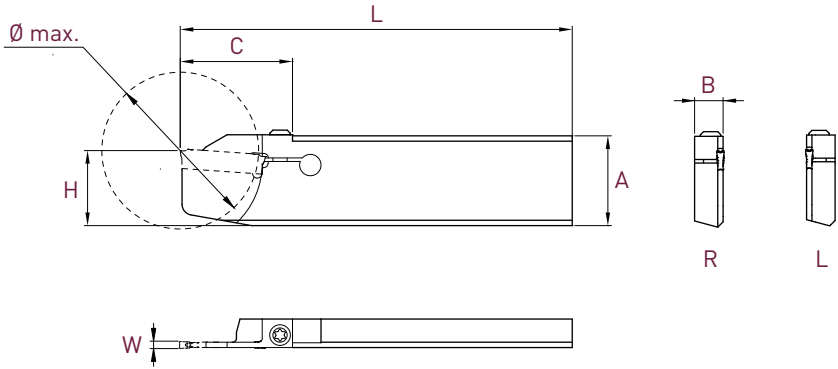
EVOCUT-LINE

Lames de tronçonnage



Stechklinge

Parting-off blades

HK Series



Plaquettes WSP Inserts	A x B x L	Ø max.	C	H	Art. N°	Art. N°
W 1.5	26x8x110	20	19.5	21	ET15-HK-2608L-110-D20	ET15-HK-2608R-110-D20
Type ET15	26x8x110	32	25.5	21	ET15-HK-2608L-110-D32	ET15-HK-2608R-110-D32
W 2.0	26x8x110	32	25.5	21	ET20-HK-2608L-110-D32	ET20-HK-2608R-110-D32
Type ET20	26x8x110	44	31.5	21	ET20-HK-2608L-110-D44	ET20-HK-2608R-110-D44

Pièces de rechange Ersatzteile Spare parts	 *	 *
	Art. N°	Art. N°
	V-M4X14.5-T15-EVOCUT	C-T15

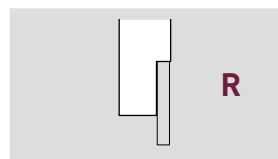
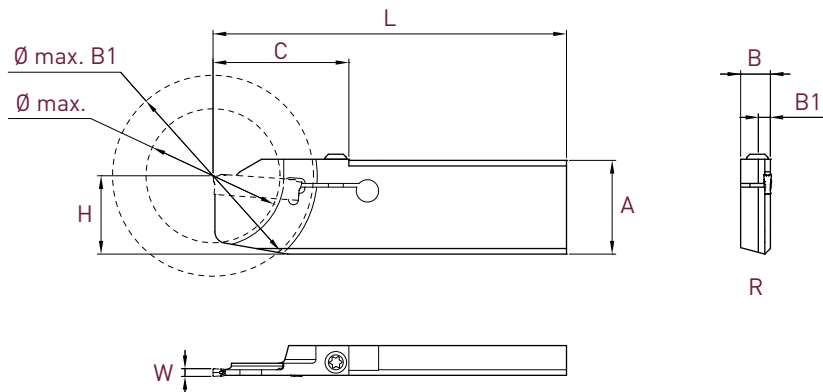
* livré avec chaque lame
mit jedem Stechkling geliefert
delivered with each blade

Lames de tronçonnage avec dégagement pour accès contre-broche

Stecklinge mit Aussparung für Gegenspindel Zugriff

Parting-off blades with recess for subspindle access

HK-RS Series



Plaquettes WSP Inserts	A x B x L	Ø max.	Ø max B1	B1	C	H	Art. N°
W 1.5 Type ET15	26x8x95	36	54	3.25	36.5	21	ET15-HK-2608RS-95-D36
W 2.0 Type ET20	26x8x95	36	54	3.25	36.5	21	ET20-HK-2608RS-95-D36

