



MIRCONA^A

Parting-off and Grooving Tools
Abstech- und Nutendrehwerkzeuge
Avsticknings- och spårvarvningsverktyg

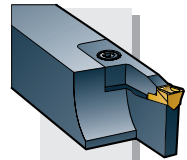


 **建德刀具專業產品**
台北02-25552876 台中04-22809826



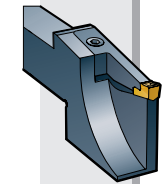
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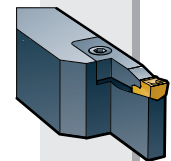
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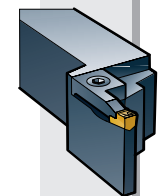
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A69



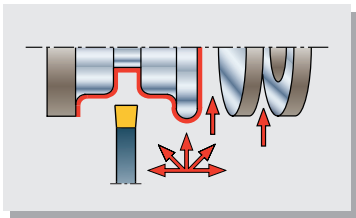
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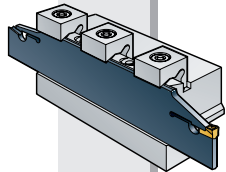
151G
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Circlip grooves
Sicherungsringnuten
Låsringsspår



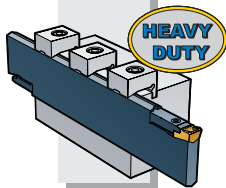
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156C
TB56C

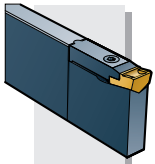
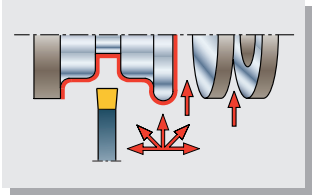
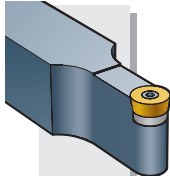
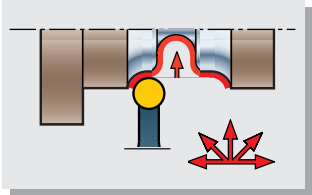
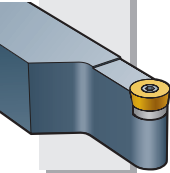
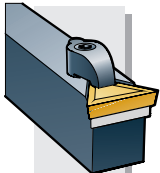
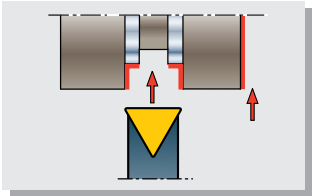
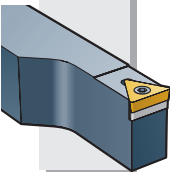
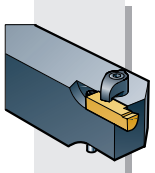
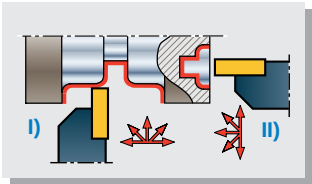
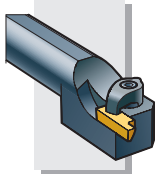
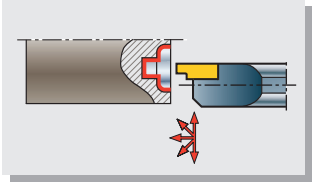
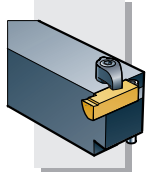
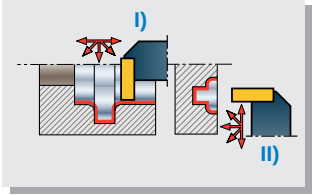
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HD56S

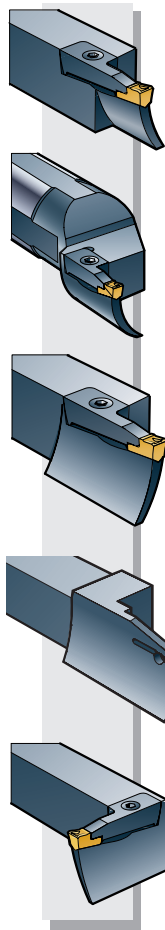
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	SRDCN		A21	A81–A82
	SRDCNM			
	ISO			
	SRDCR/LM			
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	STFCR/LM			
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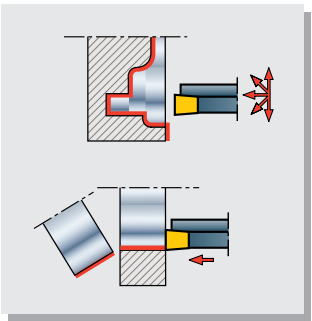
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A94–A98

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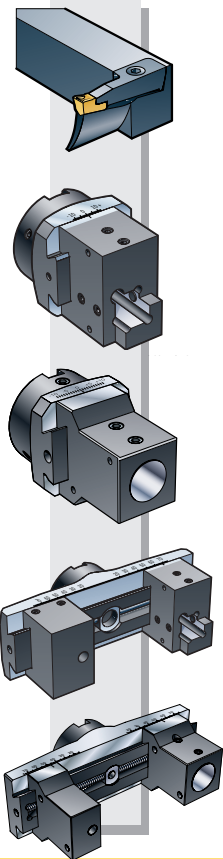
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153SD
153CD

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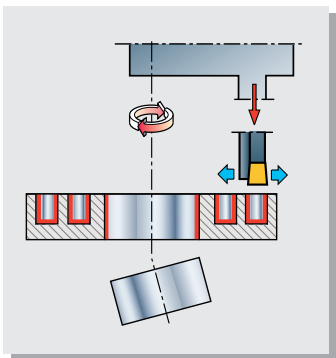


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A115

BFG

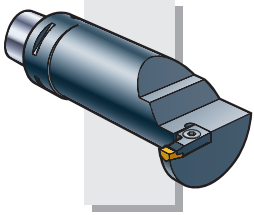


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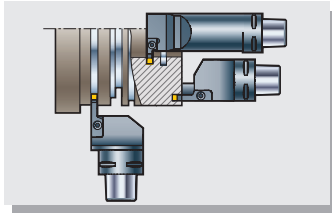
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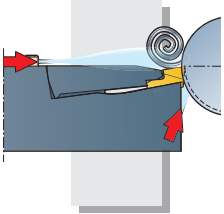


CAPTO®



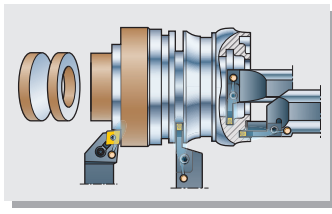
A36

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EB

Micro-lubrication system
Minimalschmiersystem
Minimalsmörjsystem

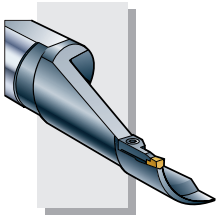


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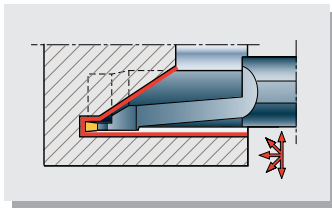
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A40–A41

C1–C24



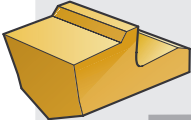
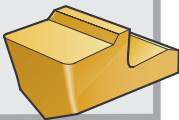
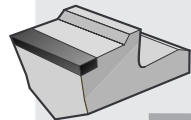
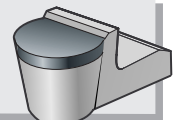
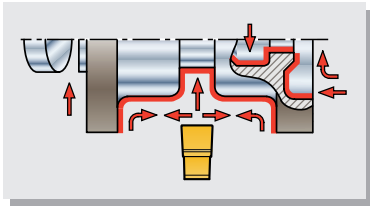
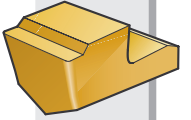
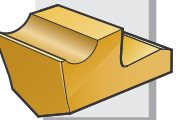
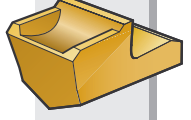
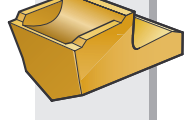
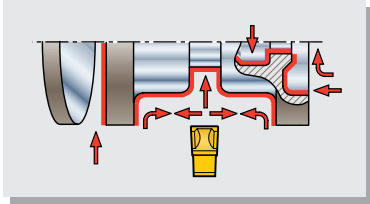
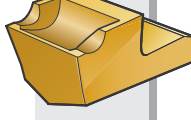
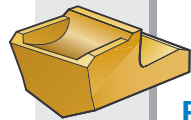
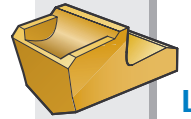
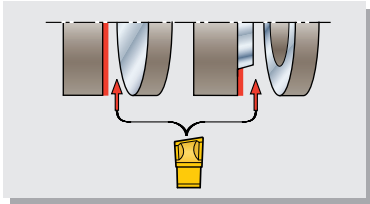
Special tools
Sonderwerkzeuge
Specialverktyg



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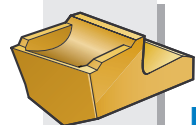
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Skär	Användningsområde	Rekommendationer; Sida	Tekniska speci- fikationer; Sida

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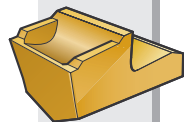
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MT 	MT-..Fr Boron nitride/Diamond Bornitrid/Diamant 		A146-A147	A146-A148
	MTb		A44-A58	A131
	MTc			A132
	MS			A132
	MZ		A44-A58	A134
	MP			A135
	MA			A136
R/L MS  RMS  LMS			A44-A49	A133



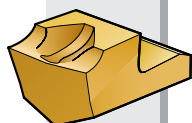
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**R/L MZ**

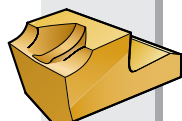
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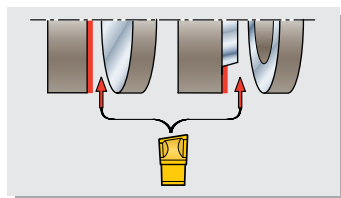
LMZ

**R/L MA**

RMA



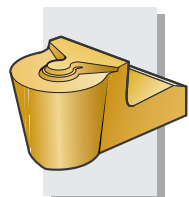
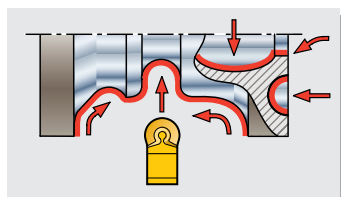
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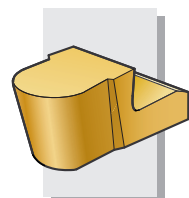
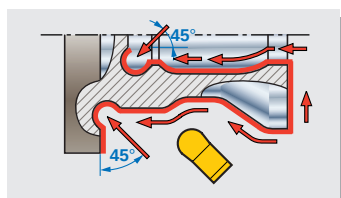
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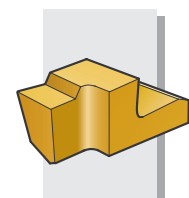
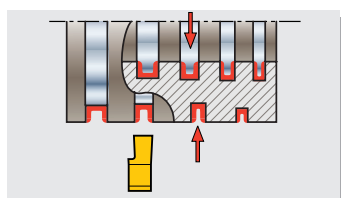
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A137

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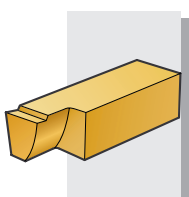
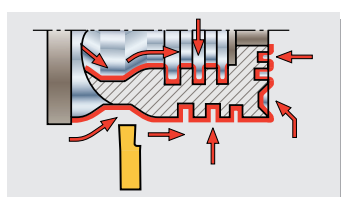
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**G**Circlip grooves
Sicherungsringnuten
Låsringsspår

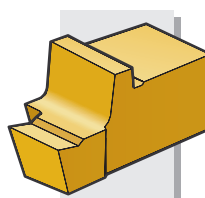
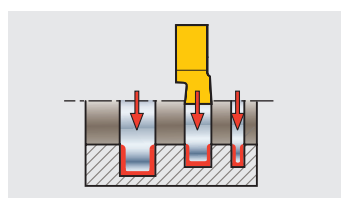
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A138

**R/LE**

A44–A58

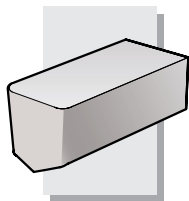
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**R/LH**Circlip grooves
Sicherungsringnuten
Låsringsspår

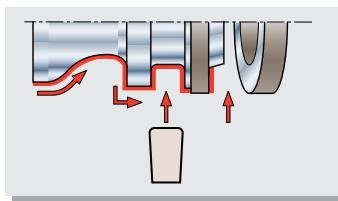
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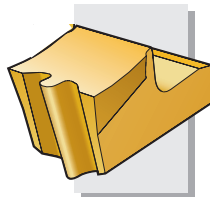


K
R/L K
Ceramics
Keramik
Keramik

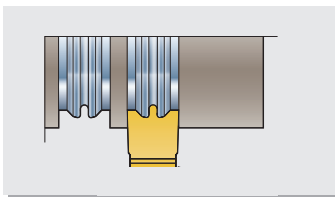


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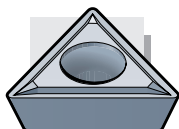
A145



Special inserts
Sonderschneiden
Specialskär



A63, A141



TCMT
TCGT
PF1



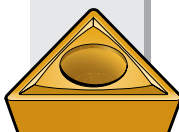
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PF2



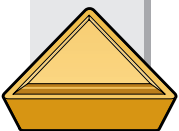
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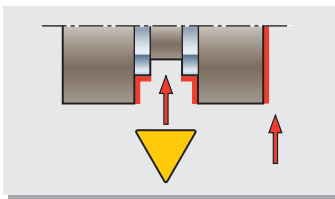
PM1



PM2



TPMR



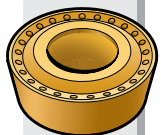
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A154–A155

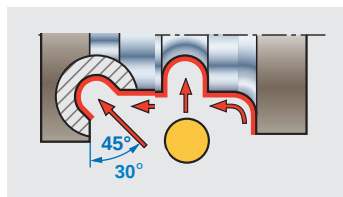
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**RCMT**

PF2



PM1

**RCMX**

A60-A61

A156-A157

**RCGT**

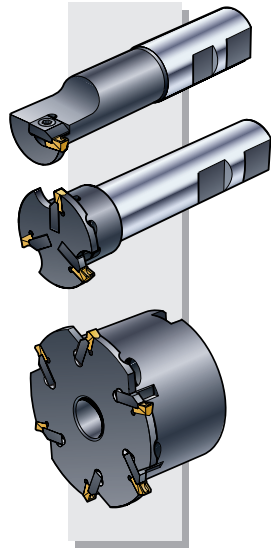
AL1

**RCXT**

AL2

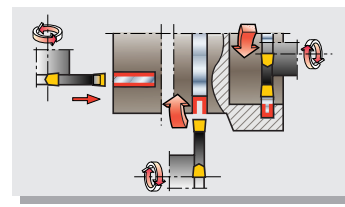
Groove milling cutter	Applications	Recommendations; Page	Technical speci- fications; Page
Nutenfräsen	Anwendungsbereich	Empfehlungen; Seite	Technische Spezi- fikationen; Seite
Spårfräs	Användningsområde	Rekommendationer; Sida	Tekniska specifi- kationer; Sida

A

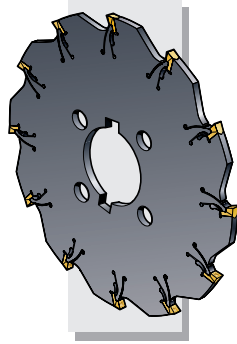


RGOA

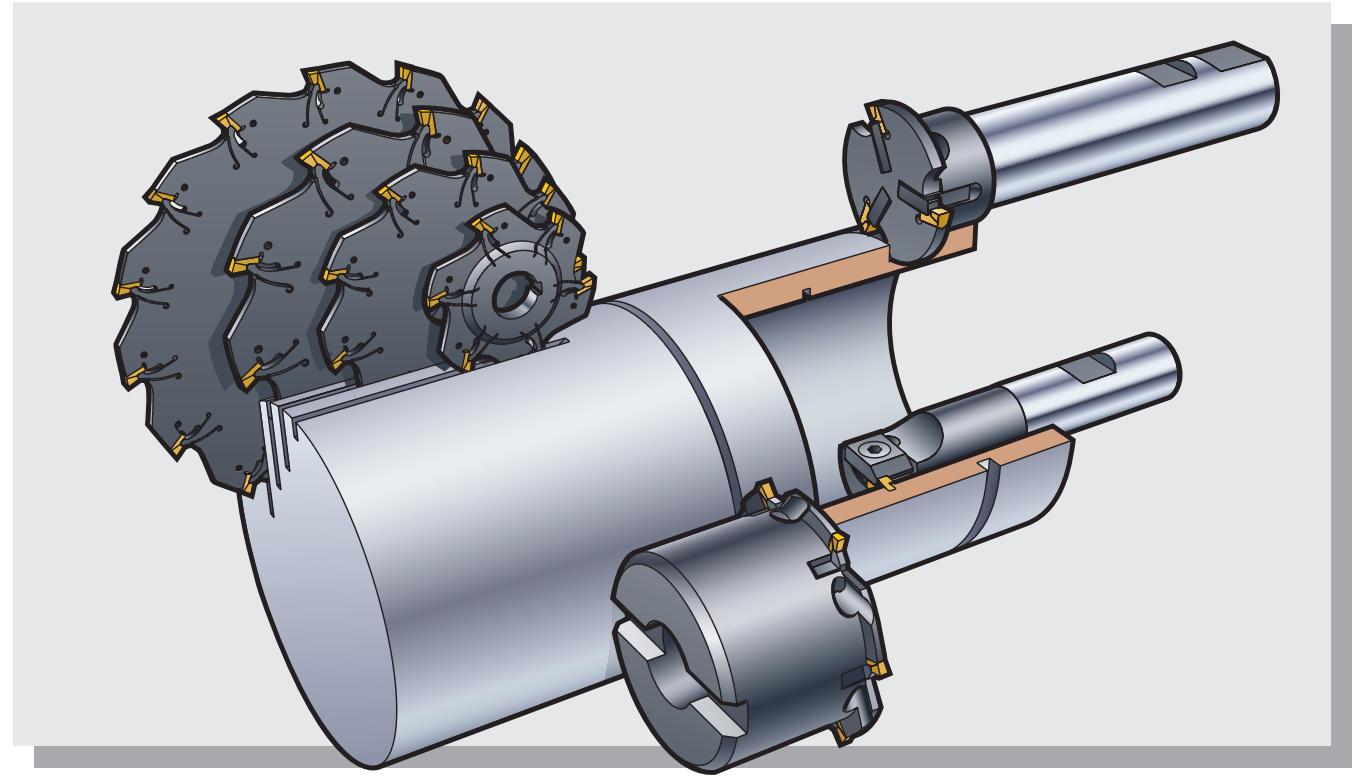
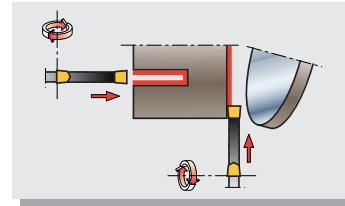
RGOU



E1-E36



NGOT



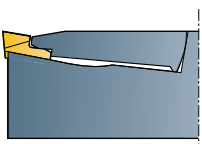
MIRCONA

..Parting-off and Grooving System

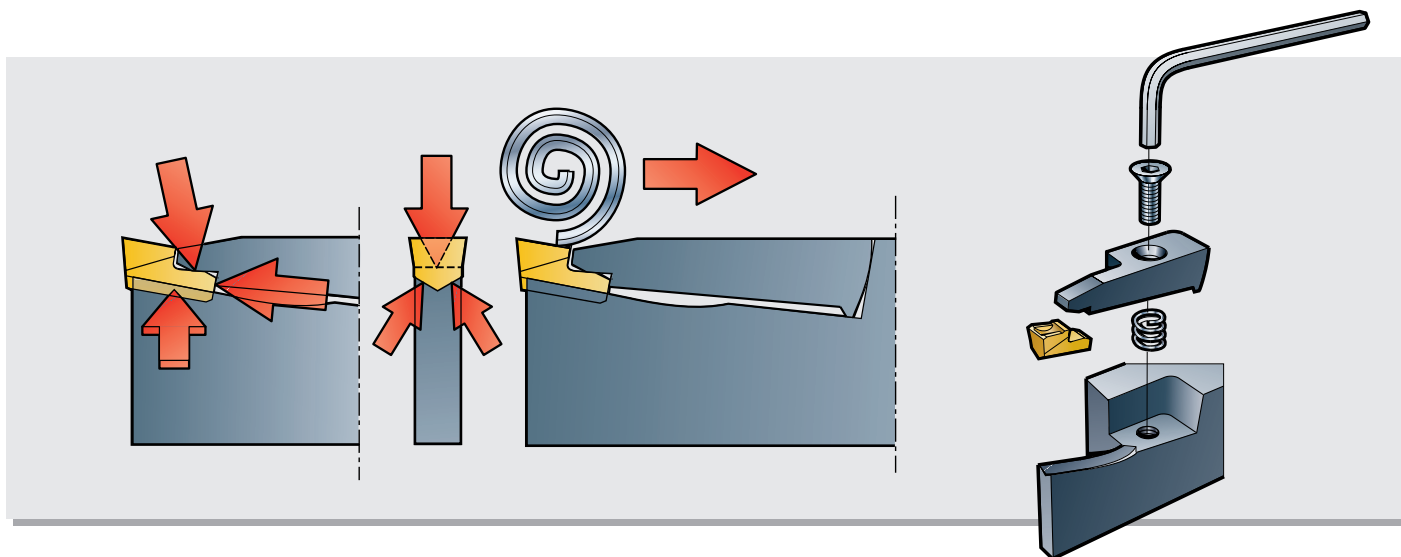
..Abstech- und Nutdrehssystem

..Avsticknings- och spårvarvningssystem

A

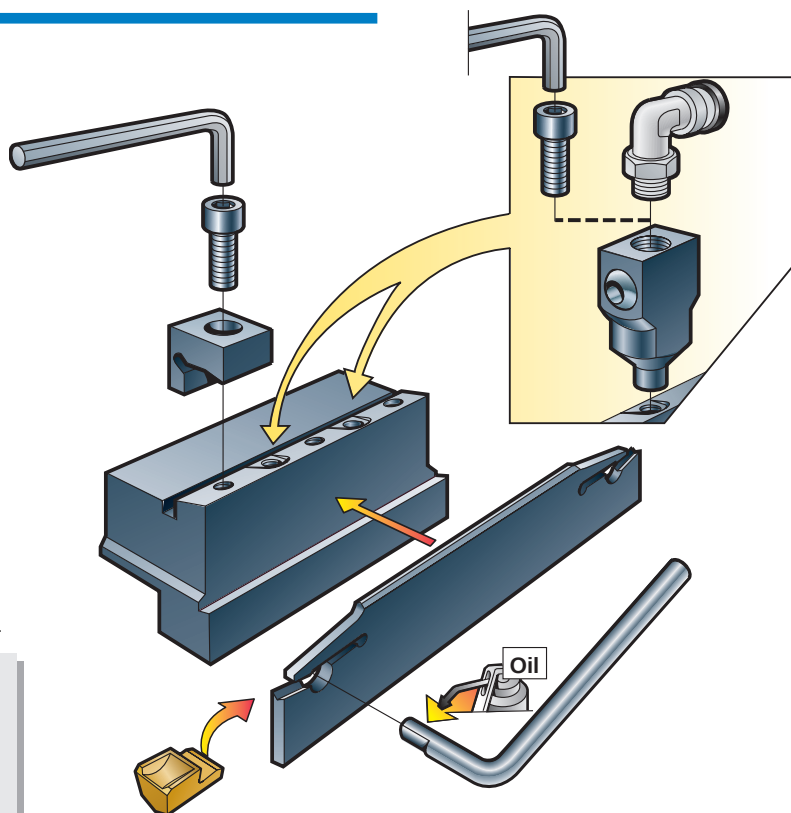
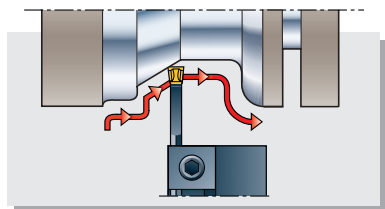
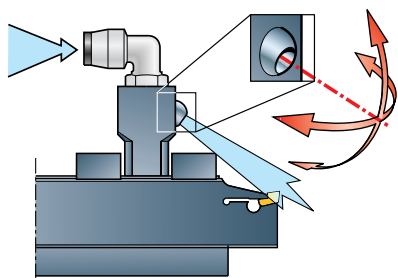
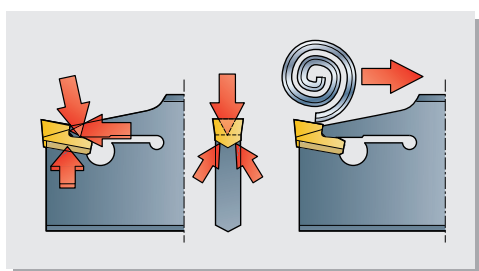


151F	151FA	151RF	151S	151G	151GA	156S	HD56S
155S	151K	152S	152S-00	153S	153SD	158S	159S
157G-00	157S-00	157GA-00	157SA-00	157TA-00	157HA-00		
157S	151B	157B					



156C

153CD



The Tool System

The **MIRCONA** tool system for parting-off and grooving includes standard tool holders and inserts for external and internal grooving and parting-off, face grooving and turning of relief grooves, circlip grooves, O-ring grooves, full-radius grooves and also blanks which can be ground to desired shape.

The tool system offers the following main advantages:

- Simple, safe and **rigid** insert clamping and **free chip flow**.

Das Werkzeugsystem

Zum **MIRCONA** Werkzeugsystem für das Abstechen und Nutenstechen gehören Standardhalter und Schneiden für das Aussen- und Innen-Nutendrehen und Abstechen, für das Stirnstechen und Drehen von Freistichen und Sicherungsringnuten, O-Ringnuten, Vollradiusnuten und auch „Rohlinge“, die zum gewünschten Nutenprofil geschliffen werden können.

Das Werkzeugsystem bietet die nachstehenden Hauptvorteile:

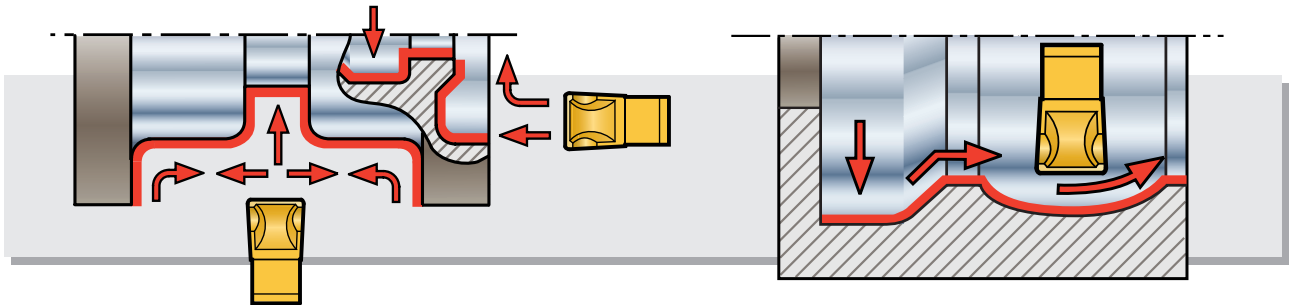
- Einfache, sichere und **starre** Klemmung der Schneide und **freien Spanfluss**.

Verktygssystemet

MIRCONAs verktygssystem för spår- och avstickning inkluderar standardhållare och skär för ut- och invändig spårsvärning och avstickning, axiell spårsvärning och svarvning av släppningsspår, låsringsspår, O-ringsspår, fullradiespår och även "ämnen" som kan slipas till önskad skärprofil.

Verktygssystemet erbjuder följande huvudsakliga fördelar:

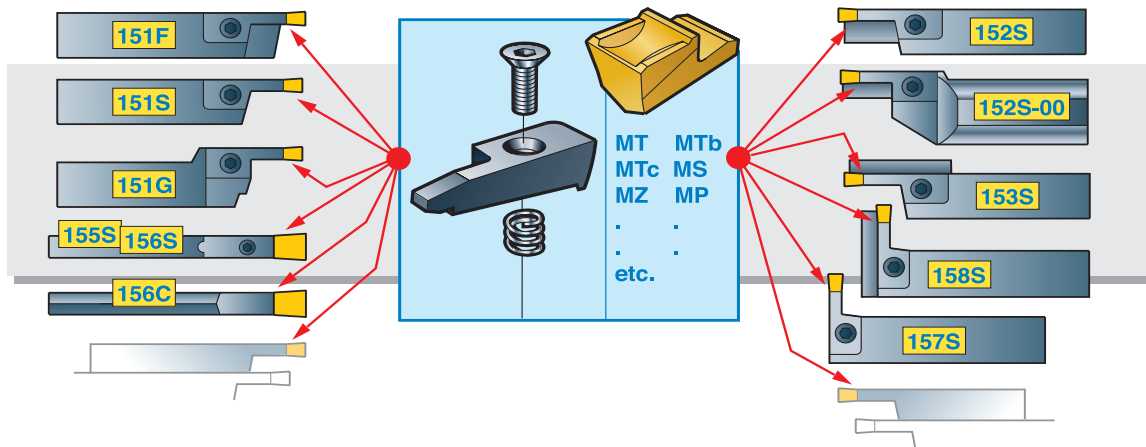
- Enkel, säker och **stabil** skärinspänning samt **fritt spånflöde**.



- Machining rigidity that allows **sideways turning, profiling** and **intermittent cutting**, with impact load.

- Bearbeitungsstabilität, die es erlaubt **seitwärts zu drehen, zu profilieren** sowie **unterbrochene Schnitte** vorzunehmen bei Schlagbelastung.

- Bearbetningsstabilitet som tillåter **svarvning i sidled, profilsvärning** och **intermittent bearbetning** med slagbelastning.



- With a few exceptions spare parts and inserts are **"universal"**, i.e. they can be used in holders for different applications.

As a complement, for machining of large cutting depths and possibility to adjust the entry length, **MIRCONA** offers tool type **156C** and **153CD** with a "self-clamping" of the insert.

To change the insert the excentric key EX5NY is used. To reduce the friction EX5NY should be lubricated.

The tool holder is provided with a rear **stop** for the insert, thereby ensuring that the insert will **not** be pushed back and will maintain centre height.

The clamping system also **allows side-ways turning and profiling operations to be performed**.

For applying cutting fluid a fluid adapter may be used.

- Mit wenigen Ausnahmen sind die Ersatzteile und Schneiden **"universal"**, d. h. sie können in verschiedenen Haltern bei verschiedenen Anwendungen verwendet werden.

Als Ergänzung für das Bearbeiten von besonders tiefen Schnitten bietet **MIRCONA** mit dem Werkzeug **156C** und **153CD**, einem „Selbstklemmsystem“, die Möglichkeit, die gewünschte Stechtiefe anzupassen.

Um die Schneide zu wechseln, wird die exzentrische Schlüssel EX5NY verwendet. Um die Reibung zu vermindern sollte die EX5NY Schlüssel geschmiert werden.

Der Werkzeughalter ist mit einem hinteren **Anschlag** für die Schneide ausgerüstet, der dafür sorgt, dass die Schneide **nicht** zurückgeschoben und die Spitzenhöhe der Maschine gehalten wird.

Das Spannsystem **erlaubt auch Seitwärtsbearbeitung und Profilieren**.

Um Schneidflüssigkeit zu verwenden, kann ein Schneidflüssigkeitsadapter verwendet werden.

- Med ett fåtal undantag är skär och reservdelar **"universella"**, dvs de kan användas i hållare för olika tillämpningar.

Som ett komplement för bearbetning av stora stickdjup samt möjlighet att valfritt ställa in instickslängden, så erbjuder **MIRCONA** verktygstyp **156C** och **153CD**, med sk självfastslåsning av skäret.

Vid skärbyte används excenternyckel EX5NY. För att reducera friktionen bör EX5NY smörjas.

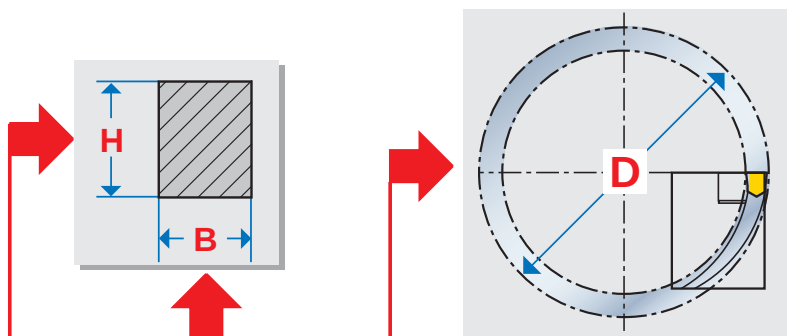
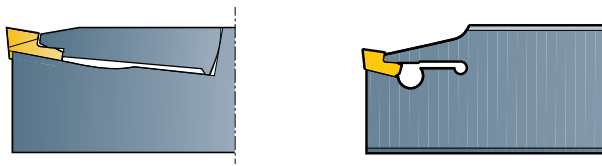
Skärhållaren har ett bakre fast anslag för skäret, innebärande att bearbetat radiellt mått ej kan variera och att centrumhöjden bibehålles.

Fastspänningssystemet **tillåter även bearbetning i sidled och profilsvärning**.

För applicering av skärvätska kan en kylvätskeadapter användas.

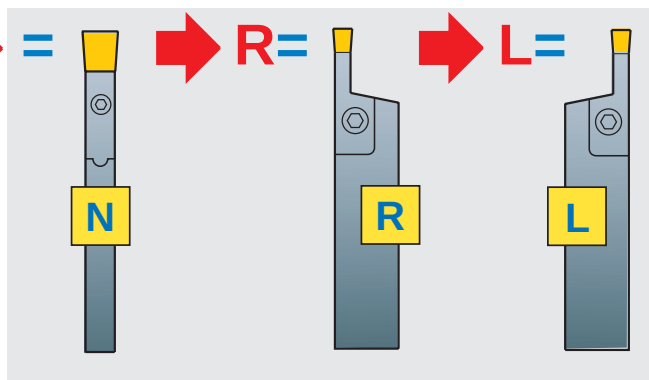
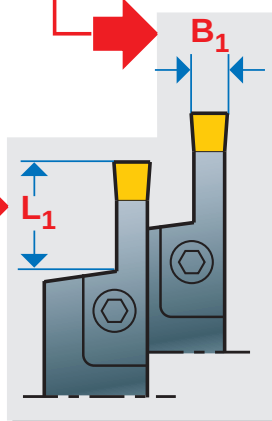
Code Key
Kodeschlüssel
Kodnyckel

A

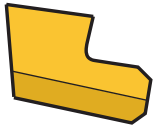


R152S-2525x20x4/50-60T

Type designation
Typenbezeichnung
Typbeteckning

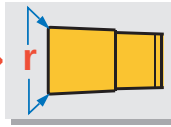


S,T=Modified standard
performance.
S,T=Modifizierte
Standardausführung
S,T=Modifiat standard-
utförande



MT-4r1 H20 K20

Carbide grade
Hartmetallsorte
Hårdmetallsort



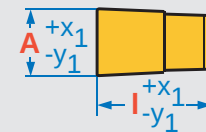
b =; **c** = Chip breaker
b =; **c** = Spanbrecher
b =; **c** = Spånbrytare



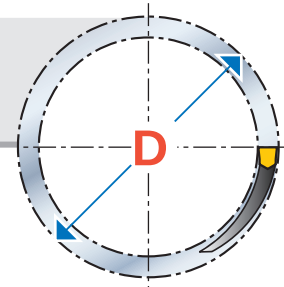
F = Full radius
F = Vollradius
F = Fullradie



Q = Precision performance
Q = Präzisionsausführung
Q = Precisionsutförande



Z ; **ZU** : D = 20 - 30 mm
X ; **XU** : D = 30 - 35 mm
U : D = 30 - 50 mm



Type designation
Typenbezeichnung
Typbeteckning

**MT, MTr, MTb, MTc, MS,
MZ, MP, MA, MB, B, G, E, H, K**

R

L



RMS



RMZ



RMA



RK



RG



RE



RH



RMT-..Z

RMP-..Z



RMB-..ZU



RMT-..FrZU

LMS



LMZ



LMA



LK



LG



LE



LH



LMT-..Z

LMP-..Z



LMB-..ZU



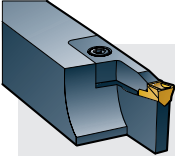
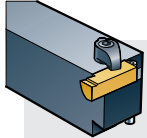
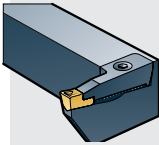
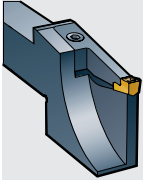
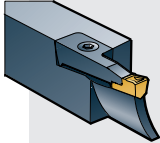
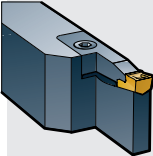
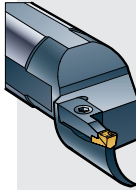
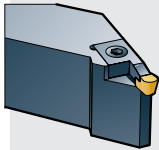
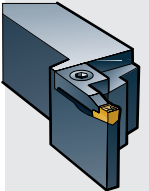
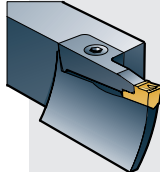
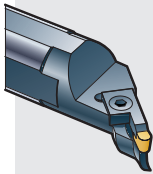
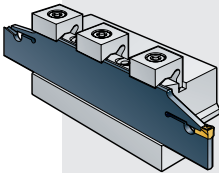
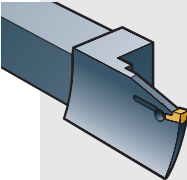
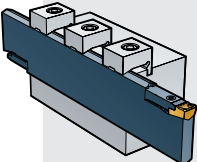
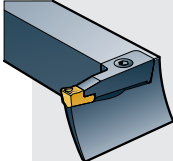
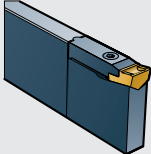
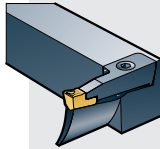
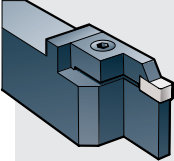
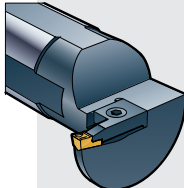
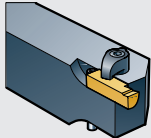
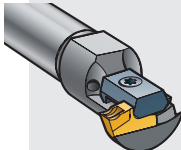
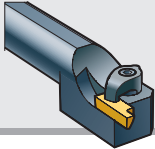
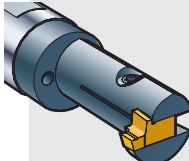
LMT-..FrZU

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	151F 151FA	A66-A68		158E	A86		157S	A120
	151RF	A69		152S	A87-A93			
	151S	A70		152S-00	A94-A98		151B	A121
	151G 151GA	A72-A73		153S	A99-A105		157B	A123
	156C TB56C	A74-A75		153SD 153CD	A106-A107			
	156S TB56S HD56S	A76-A79		158S	A108-A114			
	155S	A80		159S	A115			
	151K	A80		157G-00 157S-00 157GA-00 157SA-00	A116-A118			
	153E	A83		157TA-00	A119			
	153E-00	A84		157HA-00	A119			

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A63, A141, A172-A173

MB MT MTb MP MA MZ MS
MTc R/LMA R/LMZ R/LMS

A

Reduction of feed in center of workpiece and/or use of synchro chuck.