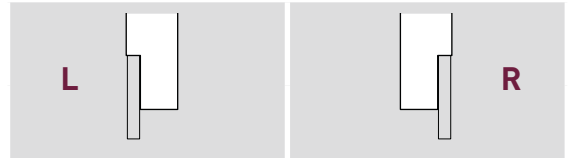
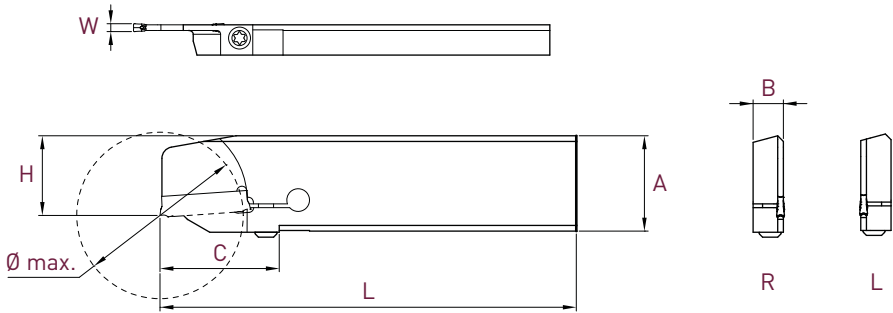
Pièces de rechange Ersatzteile Spare parts	 *	 *
	Art. N°	Art. N°
	V-M4X14.5-T15-EVOCUT	C-T15

* livré avec chaque lame
mit jedem Steckling geliefert
delivered with each blade



EVOCUT-LINE

Lames de tronçonnage inversées
 Überkopf Stechklinge
 Upside down parting-off blades

HUK Series



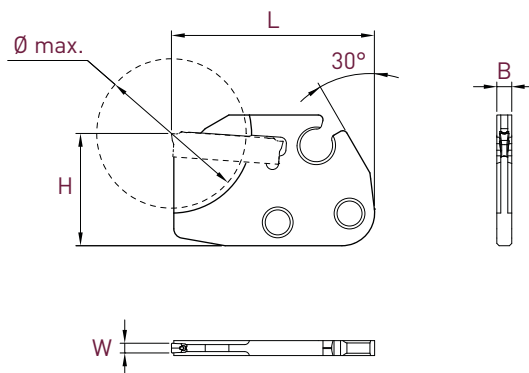
Plaquettes WSP Inserts	A x B x L	Ø max.	C	H	Art. N°	Art. N°
W 1.5	26x8x110	20	19.5	21	ET15-HUK-2608L-110-D20	ET15-HUK-2608R-110-D20
Type ET15	26x8x110	32	25.5	21	ET15-HUK-2608L-110-D32	ET15-HUK-2608R-110-D32
W 2.0	26x8x110	32	25.5	21	ET20-HUK-2608L-110-D32	ET20-HUK-2608R-110-D32
Type ET20	26x8x110	44	31.5	21	ET20-HUK-2608L-110-D44	ET20-HUK-2608R-110-D44

Pièces de rechange Ersatzteile Spare parts	 *	 *
	Art. N°	Art. N°
	V-M4X14.5-T15-EVOCUT	C-T15

* livré avec chaque lame
 mit jedem Steckling geliefert
 delivered with each blade

Lames pour système modulaire
 Stechklinge für modulares System
 Parting-off blades for modular system

HM Series



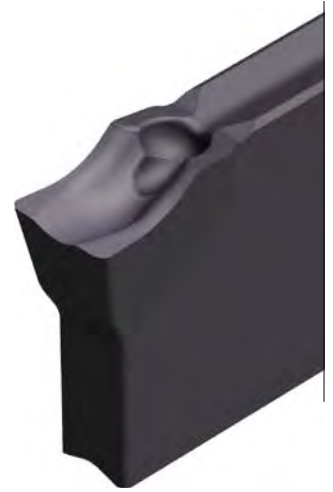
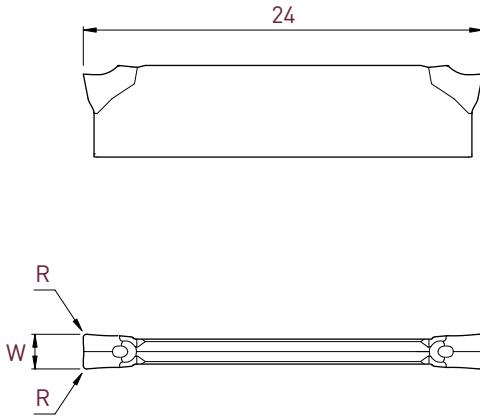
N