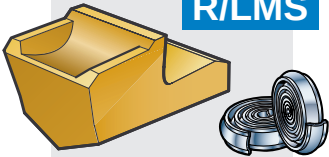
- Vorschubreduktion im Zentrum des Werkstücks und/oder Verwendung von Synchronfuttern.
-) Matningsreduktion i arbetsstyckets centrum och/eller användande av synkrospindel.

Recommended
○ Empfohlen
Rekommenderas

Expressed demand
● Ausdrücklicher Anspruch
Uttalat krav

Strong cutting edge
Starke Schneidkante
Stark skäregg

MS
R/LMS

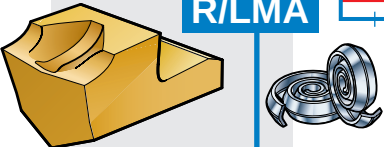
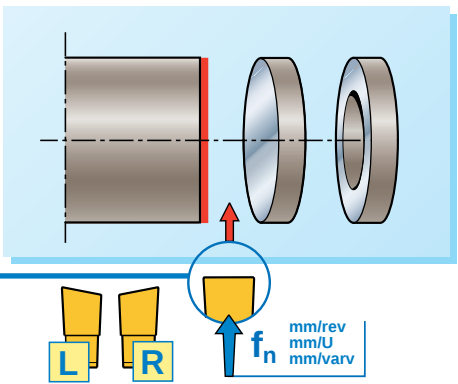


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Edge strength Kantenstärke Eggstyrka	Cutting pressure Schnittdruck Skärtryck	Special recommendations Besondere Empfehlungen Speciella rekommendationer	 f_n mm mm/rev mm/U mm/varv	Feed, f_n Vorschub, f_n Matning, f_n
○) 		- Unfavourable machining conditions, intermittent cutting, hard abrasive materials. - Unvorteilhafte Bearbeitungsverhältnisse, unterbrochene Schnitte, harte abrasive Materialien. - Ofördelaktiga bearbetningsförhållanden, intermittent bearbetning, hårda abrasiva material.	2	0,05–0,13
			2,5	0,05–0,15
			3	0,12–0,25
			4	0,12–0,30
			5	0,12–0,35
			6	0,15–0,40
			8	0,15–0,60
			10	0,20–0,60
			12	0,20–0,60
			R/LMS	
			2	0,04–0,12
			2,5	0,05–0,12
			3–5	0,10–0,20
			6–10	0,10–0,30
○) 		- Tough difficult to break materials, aust stainless steels. Carbon steels with low carbon content. - Zähe schwer zu brechende Materialien, aust rostfreie Stähle. Kohlenstoffstähle mit niedrigem Kohlenstoffgehalt. - Sega svårbrytbara material, aust rostfria stål. Kolstål med låg kolhalt.	2	0,04–0,10
			2,5	0,05–0,10
			3	0,05–0,20
			4	0,05–0,20
			5	0,05–0,25
			6	0,07–0,25
			8	0,07–0,30
			10	0,07–0,35
			12	0,07–0,35
			R/LMZ	
			3–4	0,05–0,15
○) 		- Soft, "sticky", work-hardening, built-up edge forming materials. Aust/ duplex stainless steels, heat/acid-resistant alloys, non-ferrous metals. Slender workpieces, favourable machining conditions. - Weiche, „klebrige“, kaltverfestigende Materialien die Aufbauschneiden bilden. Aust/duplexe rostfreie Stähle, warm/säurefeste Legierungen, NE-Metalle. Schlanke Werkstücke, vorteilhafte Bearbeitungsverhältnisse. - Mjuka, "kladdiga", deformationshårdande, löseggsbildande material. Aust/duplexa rostfria stål, varm/syrahållfasta legeringar, icke-järnmetaller. Klena arbetsstycken, fördelaktiga bearbetningsförhållanden.	2	0,04–0,12
			2,5	0,04–0,20
			3	0,07–0,20
			4	0,07–0,20
			5	0,07–0,30
			R/LMA	
			2–2,5	0,04–0,12
			3–4	0,05–0,15
●) 			2	0,04–0,12
			2,5	0,04–0,20
			3	0,10–0,20
			4	0,10–0,20
			5	0,10–0,25
			6	0,10–0,30
			8	0,10–0,30

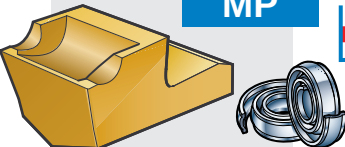


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MP

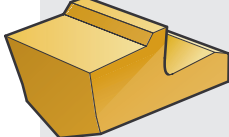
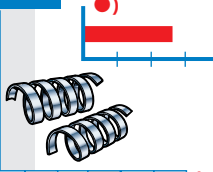
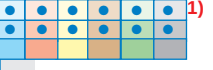
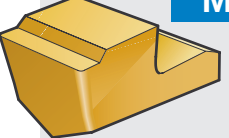
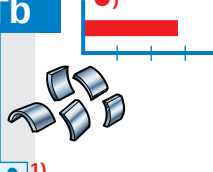
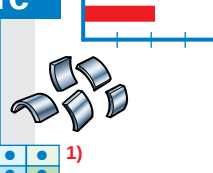
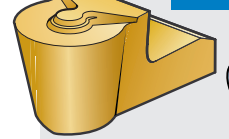
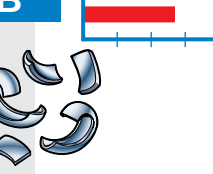
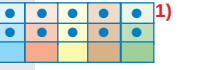


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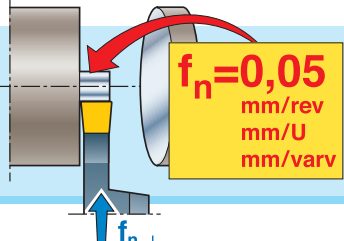
A135



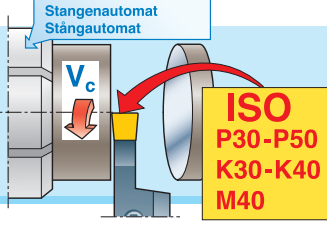
Contd. - Forts. -
Forts.

To limited extent In begrenztem Aufmass I begränsad omfattning		Edge strength Kantenstärke Eggstyrka	Cutting pressure Schnittdruck Skärtryck	Special recommendations Besondere Empfehlungen Speciella rekommendationer	 A mm	Feed, f_n Vorschub, f_n Matning, f_n					
 Page: A130 Seite: A130 Sida: A130	MT  	 	 	Small diameter slender workpieces, tubes, favourable machining conditions, non-ferrous metals. No swarf control.	2	0,04–0,12					
				Schlanke Werkstücke mit kleinem Durchmesser, Rohre, vorteilhafte Bearbeitungsverhältnisse, NE-Metalle. Keine Spanbeeinflussung.	2,5	0,04–0,20					
					3	0,05–0,15					
					4	0,05–0,15					
					5	0,05–0,20					
					6	0,05–0,20					
					7	0,05–0,20					
					8	0,05–0,25					
					9	0,05–0,25					
					10	0,05–0,30					
					11	0,05–0,30					
					12	0,05–0,30					
 Page: A131 Seite: A131 Sida: A131	MTb  	 	 	Small diameter slender workpieces, tubes, favourable machining conditions, non-ferrous metals. Chip breaking in carbon to high-alloy tool steel.	3	0,08–0,15					
				Schlanke Werkstücke mit kleinem Durchmesser, Rohre, vorteilhafte Bearbeitungsverhältnisse, NE-Metalle. Spanbrechung in Kohlenstoff bis zu hochlegiertem Werkzeugstahl.	4	0,08–0,15					
					5	0,08–0,15					
					6	0,08–0,20					
					7	0,08–0,20					
					8	0,08–0,25					
					10	0,08–0,25					
					12	0,08–0,25					
					 Page: A132 Seite: A132 Sida: A132	MTc  	 	 	Slanka arbetsstycken med liten diameter, rör, fördelaktiga bearbetningsförhållanden, icke-järnmetaller. Spånbrytning i kol- till höglegerade verktygsstål.	3	0,10–0,20
									Can be used for parting-off if required.	4	0,10–0,20
										5	0,15–0,25
										6	0,15–0,25
7	0,15–0,25										
8	0,20–0,30										
10	0,25–0,35										
12	0,25–0,35										
 Page: A137 Seite: A137 Sida: A137	MB  	 	 	Kann für Abstechen verwendet werden, wenn nötig.						3	0,05–0,20
				Kan användas för avstickning om så krävs.						4	0,05–0,20
										5	0,05–0,25
				Page: A54 Seite: A54 Sida: A54							

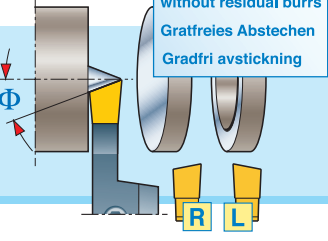
Please note the following: – Bitte folgendes beachten: – Notera följande:



$f_n = 0,05$
mm/rev
mm/U
mm/varv



ISO P30-P50 K30-K40 M40



Parting-off without residual burrs
Gratfreies Abstechen
Gratfri avstickning

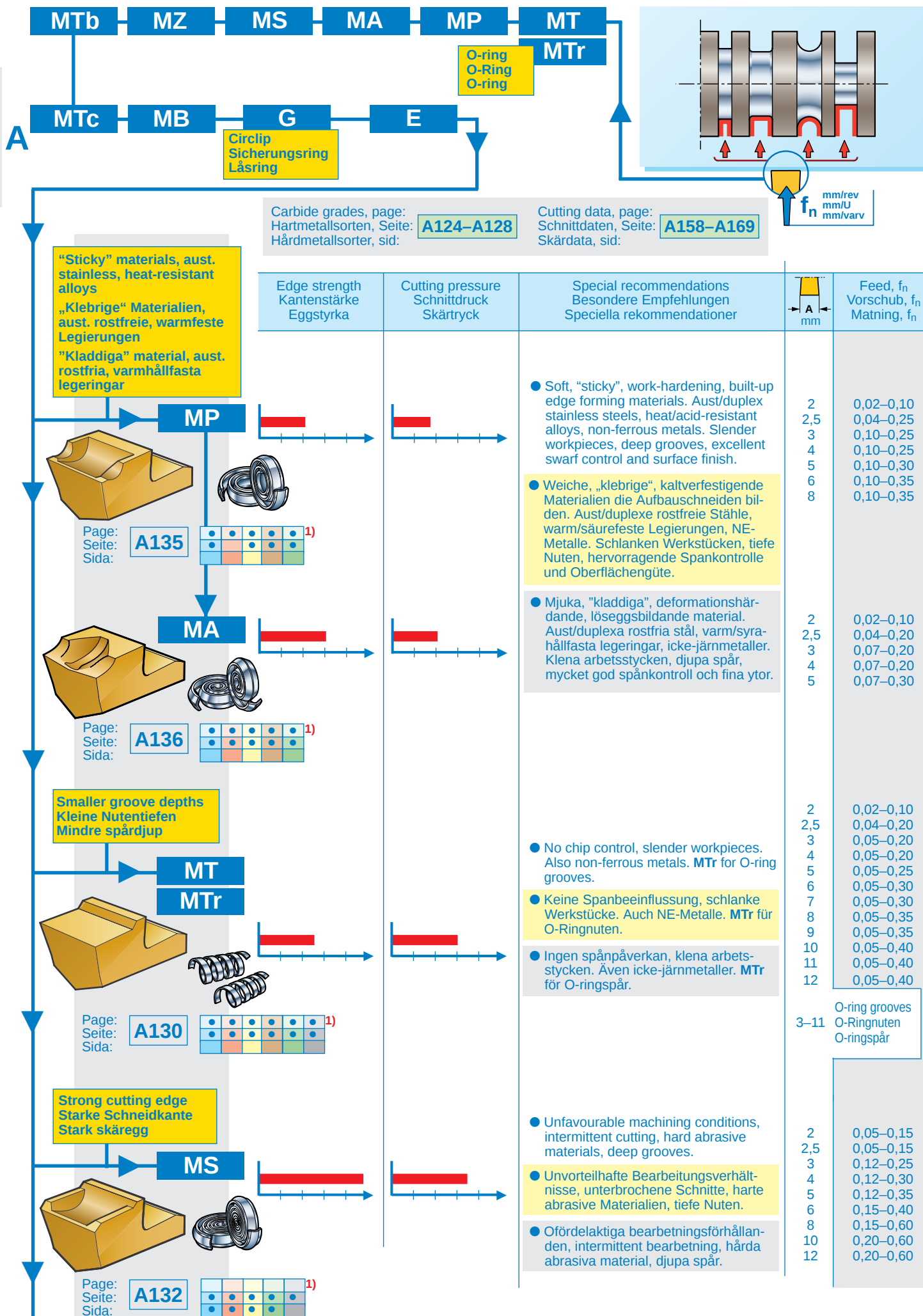
- Reduce feed in centre of workpiece.
- Den Vorschub im Zentrum des Werkstücks reduzieren.
- Reducera matningen i arbetsstyckets centrum.

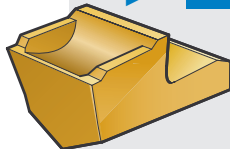
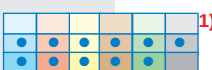
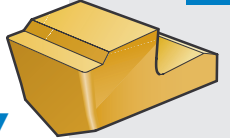
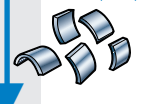
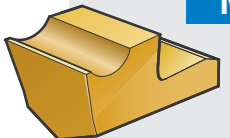
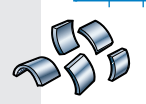
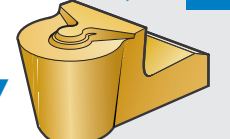
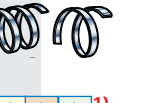
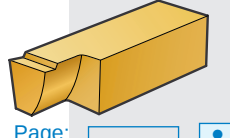
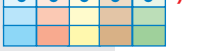
- Use a tough carbide grade in bar fed automatic lathes, due to low speed v_c .
- Eine zähe Hartmetallsorte verwenden, weil die Geschwindigkeit v_c in Stangenautomaten niedrig ist.
- Använd en seg hårdmetallsort i stångautomater, pga låg hastighet v_c .

- Select $\Phi = 0^\circ$ or smallest possible to avoid bad surface finish, deflection of the tool blade and short tool life.
- Wählen Sie $\Phi = 0^\circ$ oder den geringsten winkel, um schlechte Oberflächengüte, Biegung der Werkzeugklinge und kurze Lebensdauer der Schneide zu vermeiden.
- Välj $\Phi = 0^\circ$ eller minsta möjliga för att undvika dålig ytfinitet, utböjning av verktygstungan och kort verktygslivslängd.

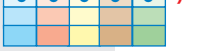
Carbide grades, page: A124–A128
Hartmetallsorten, Seite: A124–A128
Hårdmetallsorter, sid: A124–A128

Cutting data, page: A158–A169
Schnittdaten, Seite: A158–A169
Skärdata, sid: A158–A169

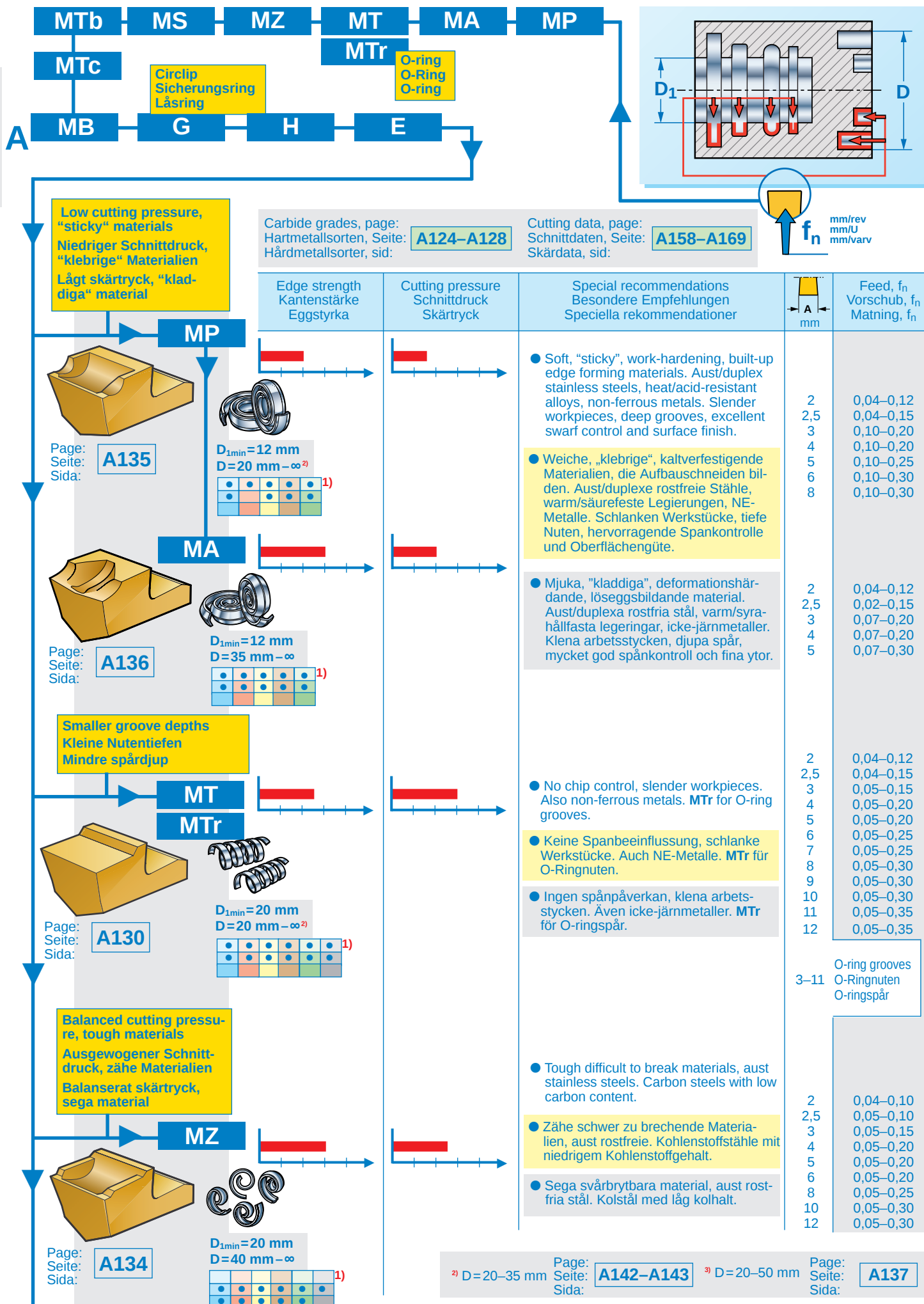


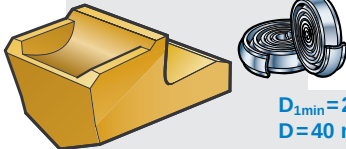
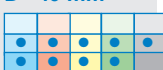
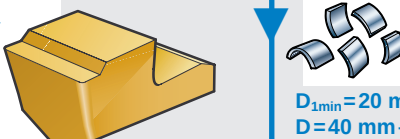
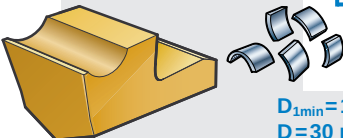
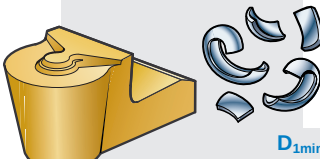
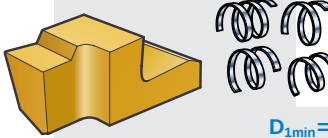
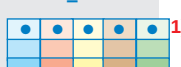
Tough materials, aust stainless Zähe Materialien, aust rostfreie Sega material, aust rostfria		Edge strength Kantenstärke Eggstyrka	Cutting pressure Schnittdruck Skärtryck	Special recommendations Besondere Empfehlungen Speciella rekommendationer	 mm	Feed, f _n Vorschub, f _n Matning, f _n
 MZ  Page: A134 Seite:  Sida: ¹⁾				- Tough difficult to break materials, aust stainless steels. Carbon steels with low carbon content. - Zähe schwer zu brechende Materialien, aust rostfreie Stähle. Kohlenstoffstähle mit niedrigem Kohlenstoffgehalt. - Sega svårbrytbara material, aust rostfria stål. Kolstål med låg kolhalt.	2 2,5 3 4 5 6 8 10 12	0,04–0,10 0,05–0,10 0,05–0,20 0,05–0,20 0,05–0,25 0,07–0,25 0,07–0,30 0,07–0,35 0,07–0,35
 MTb  Page: A131 Seite:  Sida: ¹⁾				- Chip breaking in carbon to high alloy tool steel. Also non-ferrous metals. - Spanbrechung in Kohlenstoffstählen bis zu hochlegiertem Werkzeugstahl. Auch NE-Metalle. - Spånbrytning i kol- till höglegerat verktygsstål. Även icke-järnmetaller.	3 4 5 6 7 8 10 12	0,08–0,15 0,08–0,15 0,08–0,15 0,08–0,20 0,08–0,20 0,08–0,25 0,08–0,25 0,08–0,25
 MTc  Page: A132 Seite:  Sida: ¹⁾				Spånbrytning i kol- till höglegerat verktygsstål. Även icke-järnmetaller.	3 4 5 6 7 8 10 12	0,10–0,20 0,10–0,20 0,15–0,25 0,15–0,25 0,15–0,25 0,20–0,30 0,25–0,35 0,25–0,35
 MB  Page: A137 Seite:  Sida: ¹⁾				- See previous page, MP/MA. - Siehe vorstehende Seite, MP/MA. - Se föregående sida, MP/MA.	3 4 5	0,05–0,20 0,05–0,20 0,05–0,25
 G  Page: A138 Seite:  Sida: ¹⁾				- Tool holder 151G. Also non-ferrous metals. Chip breaking in carbon to high alloy tool steel. - Werkzeughalter 151G. Auch NE-Metalle. Spanbrechung in Kohlenstoffstählen bis zu hochlegiertem Werkzeugstahl. - Verktygshållare 151G. Även icke-järnmetaller. Spånbrytning i kol- till höglegerat verktygsstål.	0,50 0,60 0,70 0,80 0,90 1,05 1,10 1,25 1,30 1,55 1,60 1,85 2,15 2,65 3,15	0,02–0,10 0,02–0,10 0,03–0,10 0,05–0,12 0,05–0,12 0,05–0,12 0,05–0,12 0,05–0,12 0,05–0,12 0,05–0,12 0,05–0,12 0,05–0,15 0,05–0,15 0,05–0,15 0,05–0,20
 E  Page: A139 Seite:  Sida: ¹⁾				- Tool holder 153E. High precision grooves, limited depths (3.0-6.5 mm). Chip breaking. - Werkzeughalter 153E. Präzisionsnuten mit begrenzten Tiefen (3,0-6,5 mm). Spånbrechend. - Verktygshållare 153E. Spår med hög precision, begränsade djup (3,0-6,5 mm). Spånbrytande.	2 2,5 3 4 5	0,05–0,15

Page: **A54**
Seite: ¹⁾
Sida:



Page: **A54**
Seite: **A54**
Sida: **A54**



Strong cutting edge Starke Schneidkante Stark skäregg		Edge strength Kantenstärke Eggstyrka	Cutting pressure Schnittdruck Skärtryck	Special recommendations Besondere Empfehlungen Speciella rekommendationer	 A mm	Feed, f_n Vorschub, f_n Matning, f_n
MS  $D_{1min}=20\text{ mm}$ $D=40\text{ mm}-\infty$ ¹⁾ Page: Seite: Sida: A132			- Unfavourable machining conditions, intermittent cutting, hard abrasive materials, deep grooves. - Unvorteilhafte Bearbeitungsverhältnisse, unterbrochene Schnitte, harte abrasive Materialien, tiefe Nuten. - Ofördelaktiga bearbetningsförhållanden, intermittent bearbetning, hårda abrasiva material, djupa spår.	2	0,05–0,12	
				2,5	0,05–0,12	
				3	0,07–0,15	
				4	0,07–0,20	
				5	0,10–0,20	
				6	0,10–0,25	
				8	0,10–0,25	
				10	0,10–0,30	
				12	0,10–0,30	
				Chip breaking Spanbrechung Spånbrytning MTb  $D_{1min}=20\text{ mm}$ $D=40\text{ mm}-\infty$ ¹⁾ Page: Seite: Sida: A131		
4	0,08–0,15					
5	0,08–0,15					
6	0,08–0,15					
7	0,08–0,15					
8	0,08–0,20					
10	0,08–0,20					
12	0,08–0,20					
MTc  $D_{1min}=16\text{ mm}$ $D=30\text{ mm}-\infty$²⁾ ¹⁾ Page: Seite: Sida: A132						
				4	0,10–0,20	
				5	0,15–0,25	
				6	0,15–0,25	
				7	0,15–0,25	
				8	0,20–0,30	
				10	0,25–0,35	
				12	0,25–0,35	
				Full-radius grooves Vollradiusnuten Fullradiespår MB  $D_{1min}=20\text{ mm}$ $D=20\text{ mm}-\infty$³⁾ ¹⁾ Page: Seite: Sida: A137		
4	0,05–0,20					
5	0,05–0,25					
Circlip grooves Sicherungsringnuten Låsringspår G  $D_{1min}=12\text{ mm}$ – ¹⁾ Page: Seite: Sida: A138			- Tool holder 157G-00/157GA-00. Also non-ferrous metals. Chip breaking in carbon to high alloy tool steel. - Werkzeughalter 157G-00/157GA-00. Auch NE-Metalle. Spanbrechung in Kohlenstoffstählen bis zu hochlegiertem Werkzeugstahl. - Verktygshållare 157G-00/157GA-00. Även icke-järnmetaller. Spånbrytning i kol- till höglegerat verktygsstål.	0,50	0,02–0,10	
				0,60	0,02–0,10	
				0,70	0,03–0,10	
				0,80	0,05–0,12	
				0,90	0,05–0,12	
				1,05	0,05–0,12	
				1,10	0,05–0,12	
				1,25	0,05–0,12	
				1,30	0,05–0,12	
				1,55	0,05–0,12	
				1,60	0,05–0,12	
				1,85	0,05–0,15	
				2,15	0,05–0,15	
				2,65	0,05–0,15	
				3,15	0,05–0,20	

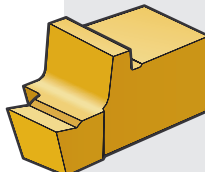
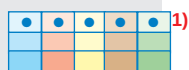
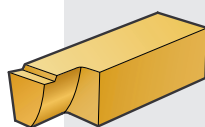
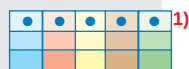
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Forts.

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MIRCONA

A5

A

		Edge strength Kantenstärke Eggstyrka	Cutting pressure Schnittdruck Skärtryck	Special recommendations Besondere Empfehlungen Speciella rekommendationer	 A mm	Feed, f_n Vorschub, f_n Matning, f_n
A	Circlip grooves in the smallest hole dimensions Sicherungsringnuten in den kleinsten Lochdurchmessern Låsringsspår i de minsta håldimensionerna H  $D_{1min}=8\text{ mm}$ $D=-$  Page: A140 Seite: Sida:			- Tool holder 157HA-00 for internal machining in the smallest hole dimensions. Chip breaking. - Werkzeughalter 157HA-00 für Innenbearbeitung in den kleinsten Lochdurchmessern. Spanbrechend. - Verktvgshållare 157HA-00 för invändig bearbetning i de minsta håldimensionerna. Spånbrtande.	0,40 0,90 1,10 1,25 2,0	0,02–0,07 0,02–0,10 0,05–0,12 0,05–0,12 0,05–0,15
	High precision grooves Präzisionsnuten Spår med hög precision E  $D_{1min}=50\text{ mm}$ $D=14\text{ mm} - \infty$  Page: A139 Seite: Sida:			- Tool holder 153E, 153E-00 or 158E. High precision grooves, limited depths (3.0-6.5 mm). Chip breaking. - Werkzeughalter 153E, 153E-00 oder 158E. Präzisionsnuten mit begrenzter Tiefe (3,0-6,5 mm). Spanbrechend. - Verktvgshållare 153E, 153E-00 eller 158E. Spår med hög precision, Begränsade djup (3,0-6,5 mm). Spånbrtande.	2 2,5 3 4 5	0,05–0,15

¹⁾ ISO Material index - Werkstoff-Index - Materialindex

P: All types of steels, cast steels and long chipping cast irons except aust/duplex stainless steels - Stähle, Stahlguss und langspanender Guss aller arten ohne aust/duplex rostfreie Stähle - Alla typer av stål, gjutstål och långspånande gjutjärn utom aust/duplexa rostfria stål.

M: All types of aust/duplex stainless steels - Aust/duplex rostfreie Stähle aller Arten - Alla typer av aust/duplex rostfritt stål.

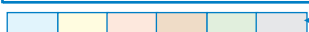
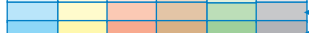
K: All types of short-chipping cast iron - Kurzspanender Guss aller arten - Alla typer av kortspånande gjutjärn.

S: All types of heat-resistant Ni-, Co-, Fe- and Ti-alloys - Warmfeste Ni-, Co-, Fe- und Ti-Legierungen aller Arten - Alla typer av varmhållfasta Ni-, Co-, Fe- och Ti-legeringar.

N: All types of non-ferrous metals and non-metallic materials - NE-Metalle aller Arten und nicht metallische Matrialien -Alla typer av icke-järnmetaller och icke metalliska material.

H: Hard materials; all types of hardened steels and cast iron - Harte Materialien; Gehärtete Stähle und guss aller Arten - Hårda material; alla typer av härdade stål och gjutjärn.

• Main application area - Hauptsätzliches Gebrauch - Främsta tillämpningsområde

	Finishing/light roughing - Schlichten/leichtes Schruppen - Finbearbetning/lätt grovbearbetning
	Medium roughing - Mittleres Schruppen - Medelgrov bearbetning
	Roughing/heavy roughing - Schruppen/Starkes Schruppen - Grovbearbetning/tung grovbearbetning

MTb **MTc** **MTr** **MT** **MA**

MZ **E** **H** **MS**

O-ring
O-Ring
O-ring

MB
MP

f_n mm/rev
mm/U
mm/varv

Excellent swarf control
Hervorragende Spankontrolle
Förträfflig spånkontroll

Important! Page: A65
Wichtig! Seite: A65
Viktigt! Sida: A65

Carbide grades, page: A124–A128
Hartmetallsorten, Seite: A124–A128
Hårdmetallsorter, sid: A124–A128

Cutting data, page: A158–A169
Schnittdaten, Seite: A158–A169
Skärdata, sid: A158–A169

	Edge strength Kantenstärke Eggstyrka	Cutting pressure Schnittdruck Skärtryck	Special recommendations Besondere Empfehlungen Speciella rekommendationer	$\frac{A}{mm}$	$\frac{r}{mm}$	$\frac{a_p}{mm}$	Feed, f_n Vorschub, f_n Matning, f_n	
MP Page: A135 Seite: A135 Sida: A135 $D_{1min} = 12\text{ mm}$ $D = 20\text{ mm} - \infty^{2)}$			Soft, "sticky", work-hardening, built-up edge forming materials, heat/acid-resistant alloys. Slender workpieces, smooth surface finish. Excellent swarf control and chip breaking in all machining directions in most materials, including aust/duplex stainless steels and non-ferrous metals.	2	0,20	–	–	
				2,5	0,20	0,1-1,0	0,05–0,15	
				3	0,25	0,1-2,0	0,10–0,25	
				4	0,25	0,1-2,0	0,10–0,25	
				5	0,25	0,1-2,5	0,10–0,30	
				6	0,25	0,1-2,5	0,10–0,35	
				8	0,35	0,1-2,5	0,10–0,40	
MB Page: A137 Seite: A137 Sida: A137 $D_{1min} = 20\text{ mm}$ $D = 20\text{ mm} - \infty^{3)}$			Weiche, „klebrige“, kaltverfestigende Materialien, die Aufbauschneiden bilden, warm/säurefeste Legierungen. Schlanke Werkstücke, hervorragende Oberflächenqualität. Hervorragende Spankontrolle und Spanbrechung in allen Bearbeitungsrichtungen in den meisten Materialien, inklusive aust/duplexer rostfreier Stähle und NE-Metalle.	3	1,5	0,1-2,0	0,05–0,25	
				4	2,0	0,1-2,5	0,05–0,25	
				5	2,5	0,1-3,5	0,05–0,35	
MA Page: A136 Seite: A136 Sida: A136 $D_{1min} = 12\text{ mm}$ $D = 35\text{ mm} - \infty$				Mjuka, "kladdiga", deformationshårdande, löseggsbildande material, varm/syrahållfasta legeringar. Klena arbetsstycken, fina ytor. Förträfflig spånkontroll och spånbrytning i alla bearbetningsriktningar i de flesta material, inklusive aust/duplexa rostfria stål och icke-järnmetaller.	2	0,20	–	–
					2,5	0,20	0,1-1,0	0,05–0,15
			3		0,25	0,1-2,0	0,10–0,25	
			4		0,25	0,1-2,0	0,10–0,25	
			5		0,25	0,1-2,0	0,07–0,30	
MT MTr Page: A130 Seite: A130 Sida: A130 $D_{1min} = 20\text{ mm}$ $D = 20\text{ mm} - \infty^{2)}$			No chip control, slender workpieces. Also non-ferrous metals. MTr for O-ring grooves.	2	0,2	–	–	
				2,5	0,2	0,1-1,0	0,05–0,15	
				3	0,25	0,1-2,0	0,10–0,25	
				4	0,25	0,1-2,5	0,10–0,25	
				5	0,25	0,1-3,0	0,10–0,30	
				6	0,25	0,1-3,5	0,10–0,35	
				7	0,25	0,1-3,5	0,10–0,35	
				8	0,35	0,1-3,5	0,10–0,40	
				9	0,35	0,1-3,5	0,10–0,40	
				10	0,35	0,1-3,5	0,10–0,40	
				11	0,35	0,1-3,5	0,10–0,40	
				12	0,35	0,1-3,5	0,10–0,40	
				3-11	0,5-1,0	0,1-3,5	O-ring grooves O-Ringnuten O-ringsspår	

²⁾ D=20–35 mm

Page: A142–A143
Seite: A142–A143
Sida: A142–A143

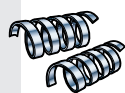
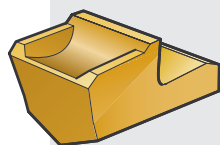
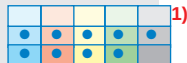
³⁾ D=20–50 mm

Page: A133
Seite: A133
Sida: A133

A

To limited extent
In begrenztem Aufmass
I begränsad omfattning

MS


 $D_{\min} = 20 \text{ mm}$
 $D = 40 \text{ mm} - \infty$


Page:
Seite:
Sida:

A132

Edge strength
Kantenstärke
Eggstyrka

Cutting pressure
Schnittdruck
Skärtryck

Special recommendations
Besondere Empfehlungen
Speciella rekommendationer

ΔA
mm

Δr
mm

a_p
mm

Feed, f_n
Vorschub, f_n
Matning, f_n

- Not suitable for sideways turning, due to unsuitable edge geometry and high cutting pressure.