Plaquettes WSP Inserts	Ø max.	B	L	H	Art. N°
W 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
W 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
W 3.0					
Type ET20	32	3.2	43.5	24	ET30-HM-IN-43-D32

EVOCUT-LINE

Plaquettes de tronçonnage
 Abstechwendeplatten
 Cut off inserts

UN Series



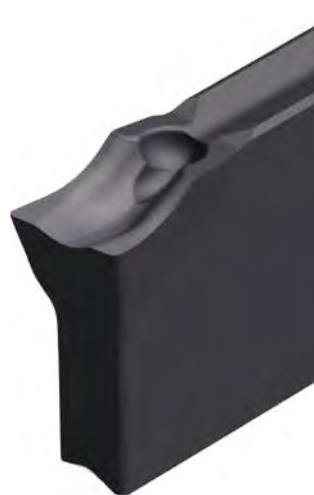
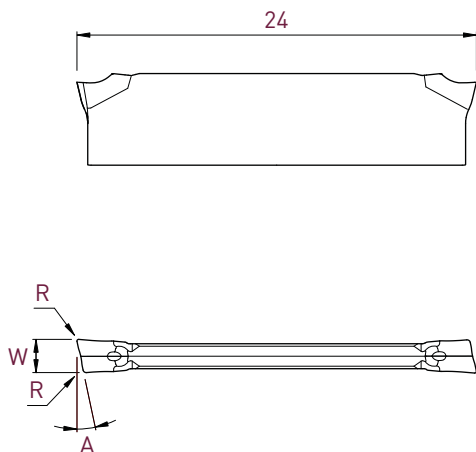
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Type	W $\pm 0,05$	R	Art. N°	<table border="1"> <tr> <td>P</td><td>P</td><td>P</td><td>P</td> </tr> <tr> <td>E</td><td>M</td><td>M</td><td>M</td> </tr> <tr> <td>N</td><td></td><td></td><td></td> </tr> <tr> <td>S</td><td></td><td></td><td></td> </tr> </table>	P	P	P	P	E	M	M	M	N				S				Tmax	Zmax	ZT16
P	P	P	P																				
E	M	M	M																				
N																							
S																							
ET15	1.5	0	ET15-UN-000F	■																			
	1.5	0.2	ET15-UN-002	■	■	■																	
ET20	2.0	0	ET20-UN-000F	■																			
	2.0	0.2	ET20-UN-002	■	■	■	■																
ET25	2.5	0	ET25-UN-000F	■																			
	2.5	0.3	ET25-UN-003	■	■	■	■																
ET30	3.0	0	ET30-UN-000F	■																			
	3.0	0.3	ET30-UN-003	■	■	■	■																

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

UL-UR Series

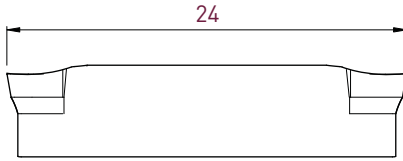


Type	W ±0,05	A	R	UL			UR				
				Art. N°	TiAlN	Tmax	Zmax	Art. N°	TiAlN	Tmax	Zmax
ET15	1.5	6°	0.2	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET15-UR-602	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	1.5	8°	0	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET15-UR-800F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	1.5	12°	0.1	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET15-UR-1201	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	1.5	15°	0	ET15-UL-1500F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET15-UR-1500F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ET20	2.0	6°	0.2	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET20-UR-602	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	2.0	8°	0	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET20-UR-800F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	2.0	12°	0.1	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET20-UR-1201	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	2.0	15°	0	ET20-UL-1500F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET20-UR-1500F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ET25	2.5	6°	0.2	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET25-UR-602	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	2.5	8°	0	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET25-UR-800F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	2.5	12°	0.1	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET25-UR-1201	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	2.5	15°	0	ET25-UL-1500F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET25-UR-1500F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ET30	3.0	6°	0.3	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET30-UR-603	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	3.0	8°	0	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET30-UR-800F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	3.0	12°	0.2	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET30-UR-1202	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	3.0	15°	0	ET30-UL-1500F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ET30-UR-1500F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