- Ist nicht für Seitwärtsdrehen geeignet, wegen der Kantengeometrie entsteht ein zu hoher Schnittdruck.

- Ej lämplig för svarvning i sidled, pga olämpligt eggutförande och högt skärtryck.

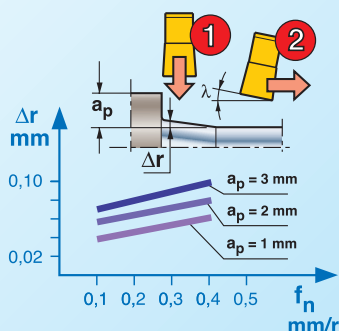
2
2,5
3
4
5
6
8
10
12

0,2
0,2
0,25
0,25
0,25
0,25
0,35
0,35
0,35

0,1–0,3

–
–
0,10–0,20
0,10–0,20
0,10–0,25
0,10–0,25
0,10–0,30
0,10–0,30
0,10–0,30

Please note the following: – Bitte folgendes beachten: – Notera följande:



- By turning sideways the edge is inclined, resulting in a front relief λ giving a smooth surface finish, and in a reduction Δr of the turned diameter. The change of position Δr is measured and the tool is **positioned backwards** the corresponding value (see page A160 - A162).

- Beim Seitwärtsdrehen wird die Schneide schräggestellt, was einen Stirnfreiwinkel λ mit einer guten Oberflächengüte ergibt und ebenso eine Reduktion Δr vom gedrehten Durchmesser. Der Unterschied Δr wird gemessen und das Werkzeug wird **nach hinten positioniert** dem Wert entsprechend (siehe Seite A160 - A162).

- Vid svarvning i sidled snedställs verktyget resulterande i en frontsläppning λ som ger en fin yta, samt i en minskning Δr av den svarvade diametern. Lägesförändringen Δr mätes och verktyget **positioneras bakåt** motsvarande värde (se sid A160 - A162).

¹⁾ ISO Material index - Werkstoff-Index - Materialindex

P: All types of steels, cast steels and long chipping cast irons except aust/duplex stainless steels - Stähle, Stahlguss und langspanender Guss aller arten ohne aust/duplex rostfreie Stähle - Alla typer av stål, gjutstål och långspånande gjutjärn utom aust/duplexa rostfria stål.

M: All types of aust/duplex stainless steels - Aust/duplex rostfreie Stähle aller Arten - Alla typer av aust/duplex rostfritt stål.

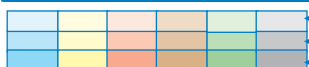
K: All types of short-chipping cast iron - Kurzspanender Guss aller arten - Alla typer av kortspånande gjutjärn.

S: All types of heat-resistant Ni-, Co-, Fe- and Ti-alloys - Warmfeste Ni-, Co-, Fe- und Ti-Legierungen aller Arten - Alla typer av varmhållfasta Ni-, Co-, Fe- och Ti-legeringar.

N: All types of non-ferrous metals and non-metallic materials - NE-Metalle aller Arten und nicht metallische Materialien - Alla typer av icke-järnmetaller och icke metalliska material.

H: Hard materials; all types of hardened steels and cast iron - Harte Materialien; Gehärtete Stähle und guss aller Arten - Hårda material; alla typer av hårdade stål och gjutjärn.

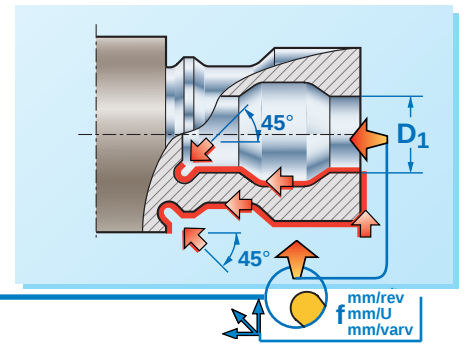
- Main application area - Hauptsätzliches Gebrauch - Främsta tillämpningsområde



Finishing/light roughing - Schlichten/leichtes Schruppen - Finbearbetning/lätt grovbearbetning
Medium roughing - Mittleres Schruppen - Medelgrov bearbetning
Roughing/heavy roughing - Schruppen/Starkes Schruppen - Grovbearbetning/tung grovbearbetning

Carbide grades, page:
Hartmetallsorten, Seite: **A124–A128**
Hårdmetallsorter, sid:

Cutting data, page:
Schnittdaten, Seite: **A158–A169**
Skärdata, sid:



A

B

Relief grooves, profiling, externally and internally
Freistiche, Profilieren, aussen und innen
Släppningsspår, profilsvärning, ut- och invändigt

B

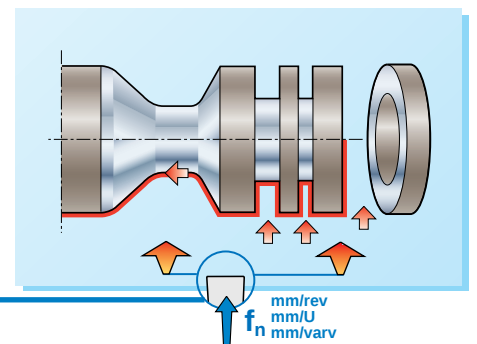
D_{1min} = 21 mm

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Seite:
Sida:

Edge strength Kantenstärke Eggstyrka	Cutting pressure Schnittdruck Skärtryck	Special recommendations Besondere Empfehlungen Speciella rekommendationer	$\frac{A}{mm}$	$\frac{r}{mm}$	$\frac{a_{pl}}{mm}$	Feed, f_n Vorschub, f_n Matning, f_n
		- Tool holders 151B for external and 157B for internal turning with 45° approach angle. No swarf control. - Werkzeughalter 151B für Aussen- und 157B für Innendrehen, mit 45° Einstellwinkel. Keine Spanbeeinflussung. - Verktygshållare 151B för utvändig och 157B för invändig svarvning, med 45° ställvinkel. Ingen spånpåverkan.	2	1,0	0,1–1,5	0,07–0,15
			3	1,5	0,1–2,0	0,07–0,15
			4	2,0	0,1–2,5	0,07–0,20
			5	2,5	0,1–3,0	0,07–0,20
6	3,0	0,1–3,5	0,07–0,25			
8	4,0	0,1–3,5	0,07–0,30			

Machining with ceramics, page:
Bearbeitung mit Keramik, Seite: **A144–A145**
Bearbetning med keramik, sid:

Cutting data, page:
Schnittdaten, Seite: **A162–A169**
Skärdata, sid:



K

Ceramic insert in pure, mixed or silicon nitride ceramics
Keramische Schneide in Rein-, Misch oder Silikonitridkeramik
Keramiskt skär i ren-, bland eller silikonitridkeramik

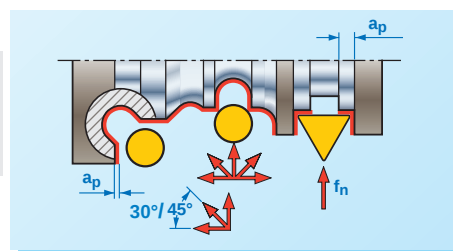
K
R/LK

Page: **A145**
Seite:
Sida:

Edge strength Kantenstärke Eggstyrka	Cutting pressure Schnittdruck Skärtryck	Special recommendations Besondere Empfehlungen Speciella rekommendationer	$\frac{A}{mm}$	Feed, f_n Vorschub, f_n Matning, f_n
		- Favourable machining conditions with high demands on rigidity. Excellent surface finish. R/LK for parting-off tubes. Tool holder 151K for external machining. - Vorteilhafte Bearbeitungsverhältnisse mit grossem Anspruch auf Starrheit. Hervorragende Oberflächengüte. R/LK für Abstechen von Rohren. Werkzeughalter 151K für Aussenbearbeitung. - Fördelaktiga bearbetningsförhållanden med uttalade krav på stabilitet. Fina ytor. R/LK för avstickning av rör. Verktygshållare 151K för utvändig bearbetning.	4	0,05–0,15
			5	
			6	
			7	
8				
10	R/LK	6	0,05–0,15	
8				

Carbide grades, page:
Hartmetallsorten, Seite: **A150–A153**
Hårdmetallsorter, sid:

Cutting data, page:
Schnittdaten, Seite: **B196–B205**
Skärdata, sid:

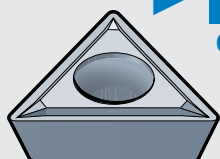


A

-PF1 -PF2 -PF3 -PM1 -PM2 -AL1 -AL2

Extreme finishing
Extremes Schlichten
Extrem finbearbetning

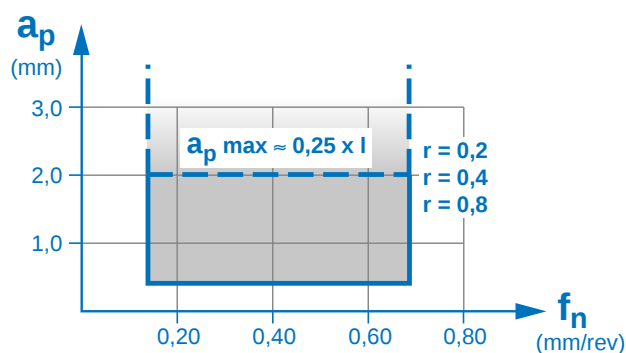
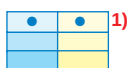
-PF1
Cermet



S

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Seite:
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Finishing
Schlichten
Finbearbetning

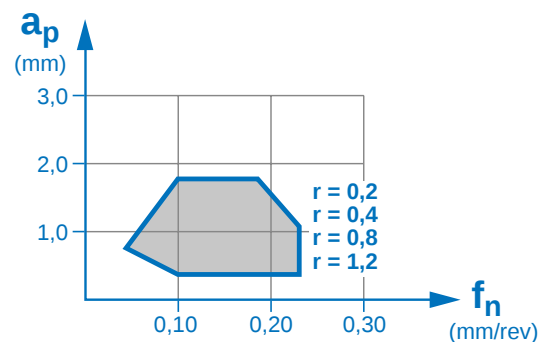
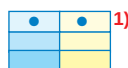
-PF2



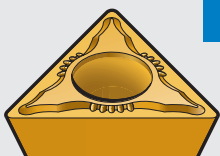
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Seite:
Sida:

A154, A156



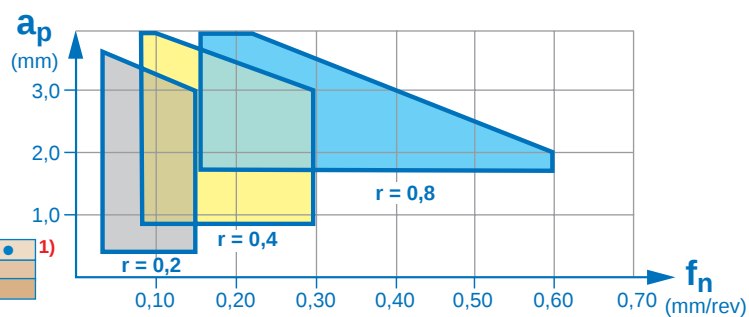
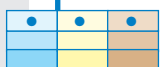
-PF3



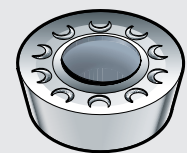
S

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Seite:
Sida:

A154



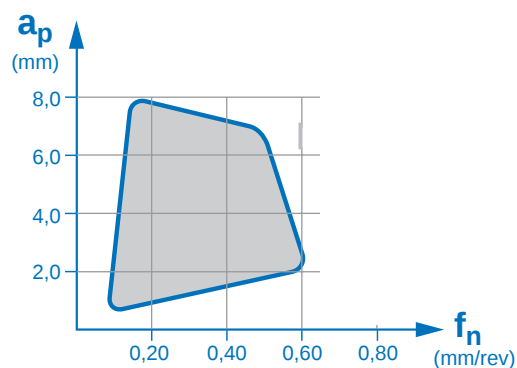
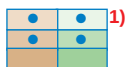
-AL1



S

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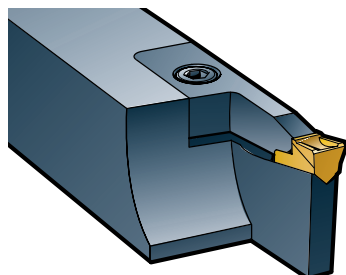
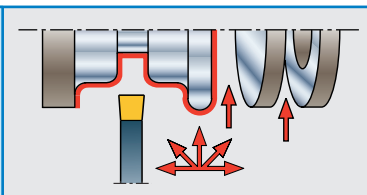
	11
	11, 16
	08, 10, 12
	11, 16
	08

Contd. - Forts. -
Forts.

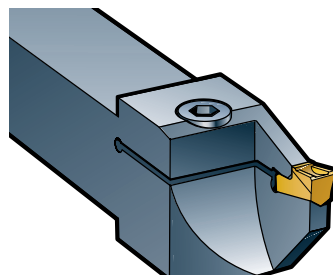
A61

A

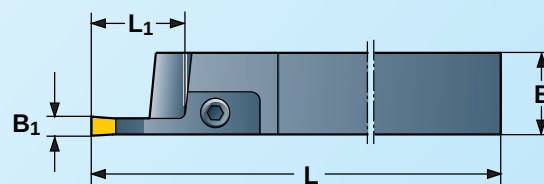
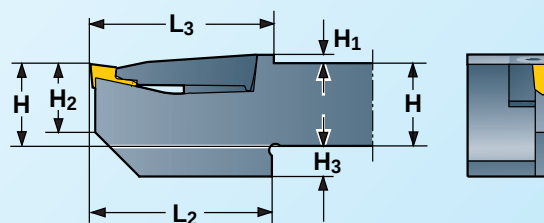
151FA

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Sida: **A18**

151F



151FA
Automatic lathes
Drehautomaten
Automatsvarvar



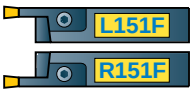
Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

EB

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A38-A41

	H	B	L	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	B ₁						 Page: Seite: Sida: A130-A148	
R/L151FA-1010x10x2 R/L151FA-1212x12.5x2 R/L151FA-1414x12.5x2 R/L151FA-1616x16x2	10 12 14 16	10 12 14 16	125 150 150 150	2,5 2,5 2,5 3	7 7 8 8	2 2 2 —	10 12,5 12,5 16	18 20 20 25	18 20 20 25	2	—	—	MC6S-314	—	NY 2.5	MT-20 MS-20 R/LMS-20 MZ-20 MP-20 MA-20 R/LMA-20	
R/L151F-2020x10x2 R/L151F-2020x16x2 R/L151F-2020x20x2 R/L151F-2525x10x2 R/L151F-2525x16x2 R/L151F-2525x20x2	20 20 20 25 25 25	20 20 20 25 25 25	125 125 125 150 150 150	— — — — — —	— — — — — —	— — — — — —	10 16 20 10 16 20	— — — — — —	— — — — — —	2	SHR 102 SHR 162 SHR 202 SHR 102 SHR 162 SHR 202	SHL 102 SHL 162 SHL 202 SHL 102 SHL 162 SHL 202	F6S 418 F6S 418 F6S 418 F6S 418 F6S 418 F6S 418	BF 04T BF 04T BF 04M BF 04T BF 04T BF 04M			
R/L151FA-1010x10x2.5 R/L151FA-1212x12.5x2.5 R/L151FA-1414x12.5x2.5 R/L151FA-1616x16x2.5	10 12 14 16	10 12 14 16	125 150 150 150	2,5 2,5 2,5 3	7 7 8 8	2 2 2 —	10 12,5 12,5 16	18 20 20 25	18 20 20 25	2,5	—	—	MC6S-314	—		NY 2.5	MT-25 MT-25Fr ³⁾ MT-2.3r0.5 MS-25 R/LMS-25 MZ-25 MP-25 MA-25 R/LMA-25
R/L151F-1616x20x2.5 R/L151F-2020x10x2.5 R/L151F-2020x16x2.5	16 20 20	16 20 20	150 125 125	4 — —	— — —	5 — —	20 10 16	40 — —	40 — —	2,5	SHR 202.5 SHR 102.5 SHR 162.5	SHL 202.5 SHL 102.5 SHL 162.5	F6S 418 F6S 418 F6S 418	BF 04M BF 04T BF 04T			
R/L151F-2020x20x2.5 R/L151F-2525x20x2.5	20 25	20 25	125 150	— —	— —	— —	20 20	— —	— —	2,5	SHR 202.5	SHL 202.5	F6S 418	BF 04M			
R/L151F-2525x10x2.5 R/L151F-2525x16x2.5	25 25	25 25	150 150	— —	— —	— —	10 16	— —	— —	2,5	SHR 102.5 SHR 162.5	SHL 102.5 SHL 162.5	F6S 418 F6S 418	BF 04T BF 04T			
R/L151F-1010x13x3S R/L151F-1212x13x3	10 12	10 12	90 110	3,5 3	— —	6 4	13 13	25 25	26 26	3	SHR 133	SHL 133	F6S 411	—			NY 2.5
R/L151F-1212x16x3 R/L151F-1414x16x3 R/L151F-1616x16x3T	12 14 16	12 14 16	150 150 110	4 3,5 —	— — —	4 2 —	16 16 16	30 30 —	34 34 —	3	SHR 163F	SHL 163F	F6S 418 F6S 418 F6S 415	—			
R/L151F-1616x20x3 R/L151F-2020x10x3 R/L151F-2020x13x3 R/L151F-2020x16x3T R/L151F-2020x20x3	16 20 20 20 20	16 20 20 20 20	150 125 125 125 125	4 — — — —	— — — — —	4 — — — —	20 10 13 16 20	33 — — — —	42 — — — —	3	SHR 203M SHR 133T SHR 133 SHL 163F SHR 203M	SHL 203M SHL 133T SHL 133 SHL 163F SHL 203M	F6S.418 F6S 411 F6S 411 F6S 418 F6S 418	BF 04M — — — BF 04M			
R/L151F-2020x25x3 R/L151F-2020x25x3S	20	20	125	—	—	— 12	25 25	— 38	— —	3	SHR 253M	SHL 253M	F6S 418	BF 04M			
R/L151F-2516x20x3 R/L151F-2525x10x3 R/L151F-2525x20x3	25 25 25	16 25 25	140 150 150	— — —	— — —	— — —	20 10 20	— — —	— — —	3	SHR 203M SHR 133T SHR 203M	SHL 203M SHL 133T SHL 203M	F6S 418 F6S 411 F6S 418	BF 04M — BF 04M			
R/L151F-2525x25x3 R/L151F-2525x25x3S	25	25	150	—	—	— 7	25 25	— 38	— —	3	SHR 253M	SHL 253M	F6S 418	BF 04M			
R/L151F-3225x20x3 R/L151F-3225x25x3	32 32	25 25	170 170	— —	— —	— —	20 25	— —	— —	3	SHR 203M SHR 253M	SHL 203M SHL 253M	F6S 418 F6S 418	BF 04M BF 04M			