EVOCUT-LINE

- Plaquettes de tronçonnage
- Abstechwendeplatten
- Cut off inserts

JN Series



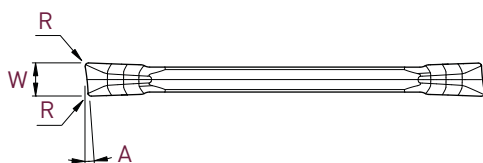
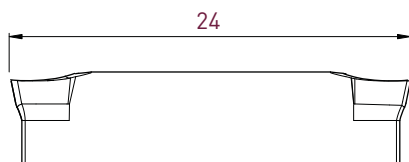
Type	W $\pm 0,05$	R	Art. N°	<table border="1"> <tr> <td>P</td><td>P</td><td>P</td><td>P</td> </tr> <tr> <td>E</td><td>M</td><td>M</td><td>M</td> </tr> <tr> <td>N</td><td></td><td></td><td></td> </tr> <tr> <td>S</td><td></td><td></td><td></td> </tr> </table>	P	P	P	P	E	M	M	M	N				S			
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E	M	M	M																	
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S																				
				<table border="1"> <tr> <td>TiAlN</td><td>Tmax</td><td>Zmax</td><td>ZTi6</td> </tr> </table>	TiAlN	Tmax	Zmax	ZTi6												
TiAlN	Tmax	Zmax	ZTi6																	
ET15	1.5	0.2	ET15-JN-002	<table border="1"> <tr> <td>■</td><td>■</td><td>■</td><td></td> </tr> </table>	■	■	■													
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ET20	2.0	0.2	ET20-JN-002	<table border="1"> <tr> <td>■</td><td>■</td><td>■</td><td>■</td> </tr> </table>	■	■	■	■												
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ET25	2.5	0.3	ET25-JN-003	<table border="1"> <tr> <td>■</td><td>■</td><td>■</td><td>■</td> </tr> </table>	■	■	■	■												
■	■	■	■																	
ET30	3.0	0.3	ET30-JN-003	<table border="1"> <tr> <td>■</td><td>■</td><td>■</td><td>■</td> </tr> </table>	■	■	■	■												
■	■	■	■																	

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

JR Series



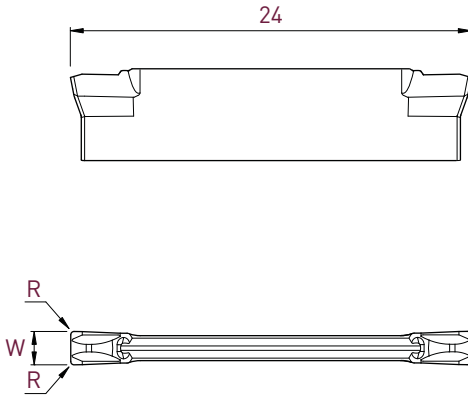
Type	W ±0,05	A	R	Art. N°	JR		
					TiAlN	Tmax	Zmax
ET15	1.5	6°	0.2	ET15-JR-602	■	■	■
ET20	2.0	6°	0.2	ET20-JR-602	■	■	■
ET25	2.5	6°	0.2	ET25-JR-602	■	■	■
ET30	3.0	6°	0.3	ET30-JR-603	■	■	■