	H	B	L	H ₁	H ₂	H ₃	L ₁	L ₂	L ₃	B ₁							Page: Seite: Sida: A130-A148
R/L151F-1010x13x4S R/L151F-1212x13x4	10 12	10 12	90 110	3,5 3	— —	6 4	13 13	25 25	26 26	4-4,5	SHR 134	SHL 134	F6S 411	—	NY 2.5		MT-4 MT-3.7 r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 R/LMS-4 MS-4D MZ-4 R/LMZ-4 MP-4 MP-40 MA-40 R/LMA-40 MB-4F ³⁾ MT-40Fr ³⁾
R/L151F-1616x20x4 R/L151F-2020x10x4 R/L151F-2020x20x4	16 20 20	16 20 20	150 125 125	3 — —	— — —	4 — —	20 10 20	33 — —	42 — —	4-4,5	SHR 204MT SHR 134T SHR 204MT	SHL 204MT SHL 134T SHL 204MT	F6S 418 F6S 411 F6S 418	BF 04M — BF 04M			
R/L151F-2020x25x4 R/L151F-2516x20x4 R/L151F-2525x10x4 R/L151F-2525x20x4 R/L151F-2525x25x4	20 25 25 25 25	20 16 25 25 25	125 140 150 150 150	— — — — —	— — — — —	— — — — —	25 20 10 20 25	— — — — —	— — — — —	4-4,5	SHR 254MT SHR 204MT SHR 134T SHR 204MT SHR 254MT	SHL 254MT SHL 204MT SHL 134T SHL 204MT SHL 254MT	F6S 418 F6S 418 F6S 411 F6S 418 F6S 418	BF 04M BF 04M — BF 04M BF 04M			
R/L151F-2525x32x4 R/L151F-2525x32x4S	25 25	25 25	150 —	— —	— —	7 —	32 32	— 50	— —	4-4,5	SHR 324MT	SHL 324MT	F6S 519	BF 05M	NY 3		
R/L151F-3225x20x4 R/L151F-3225x25x4 R/L151F-3225x32x4	32 32 32	25 25 25	170 170 170	— — —	— — —	— — —	20 25 32	— — —	— — —	4-4,5	SHR 204MT SHR 254MT SHR 324MT	SHL 204MT SHL 254MT SHL 324MT	F6S 418 F6S 418 F6S 519	BF 04M BF 04M BF 05M	NY 2.5 NY 2.5 NY 3		
R/L151F-2020x10x5	20	20	125	—	—	—	10	—	—	5	SHR 135T	SHL 135T	F6S 411	—	NY 2.5		MT-5 MT-5r1 MT-5b MT-5c MS-5 R/LMS-5 MZ-5 MP-5 MA-50 MB-5F ³⁾ MT-50Fr ³⁾
R/L151F-2020x25x5 R/L151F-2516x25x5	20 25	20 16	125 140	— —	— —	— —	25 25	— —	— —	5	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
R/L151F-2525x10x5 R/L151F-2525x25x5	25 25	25 25	150 150	— —	— —	— —	10 25	— —	— —	5	SHR 135T SHR 255MT	SHL 135T SHL 255MT	F6S 411 F6S 418	— BF 04M			
R/L151F-2525x32x5 R/L151F-2525x32x5S	25 25	25 25	150 —	— —	— —	7 —	32 32	— 50	— —	5	SHR 325MT	SHL 325MT	F6S 519	BF 05M	NY 3		
R/L151F-3225x25x5 R/L151F-3225x32x5	32 32	25 25	170 170	— —	— —	— —	25 32	— —	— —	5	SHR 255MT SHR 325MT	SHL 255MT SHL 325MT	F6S 418 F6S 519	BF 04M BF 05M	NY 2.5 NY 3		
R/L151F-3225x40x5 R/L151F-4032x40x5T	32 40	25 32	170 200	— —	— —	8 —	40 40	55 —	— —	5	SHR 405	SHL 405	F6S 526	BF 05T	NY 3		
R/L151F-2020x10x6 R/L151F-2516x25x6 R/L151F-2525x10x6 R/L151F-3225x32x6 R/L151F-4032x40x6T	20 25 25 32 40	20 16 25 25 32	125 140 150 170 200	— — — — —	— — — — —	— — — — —	10 25 10 32 40	— — — — —	— — — — —	6-7,5	SHR 136T SHR 256MT SHR 136T SHR 326MT SHR 406	SHL 136T SHL 256MT SHL 136T SHL 326MT SHL 406	F6S 411 F6S 418 F6S 411 F6S 519 F6S 526	— BF 04M — BF 05M BF 05T	NY 2.5 NY 2.5 NY 2.5 NY 3 NY 3	MT-6 MT-6.4 r1 MT-6b MT-7 MT-6c MS-6 R/LMS-6 MZ-6	MP-6 MT-60Fr ³⁾ MT-7 MT-7.5r1 MT-7b MT-7c

Ordering example:

Bestellbeispiel:

Beställningsexempel:

R151F-2525 x 20 x 3

³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

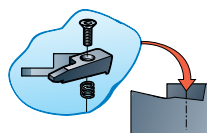
³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.



Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

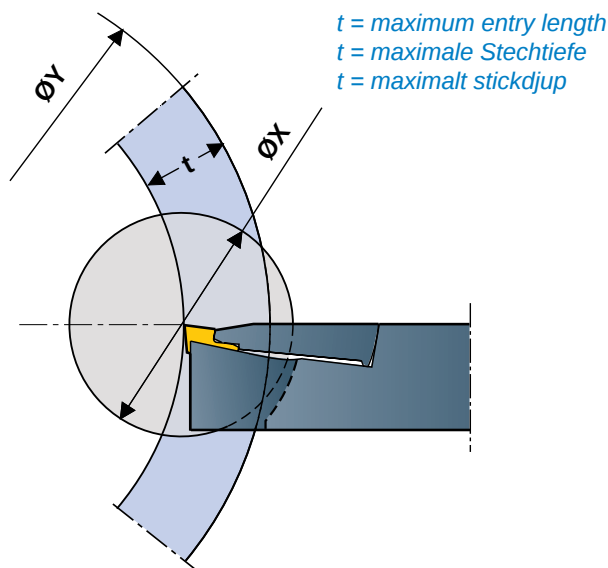
Effective Entry Length for Type 151F

Effektive Stechtiefe für Typ 151F

Effektivt stickdjup för typ 151F

A

		 t						
		50	75	100	150	200	250	300
R/L151FA-1010x10x2	20	6	5	5	4,5	4,5	4	4
R/L151FA-1212x12.5x2	25	8,5	7,5	7	6,5	6	6	6
R/L151FA-1414x12.5x2		8	6,5	6	5,5	5,5	5,5	5
R/L151FA-1616x16x2	32	12	10	9,5	8,5	8,5	8	8
R/L151F-2020x10x2	20	2,5	1,5	1,5	1	1	0,5	0,5
R/L151F-2020x16x2	32	7	4,5	3	2	1,5	1,5	1
R/L151F-2020x20x2	40	18,5	14,5	12,5	11,5	10,5	10	10
R/L151F-2525x10x2	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-2525x16x2	32	7	4,5	3	2	1,5	1,5	1
R/L151F-2525x20x2	40	18,5	12,5	10,5	9	8	7,5	7
R/L151FA-1010x10x2.5	20	6	5	5	4,5	4,5	4	4
R/L151FA-1212x12.5x2.5	25	8,5	7,5	7	6,5	6	6	6
R/L151FA-1414x12.5x2.5		8	6,5	6	5,5	5,5	5,5	5
R/L151FA-1616x16x2.5	32	12	10	9,5	8,5	8,5	8	8
R/L151FA-1616x20x2.5	40	20	16	15	14	13	13	12
R/L151F-2020x10x2.5	20	2,5	1,5	1,5	1	1	0,5	0,5
R/L151F-2020x16x2.5	32	7	4,5	3	2	1,5	1,5	1
R/L151F-2020x20x2.5	40	18,5	14,5	12,5	11,5	10,5	10	10
R/L151F-2525x20x2.5	40	17,5	12	10	8,5	7,5	7	7
R/L151F-2525x10x2.5	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-2525x16x2.5	32	7	4,5	3	2	1,5	1,5	1
R/L151F-1010x13x3S	26	4	3	2	1	1	1	1
R/L151F-1212x13x3								
R/L151F-1212x16x3	32	14	12	12	11	11	10	10
R/L151F-1414x16x3								
R/L151F-1616x16x3T								
R/L151F-1616x20x3	40	20	16	15	14	13	13	12
R/L151F-2012x20x3	40	20	16	15	14	13	13	12
R/L151F-2020x10x3	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-2020x13x3	26	4	3	2	1	1	1	1
R/L151F-2020x16x3T	32	16	13	11	10	10	9	9
R/L151F-2020x20x3	40	20	16	15	14	13	13	12
R/L151F-2020x25x3	50	25	23	22	20	19	18	18
R/L151F-2020x25x3S	50	25	19	16	14	13	12	12
R/L151F-2516x20x3	40	20	12	10	8	7	6	6
R/L151F-2525x10x3	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-2525x20x3	40	20	12	10	8	7	6	6
R/L151F-2525x25x3	50	25	22	20	19	18	17	17
R/L151F-2525x25x3S	50	25	19	16	14	13	12	12
R/L151F-3225x20x3	40	20	12	10	8	7	6	6
R/L151F-3225x25x3	50	25	19	16	14	13	12	12
R/L151F-1010x13x4S	26	4	3	2	1	1	1	1
R/L151F-1212x13x4								
R/L151F-1616x20x4	40	20	16	15	14	13	13	12
R/L151F-2020x10x4	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-2020x20x4	40	20	16	15	14	13	13	12
R/L151F-2020x25x4	50	25	23	22	20	19	18	18
R/L151F-2020x25x4S	50	25	19	16	14	13	12	12
R/L151F-2516x20x4	40	20	12	10	8	7	6	6
R/L151F-2525x10x4	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-2525x20x4	40	20	12	10	8	7	6	6
R/L151F-2525x25x4	50	25	22	20	19	18	17	17
R/L151F-2525x25x4S	50	25	19	16	14	13	12	12
R/L151F-2525x32x4	64	25	32	30	28	27	26	26
R/L151F-2525x32x4S	64	25	32	27	22	20	19	19
R/L151F-3225x20x4	40	20	12	10	8	7	6	6
R/L151F-3225x25x4	50	25	19	16	14	13	12	12
R/L151F-3225x32x4	64	25	32	27	22	20	19	19



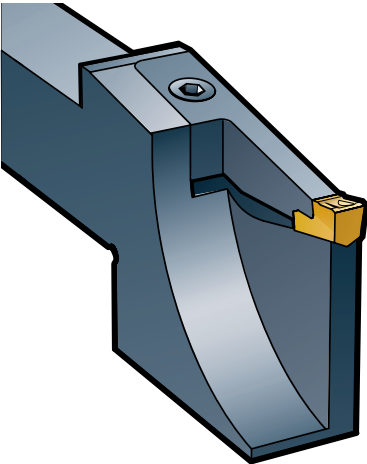
		 t						
		50	75	100	150	200	250	300
R/L151F-2020x10x5	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-2020x25x5	50	25	23	22	20	19	18	18
R/L151F-2516x25x5	50	25	23	22	20	19	18	18
R/L151F-2525x10x5	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-2525x25x5	50	25	22	20	19	18	17	17
R/L151F-2525x25x5S	50	25	19	16	14	13	12	12
R/L151F-2525x32x5	64	25	32	30	28	27	26	26
R/L151F-2525x32x5S	64	25	32	27	22	20	19	19
R/L151F-3225x25x5	50	25	19	16	14	13	12	12
R/L151F-3225x32x5	64	25	32	27	22	20	19	19
R/L151F-3225x40x5	80	40	40	38	30	27	25	24
R/L151F-4032x40x5T	80	25	37,5	38	30	27	25	24
R/L151F-2020x10x6	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-2516x25x6	50	25	22	20	19	18	17	17
R/L151F-2516x25x6S	50	25	19	16	14	13	12	12
R/L151F-2525x10x6	20	7,5	4,5	3,5	2	1,5	1,5	1
R/L151F-3225x32x6	64	25	32	27	22	20	19	19
R/L151F-4032x40x6T	80	25	37,5	38	30	27	25	24

151RF

Recommendations
Empfehlungen
Rekommendationer

Page:
Seite:
Sida:

A20



55,5

H

L₂

f₂

H

42

L₁

B₁

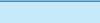
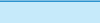
B

L

The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

 	H	B	L	f ₂	L ₁	L ₂	B ₁	 				 Page: Seite: Sida: A130-A148			
R/L151RF-1616x35x3	16	16	150	26	35	48,5	3	SHR 353	SHL 353	F6S 418	BF 04T	NY 2.5	MT-3	MS-3	MP-3
R/L151RF-2020x35x3T	20	20	150	22	35	56							MT-3.1r0.5	R/LMS-3	MA-30
R/L151RF-2525x35x3T	25	25	150	17	35	56							MT-3b	MZ-3	R/LMA-30
R/L151RF-3225x35x3T	32	25	170	10	35	56							MT-3c	R/LMZ-3	MB-3F ³⁾
													MS-3D	MP-30	MT-30Fr ³⁾

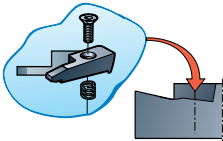


Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58

Ordering example:
Bestellbeispiel:
Beställningsexempel:

L151RF-2020 x 35 x 3T



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

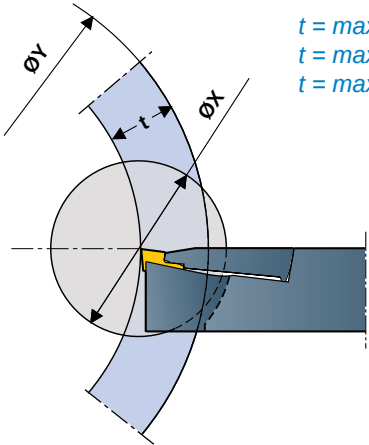
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

Effective Entry Length for Type 151RF

Effektive Stechtiefe für Typ 151RF

Effektivt stickdjup för typ 151RF

L151RF R151RF	Øx Øy	50	75	100	150	200	250	300
R/L151RF-1616x35x3	70	t						
R/L151RF-2020x35x3T		35	35	17	10	7	6	5
R/L151RF-2525x35x3T								
R/L151RF-3225x35x3T								



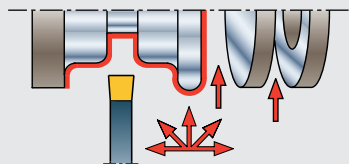
t = maximum entry length
t = maximale Stechtiefe
t = maximalt stickdjup

151S

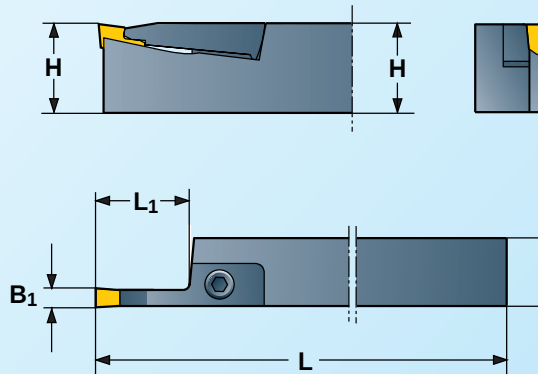
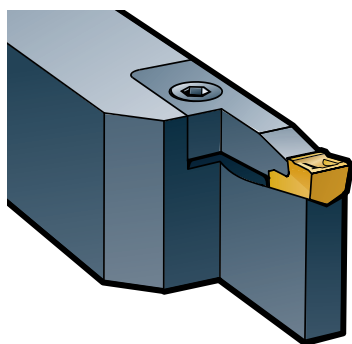
Recommendations
Empfehlungen
Rekommendationer

Page:
Seite:
Sida:

A18



A



The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

EB



Page: Seite:
Sida:

A38-A41

	H	B	L	L ₁	B ₁	SHR	SHL	F6S	BF	NY	MT	MS	R/LMA
R/L151S-2020x16x3T R/L151S-2020x20x3 R/L151S-2516x13x3	20 20 25	20 20 16	125 125 140	16 20 13	3	SHR 163F SHR 203M SHR 133	SHL 163F SHL 203M SHL 133	F6S 415 F6S 418 F6S 411	– BF 04M –	NY 2.5	MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3 R/LMS-3	MS-3D MZ-3 R/LMZ-3 MP-3 MP-30 MA-30	R/LMA-30 MB-3F ³⁾ MT-30Fr ³⁾
R/L151S-2525x20x3 R/L151S-3225x20x3	25 32	25 25	150 170	20 20	3	SHR 203M	SHL 203M	F6S 418	BF 04M				
R/L151S-2020x20x4 R/L151S-2525x20x4	20 25	20 25	125 150	20 20	4-4,5	SHR 204MT	SHL 204MT	F6S 418	BF 04M	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4 r1 MT-4.5r1 MT-4b MT-4c	MS-4 R/LMS-4 MS-4D MZ-4 R/LMZ-4 MP-4	MP-40 MA-40 R/LMA-40 MB-4F ³⁾ MT-40Fr ³⁾
R/L151S-2020x20x5 R/L151S-2525x20x5	20 25	20 25	125 150	20 20	5	SHR 205MT	SHL 205MT	F6S 418	BF 04M	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c	MS-5 R/LMS-5 MZ-5 MP-5	MA-50 MB-5F ³⁾ MT-50Fr ³⁾
R/L151S-2525x20x6 R/L151S-3225x20x6	25 32	25 25	150 170	20 20	6-7,5	SHR 206MT	SHL 206MT	F6S 418	BF 04M	NY 2.5	MT-6 MT-6.4 r1 MT-6b MT-6c	R/LMS-6 MZ-6 MP-6 MT-60Fr ³⁾ MT-7	MT-7.5r1 MT-7b MT-7c
R/L151S-3225x32x6	32	25	170	32	6-7,5	SHR 326MT	SHL 326MT	F6S 519	BF 05M	NY 3	MT-6 MT-6c MS-6		
R/L151S-2525x20x8 R/L151S-3225x20x8	25 32	25 25	150 170	20 20	8-9	SHR 208MT	SHL 208MT	F6S 519	BF 05M	NY 3	MT-8 MT-8b MT-8c	MP-8 MT-9 MT-9r1 MT-9c	
R/L151S-3225x30x8 R/L151S-4032x40x8 R/L151S-4032x50x8	32 40 40	25 32 32	170 200 200	30 40 50	8-9	SHR 308MT SHR 408M SHN 8T	SHL 308MT SHL 408M	F6S 519 F6S 526 F6S 418	BF 05M BF 05M BF 04T	NY 3 NY 3 NY 2.5	MT-8 MT-8c MS-8 R/LMS-8 MZ-8		
R/L151S-3225x30x10 R/L151S-4032x30x10	32 40	25 32	170 200	30 30	10-11	SHR 3010MT	SHL 3010MT	F6S 519	BF 05M	NY 3	MT-10 MT-10r1 MT-10b MT-10c	MS-10 R/LMS-10 MZ-10	
R/L151S-4032x50x10	40	32	200	50	10-11	SHN 10T		F6S 518T	BF 05T				
R/L151S-5032x40x12 R/L151S-4032x50x12	50 40	32 32	250 200	40 50	12	SHR 4012MT SHN 12T	SHL 4012MT	F6S 525 F6S 519	BF 05M BF 05T	NY 3	MT-12 MT-12b	MT-12c MS-12	MZ-12