EVOCUT-LINE

- Plaquettes de tronçonnage
- Abstechwendeplatten
- Cut off inserts

Negative geometry

TN Series



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Type	W $\pm 0,05$	R	Art. N°	<table border="1"> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1"> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1"> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<table border="1"> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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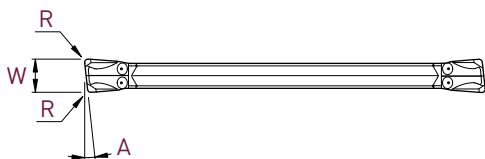
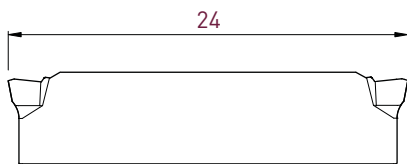
Plaquettes de tronçonnage


Abstechwendeplatten

Cut off inserts

Negative geometry

TR Series



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Type	W ±0.05	A	R	Art. N°	<table border="1"> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> </table>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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ET30	3.0	6°	0.3	ET30-TR-603	<table border="1"> <tr> <td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td> </tr> </table>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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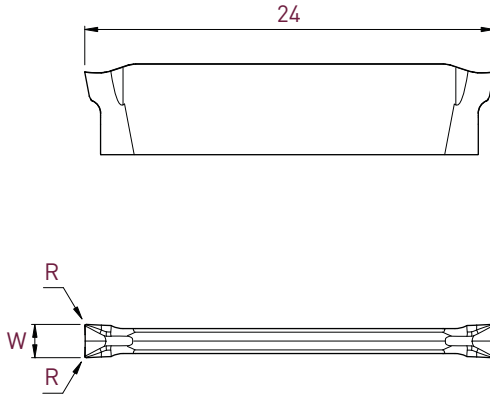
EVOCUT-LINE

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

AN Series



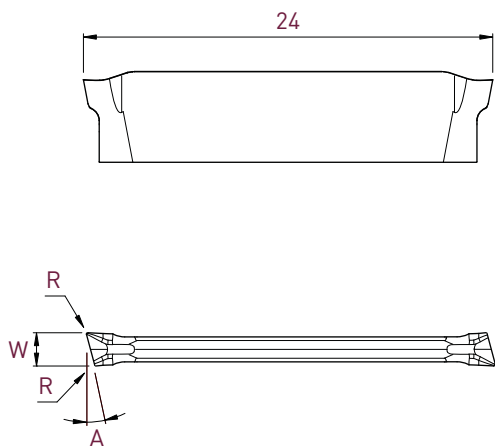
			AN			
Type	W $\pm 0,05$	R	Art. N°	TiAIN	AS	N
ET20	2.0	0.2	ET20-AN-002F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ET30	3.0	0.3	ET30-AN-003F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Plaquettes de tronçonnage

Abstechwendeplatten

Cut off inserts

AR Series












				AR			
Type	W $\pm 0,05$	A	R	Art. N°	TiAIN	AS	N
ET20	2.0	15°	0.1	ET20-AR-1501F	<input checked="" type="checkbox"/> M <input checked="" type="checkbox"/> N	<input type="checkbox"/> S <input checked="" type="checkbox"/> S	<input type="checkbox"/> N <input checked="" type="checkbox"/> N
ET30	3.0	15°	0.2	ET30-AR-1502F	<input type="checkbox"/> M <input type="checkbox"/> N	<input type="checkbox"/> S <input checked="" type="checkbox"/> S	<input type="checkbox"/> N <input checked="" type="checkbox"/> N

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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		
		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)			
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
		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
	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
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
		UR/UL	TiAlN	■	■	■	■	80-120	0.02-0.05	50-100	0.02-0.05	40-80	0.02-0.05	40-100
	AN 	N	■	■	■	■								
		TiAlN	■	■	■	■							40-80	0.02-0.05
	AR 	N	■	■	■	■								
		TiAlN	■	■	■	■							40-80	0.02-0.05
		AS	■	■	■	■								

* premier choix en cas de coupe interrompue

** arête de coupe vive

* beste Basis für unterbrochene Schnitte
** scharfe Schneidkante

* first choice for interrupted cut
** sharp cutting edge

N Alliage 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			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
						150-300	0.05-0.20				
						150-300	0.05-0.20				
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