Ordering example:

Bestellbeispiel: **R151S-2525 x 20 x 5**

Beställningsexempel:



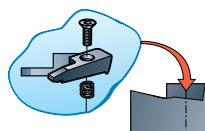
Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sida:

A44-A58

³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

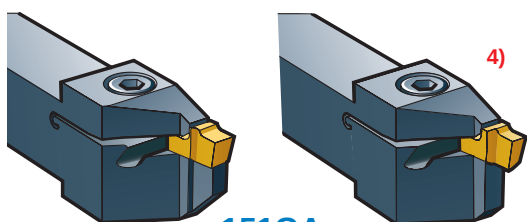
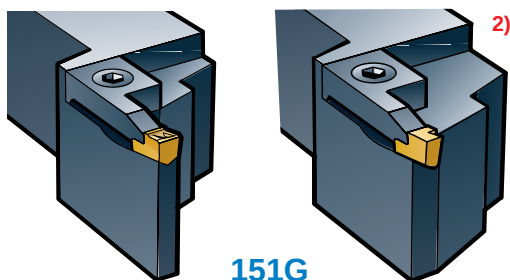
151G
151GA

Recommendations
Empfehlungen
Rekomendationer

Page:
Seite:
Sida:

A19

Circlip grooves
Sicherungs-
ringnuten
Låsingspår



151GA
Automatic lathes
Drehautomaten
Automatsvarvar

151G

The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt

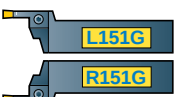
Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

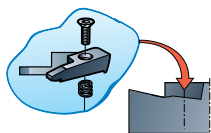
For tool holders marked **2)**.
Für Klemmhalter mit Kennzeichen **2)**.
För verktygshållare märkta **2)**.

151GA

For tool holders marked **4)**.
Für Klemmhalter mit Kennzeichen **4)**.
För verktygshållare märkta **4)**.

 L151G R151G	H	B	L	H ₁	H ₂	f	L ₁	L ₂	B ₁	 SHN SHR SHL	 MC6S-314	 NY 2.5	 NY 2.5	 A130-A148
⁴⁾ R/L151GA-1010x6x1T	10	10	125	2.5	2	10,3	6	18	0,50-1,85	—	—	—	NY 2.5	R/LG-050b R/LG-090b R/LG-130b
⁴⁾ R/L151GA-1212x6x1T	12	12	150	2.5	2	2,3	6	18	0,50-1,85	—	—	—	NY 2.5	R/LG-060b R/LG-105b R/LG-155b
⁴⁾ R/L151GA-1414x6x1T	14	14	150	2.5	2	14,3	6	18	0,50-1,85	—	—	—	NY 2.5	R/LG-070b R/LG-110b R/LG-160b
²⁾ R/L151G-1616x3x1T	16	16	100	—	—	20	3	29	0,50-1,85	SHR 133	SHL 133	F6S 411	NY 2.5	R/LG-080b R/LG-125b R/LG-185b
²⁾ R/L151G-2020x3x1T	20	20	125	—	—	25	3	29	0,50-1,85	SHR 133	SHL 133	F6S 411	NY 2.5	R/LG-080b R/LG-125b R/LG-185b
²⁾ R/L151G-2525x3x1T	25	25	150	—	—	32	3	29	0,50-1,85	SHR 133	SHL 133	F6S 411	NY 2.5	R/LG-080b R/LG-125b R/LG-185b
²⁾ R/L151G-3225x3x1T	32	25	150	—	—	32	3	29	0,50-1,85	SHR 133	SHL 133	F6S 411	NY 2.5	R/LG-080b R/LG-125b R/LG-185b
R/L151GA-1010x6x2	10	10	125	2.5	2	10,3	6	18	2,15-2,65	—	—	—	NY 2.5	R/LG-215b ³⁾ R/LG-265b ³⁾
R/L151GA-1212x6x2	12	12	150	2.5	2	25	6	18	2,15-2,65	—	—	—	NY 2.5	R/LG-215b ³⁾ R/LG-265b ³⁾
R/L151GA-1414x6x2	14	14	150	2.5	2	32	6	18	2,15-2,65	—	—	—	NY 2.5	R/LG-215b ³⁾ R/LG-265b ³⁾
R/L151G-1616x4x2	16	16	100	—	—	20	4	29	2,15-3,15	SHR 133	SHL 133	F6S 411	NY 2.5	R/LG-215b ³⁾ R/LG-265b ³⁾ R/LG-315b ³⁾
R/L151G-2020x4x2	20	20	125	—	—	25	4	29	2,15-3,15	SHR 133	SHL 133	F6S 411	NY 2.5	R/LG-215b ³⁾ R/LG-265b ³⁾ R/LG-315b ³⁾
R/L151G-2525x4x2	25	25	150	—	—	32	4	29	2,15-3,15	SHR 133	SHL 133	F6S 411	NY 2.5	R/LG-215b ³⁾ R/LG-265b ³⁾ R/LG-315b ³⁾
R/L151G-3225x4x2	32	25	150	—	—	32	4	29	2,15-3,15	SHR 133	SHL 133	F6S 411	NY 2.5	R/LG-215b ³⁾ R/LG-265b ³⁾ R/LG-315b ³⁾
R/L151G-1616x13x3	16	16	100	—	—	20	13	29	3	SHR 133	SHL 133	F6S 411	NY 2.5	MT-3 R/LMS-3 R/LMA-30
R/L151G-2020x13x3	20	20	125	—	—	25	13	29	3	SHR 133	SHL 133	F6S 411	NY 2.5	MT-3.1r0.5 MZ-3 MB-3F ⁵⁾
R/L151G-2525x13x3	25	25	150	—	—	32	13	29	3	SHR 133	SHL 133	F6S 411	NY 2.5	MT-3b R/LMZ-3 MT-30Fr ⁵⁾
R/L151G-3225x13x3	32	25	150	—	—	32	13	29	3	SHR 133	SHL 133	F6S 411	NY 2.5	MT-3c MP-3 MP-30 MA-30
R/L151G-1616x13x4	16	16	100	—	—	20	13	29	4-5	SHR 134	SHL 134	F6S 411	NY 2.5	MT-4 R/LMZ-4 MT-5c
R/L151G-2020x13x4	20	20	125	—	—	25	13	29	4-5	SHR 134	SHL 134	F6S 411	NY 2.5	MP-4 MP-40 MA-40 MZ-5
R/L151G-2525x13x4	25	25	150	—	—	32	13	29	4-5	SHR 134	SHL 134	F6S 411	NY 2.5	MA-40 MA-40 MA-50
R/L151G-3225x13x4	32	25	150	—	—	32	13	29	4-5	SHR 134	SHL 134	F6S 411	NY 2.5	MT-4c R/LMA-40 MP-5
R/L151G-3232x13x4	32	32	150	—	—	40	13	29	4-5	SHR 134	SHL 134	F6S 411	NY 2.5	MB-4F ⁵⁾ MA-50 MB-5F ⁵⁾ MT-50Fr ⁵⁾
	32	32	150	—	—	40	13	29	4-5	SHR 134	SHL 134	F6S 411	NY 2.5	MS-4 MT-40Fr ⁵⁾ MB-5F ⁵⁾ MT-50Fr ⁵⁾
	32	32	150	—	—	40	13	29	4-5	SHR 134	SHL 134	F6S 411	NY 2.5	MS-4D MT-5 MT-5 r1 MT-5b
	32	32	150	—	—	40	13	29	4-5	SHR 134	SHL 134	F6S 411	NY 2.5	R/LMS-4 MT-4 MT-5b

	H	B	L	H ₁	H ₂	f	L ₁	L ₂	B ₁					 Page: Seite: Sida: A130-A148		
R/L151G-2020x13x6 R/L151G-2525x13x6 R/L151G-3225x13x6 R/L151G-3232x13x6	20 25 32 32	20 25 25 32	125 150 150 150	— — — —	— — — —	25 32 32 40	13	29	6-7,5	SHR 136 SHL 136	F6S 411	—	NY 2.5	MT-6 MT-6.4r1 MT-6b MT-6c MS-6	R/LMS-6 MZ-6 MP-6 MT-60Fr ⁵⁾ MT-7	MT-7.5r1 MT-7b MT-7c
R/L151G-2020x10x8T R/L151G-2525x10x8T R/L151G-3225x10x8T	20 25 32	20 25 25	125 150 150	— — —	— — —	25 32 32	10	43	8-11	SHN 8T	F6S 418	BF 04T	NY2.5	MT-8 MT-8b MT-8c MS-8 R/LMS-8 MZ-8	MP-8 MT-9 MT-9 r1 MT-9c MT-10 MT-10r1	MT-10b MT-10c MS-10 R/LMS-10 MZ-10



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

Ordering example:

Bestellbeispiel:

Beställningsexempel:

L151G-2525 x 13 x 4



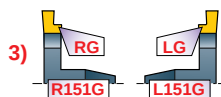
Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58

⁵⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

⁵⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

⁵⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.



³⁾ Right-hand inserts (RG) are used in right-hand holders and left-hand inserts (LG) are used in left-hand holders.

³⁾ Rechtsschneiden (RG) werden in Rechts-haltern und Linksschneiden (LG) in Linkshaltern verwendet.

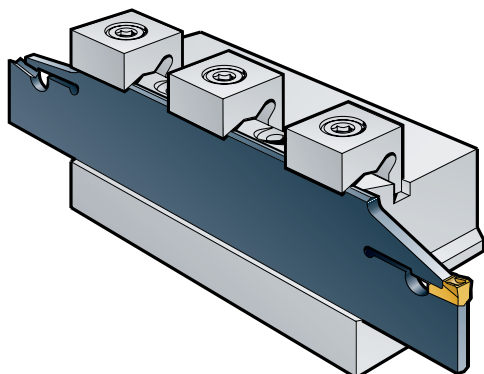
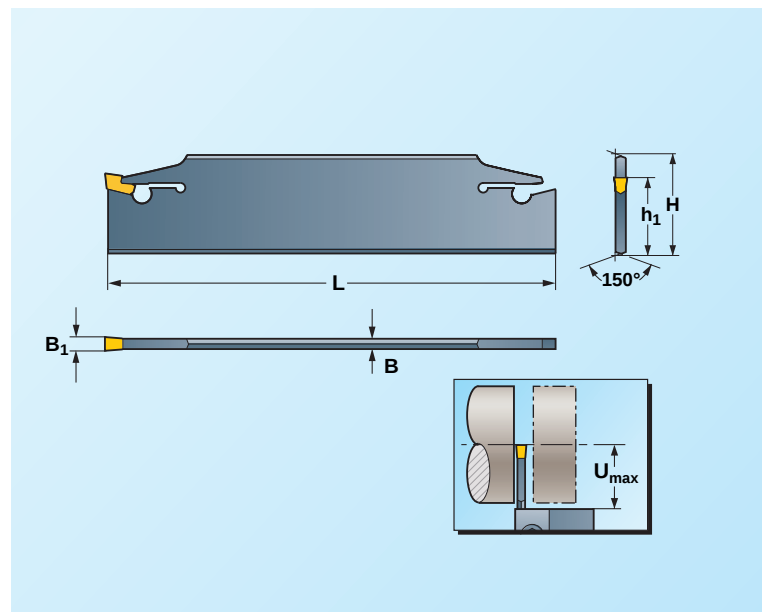
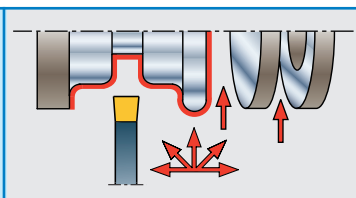
³⁾ Högerskär (RG) används i högerhållare och vänsterskär (LG) i vänsterhållare.

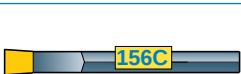
156C

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	H	B	h ₁	L	U _{max}	B ₁		 Page: Seite: Sida: A75	 Page: Seite: Sida: A130-A148			
156C-2602x45x2	26	1,6	21,4	130	45	2	EX5NY	TB 56C-16-26 TB 56C-20-26 TB 56C-25-26	MT-20 MS-20 R/LMS-20 MZ-20 MP-20 MA-20 R/LMA-20			
156C-3202x65x2	32	1,6	25	150	65	2	EX5NY	TB 56C-20-32 TB 56C-25-32 TB 56C-32-32				
156C-2602.5x45x2.5	26	2,0	21,4	130	45	2,5	EX5NY	TB 56C-16-26 TB 56C-20-26 TB 56C-25-26	MT-25 MT-25Fr ³⁾ MT-2.3r0.5 MS-25 R/LMS-25	MZ-25 MP-25 MA-25 R/LMA-25		
156C-3202.5x65x2.5	32	2,0	25	150	65	2,5	EX5NY	TB 56C-20-32 TB 56C-25-32 TB 56C-32-32				
156C-2603x45x3T	26	2,6	21,4	130	45	3	EX5NY	TB 56C-16-26 TB 56C-20-26 TB 56C-25-26	MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3	MS-3D R/LMS-3 MZ-3 R/LMZ-3 MP-3	MP-30 MA-30 R/LMA-30 MB-3F ³⁾ MT-30Fr ³⁾	
156C-3203x65x3T	32	2,6	25	150	65	3	EX5NY	TB 56C-20-32 TB 56C-25-32 TB 56C-32-32				
156C-2604x45x4T	26	3,5	21,4	130	45	4	EX5NY	TB 56C-16-26 TB 56C-20-26 TB 56C-25-26	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b	MT-4c MS-4 R/LMS-4 MS-4D MZ-4	R/LMZ-4 MP-4 MA-40 R/LMA-40	MB-4F ³⁾ MT-40Fr ³⁾
156C-3204x65x4T	32	3,5	25	150	65	4	EX5NY	TB 56C-20-32 TB 56C-25-32 TB 56C-32-32				
156C-3205x65x5	32	4,5	25	150	65	5	EX5NY	TB 56C-20-32 TB 56C-25-32 TB 56C-32-32	MT-5 MT-5r1 MT-5b	MT-5c MS-5 R/LMS-5	MZ-5 MP-5 MA-50	MB-5F ³⁾ MT-50Fr ³⁾
156C-3206x65x6	32	5,5	25	150	65	6-7	EX5NY	TB 56C-20-32 TB 56C-25-32 TB 56C-32-32	MT-6 MT-6.4r1 MT-6b	MT-6c MS-6 R/LMS-6	MZ-6 MP-6 MT-7	MT-7.5r1 MT-7b MT-7c



Ordered separately.
Ist separat zu bestellen.
Beställs separat.

EX5NY

³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-
..Fr) for modification of the tool holder.

³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-
..Fr) für Modifizierung des Werkzeughalters.

³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-
..Fr) för modifiering av verktygshållaren.

Ordering example:
Bestellbeispiel:
Beställningsexempel:

156C-3202 x 65 x 2



Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

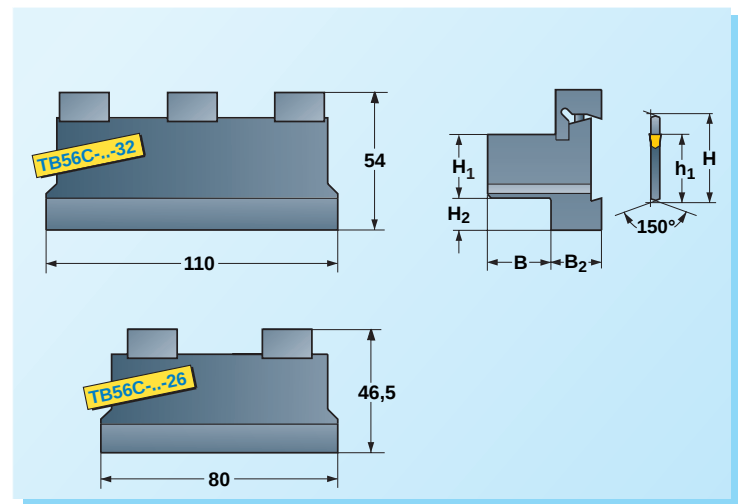
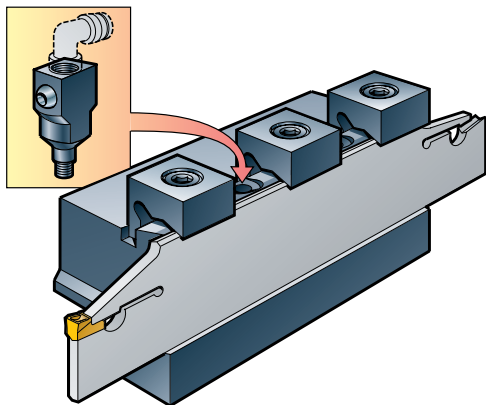
A44-A58

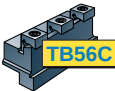
TB56C

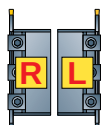
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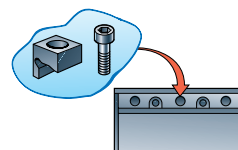
	H ₁	B	H ₂	B ₂	h ₁				1) 	 Page: Seite: Sida:
TB 56C-16-26 TB 56C-20-26 TB 56C-25-26	16 20 25	16 20 25	16,4 12,4 7,4	21,5	21,4	CL-1	MC6S-620	NY 5	FA56SC	156C-2602x45x2 156C-2602.5x45x2.5 156C-2603x45x3T 156C-2604x45x4T
TB 56C-20-32 TB 56C-25-32 TB 56C-32-32	20 25 32	20 25 32	17,5 12,5 5,5	21,5	25	CL-1	MC6S-620	NY 5	FA56SC	156C-3202x65x2 156C-3202.5x65x2.5 156C-3203x65x3T 156C-3204x65x4T 156C-3205x65x5 156C-3206x65x6



Usable for right-hand (R) or left-hand (L) mounting.
Verwendbar für Rechts (R)- oder Links(L)montage.
Omvändbar för höger (R) eller vänster (L) montage.

Ordering example:
Bestellbeispiel:
Beställningsexempel:

TB56C-16-26



Spare parts shown in the coloured columns are supplied assembled in each tool.

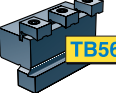
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

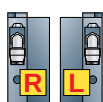
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

FA56SC

Adapter for cutting fluid
Verbindungsstück für Schneidflüssigkeit
Adapter för skärvätska

1)

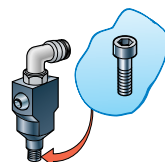
				
FA56SC	MO 0620-1	NY5	2) TB56C-...	2) TB56S-...



Usable for right-hand (R) or left-hand (L) mounting.
Verwendbar für Rechts (R)- oder Links(L)montage.
Omvändbar för höger (R) eller vänster (L) montage.

Ordering example:
Bestellbeispiel:
Beställningsexempel:

FA56SC



Spare parts shown in the coloured columns are supplied assembled in each tool.

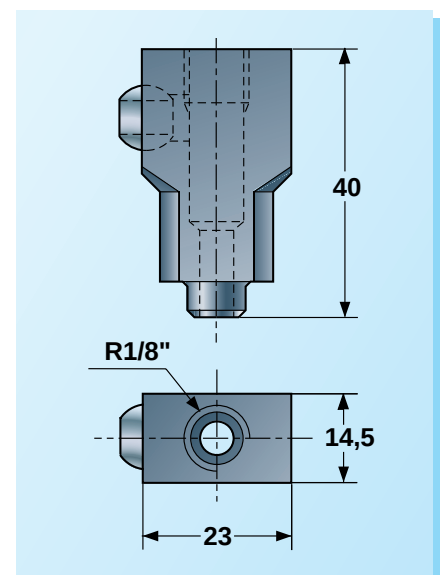
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

2) FA56SC can be used in combination with tool block TB56C or TB56S (see page A77).

2) FA56SC kann in Verbindung mit dem Träger TB56C oder TB56S (siehe Seite A77) verwendet werden.

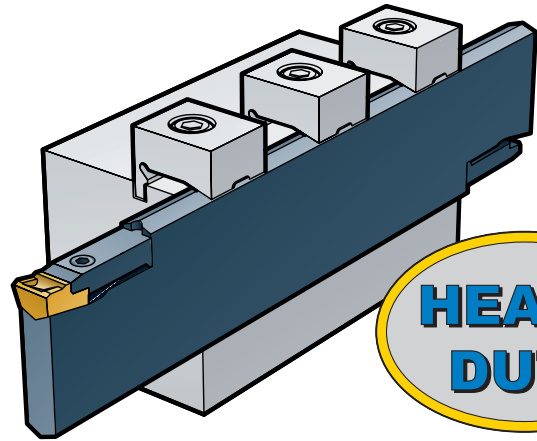
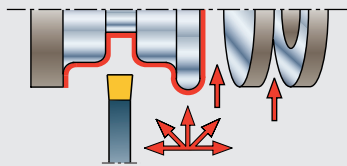
2) FA56SC kan användas i kombination med TB56C eller TB56S (se sid A77).



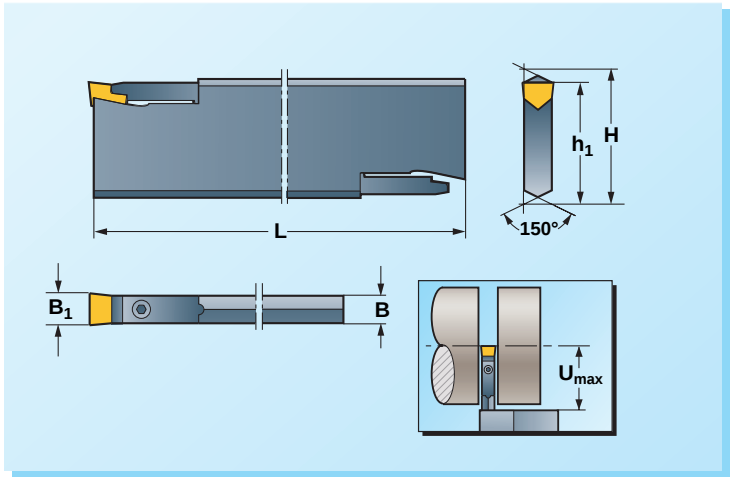
156S

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**HEAVY
DUTY**



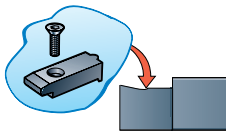
	H	B	h ₁	L	U _{max}	B ₁						Page: Seite: Sida: A130-A148		Page: Seite: Sida: A77
156S-5005x135x6	52	5	48,5	260	135	6-7	SHN 6	F6S 315	—	NY 2.5	MT-6 MT-6.4r1 MT-6b MT-6c MS-6 R/LMS-6	MZ-6 MP-6 MT-60Fr ³⁾ MT-7 MT-7.5r1 MT-7b	MT-7c	TB 56S-25-50S TB 56S-32-50S TB 56S-40-50S TB 56S-50-50S
156S-5007x105x8 156S-5007x135x8	52 52	7 7	48,5	200 260	105 135	8-9	SHN 8T	F6S 418	BF 04T	NY 2.5	MT-8 MT-8b MT-8c MS-8	R/LMS-8 MZ-8 MP-8 MT-9	MT-9r1 MT-9c	
156S-5009x105x10 156S-5009x135x10	52 52	9 9	48,5	200 260	105 135	10-11	SHN 10T	F6S 518T	BF 05T	NY 3	MT-10 MT-10r1 MT-10b MT-10c MS-10	R/LMS-10 MZ-10		
156S-5011x105x12 156S-5011x135x12	52 52	11 11	48,5	200 260	105 135	12	SHN 12T	F6S 519	BF 05T	NY3	MT-12 MT-12b MT-12c	MS-12 MZ-12		



Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58

Ordering example:
Bestellbeispiel: **156S-5005 x 135 x 6**
Beställningsexempel:



³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktyghållaren.

Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

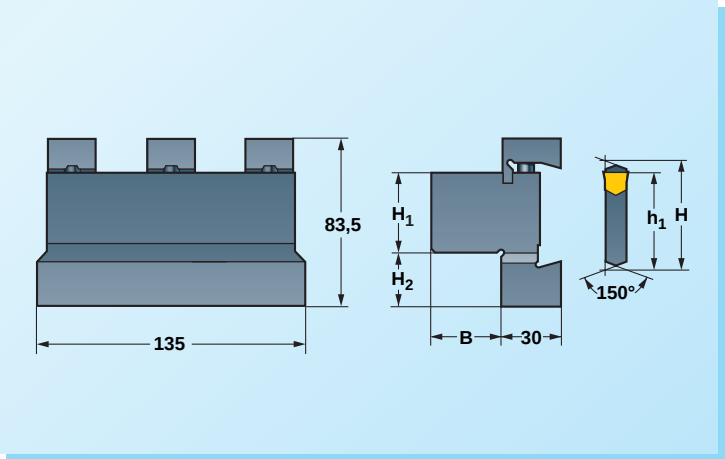
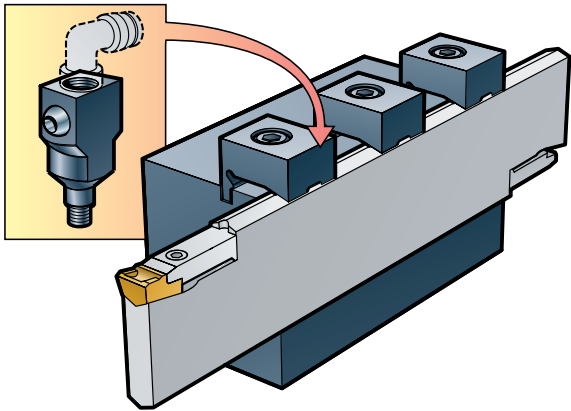
TB56S

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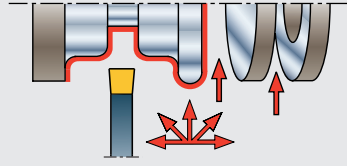
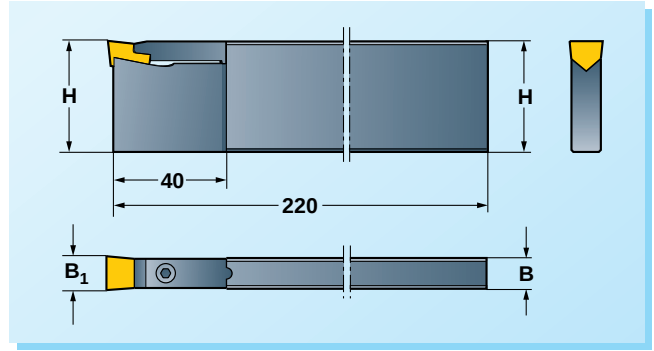
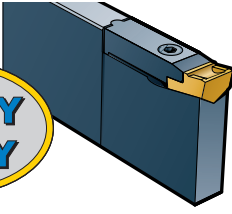
156S



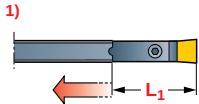
Adapter for cutting fluid
Verbindungsstück für Schneidflüssigkeit
Adapter för skärvätska

	H ₁	B	H ₂	h ₁				Page: Seite: Sida: A75
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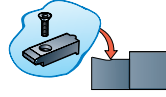
A

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	H	B	B ₁					 Page: Seite: Sida: A130-A148			
1)155S-3208x40x8T 1)155S-4008x40x8T	32 40	8 8	8-9	SHN 8T	F6S 418	BF 04T	NY 2.5	MT-8 MT-8b MT-8c MS-8 R/LMS-8 MZ-8 MP-8 MT-9 MT-9r1 MT-9c			
1)155S-3210x40x10 1)155S-4010x40x10	32 40	10 10	10-11	SHN 10T	F6S 518T	BF 05T	NY 3	MT-10 MT-10r1 MT-10b MT-10c MS-10 R/LMS-10 MZ-10 MT-12c MS-12 MZ-12			
1)155S-3212x40x12 1)155S-4012x40x12	32 40	12 12	12	SHN 12T	F6S 519	BF 05T	NY 3	MT-12 MT-12b MT-12c MS-12 MZ-12			



- 1) Design of the clamp permits modification of the tool holder to larger entry length.
- 1) Die Ausführung des Spannhakens lässt eine Änderung des Werkzeughalters zu grösserer Einstechlänge zu.
- 1) Spännhakens utformning medger modifiering av verktygshållaren till större instickslängd.



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

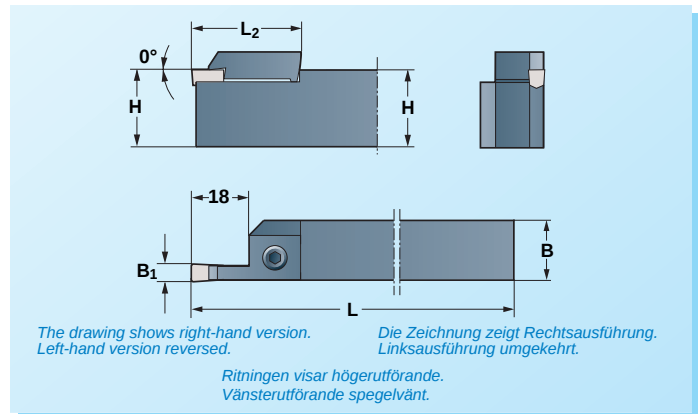
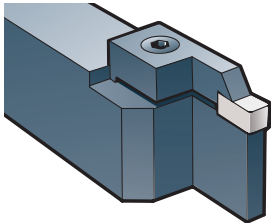
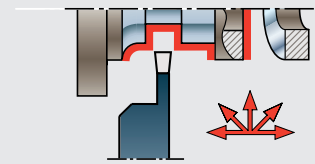
Ordering example:

Bestellbeispiel:

Beställningsexempel:

155S-3208 x 40 x 8T

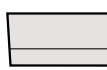
Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58**151K**Recommendations
Empfehlungen
RekomendationerPage:
Seite:
Sida: **A20**

The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

 	H	B	L	L ₂	B ₁						Page: Seite: Sida: A145
R/L 151K-2525x18x4 R/L 151K-3225x18x4	25 32	25 25	150 170	38,5 38,5	4	SHR 184K	SHL 184K	F6S 519	NY 3	K-400	
R/L 151K-2525x18x5 R/L 151K-3225x18x5	25 32	25 25	150 170	38,5 38,5	5	SHR 184K	SHL 184K	F6S 519	NY 3	K-500	
R/L 151K-2525x18x6 R/L 151K-3225x18x6	25 32	25 25	150 170	40 40	6	SHR186K	SHL 186K	F6S 519	NY 3	K-600	R/LK-600
R/L 151K-2525x18x7 R/L 151K-3225x18x7	25 32	25 25	150 170	40 40	7	SHR 186K	SHL 186K	F6S 519	NY 3	K-700	
R/L 151K-2525x18x8 R/L 151K-3225x18x8	25 32	25 25	150 170	40 40	8	SHR 186K	SHL 186K	F6S 519	NY 3	K-800	R/LK-800

Ordering example:

Bestellbeispiel:

Beställningsexempel:

R151K-2525 x18 x 5

Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

te kolumnerna ingår monterade i varje verktyg.

建德刀具

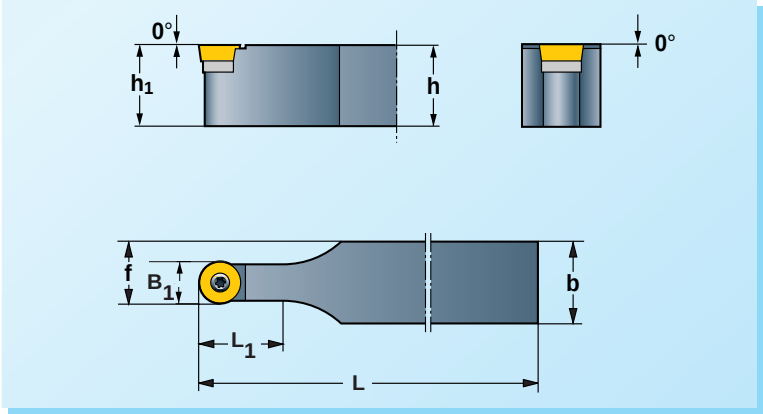
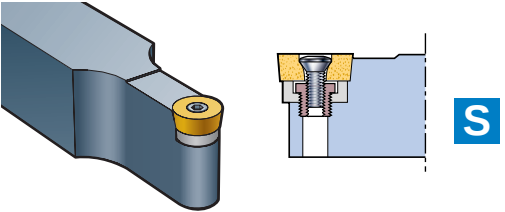
SRDC N

Recommendations
Empfehlungen
Rekomendationer

Page:
Seite:
Sida:

A21

ISO



	$h=h_1$	b	L	L_1	f	B_1						Page: Seite: Sida: A156-A157
SRDCN 1212F06 SRDCN 1616H06 SRDCN 2020K06 SRDCN 2525M06	12 16 20 25	12 16 20 25	80 100 125 150	10 12 14 16	9 11 13 15,5	6	FTX072507	NY7X	—	—	—	0602M0
SRDCN 1616H08 SRDCN 2020K08 SRDCN 2525M08	16 20 25	16 20 25	100 125 150	16 18 20	12 14 16,5	8	FTX093008	NY9X	—	—	—	0803M0
SRDCN 1616H10 SRDCN 2020K10 SRDCN 2525M10	16 20 25	16 20 25	100 125 150	18 20 25	13 15 17,5	10	FTX153514	NY15X	URC10	RSM508	NY 3.5	10T3M0
SRDCN 2525M12 SRDCN 3225P12	25 32	25 25	150 170	25 25	18,5 18,5	12	FTX153514	NY15X	URC12	RSM508	NY 3.5	1204M0

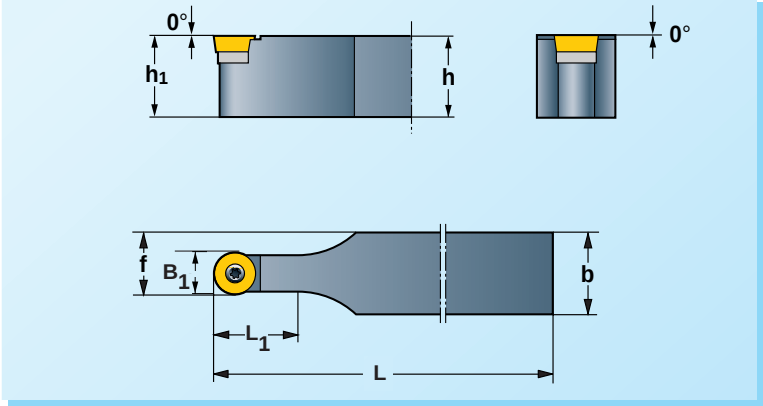
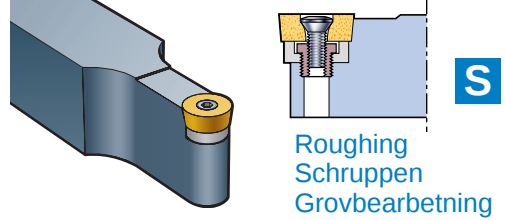
SRDC N M

Recommendations
Empfehlungen
Rekomendationer

Page:
Seite:
Sida:

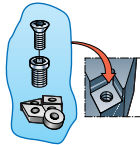
A21

ISO



	$h=h_1$	b	L	L_1	f	B_1						Page: Seite: Sida: A156-A157
SRDCN 2525-12M SRDCN 3225-12M	25 32	25 25	150 170	28 28	18,5 18,5	12	URN1203	RS61K	D61	F6S12	NY 3	120400/MO
SRDCN 2525-16M SRDCN 3225-16M SRDCN 4032T16M	25 32 40	25 25 32	150 170 300	35 35 35	20,5 20,5 24	16	URN1604	RS62	D62	F6S16F	NY 3	160600/MO
SRDCN 3225-20M SRDCN 4032T20M	32 40	25 32	170 300	40 40	22,5 26	20	URN2004	RS64	D64	F6S20F	NY 4	200600/MO

Ordering example:
Bestellbeispiel: **SRDCN 3225-20M**
Beställningsexempel:



Spare parts shown in the coloured columns are supplied assembled in each tool.
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

A

SRDC R/LM

Recommendations
Empfehlungen
Rekomendationer

Page:
Seite:
Sida:

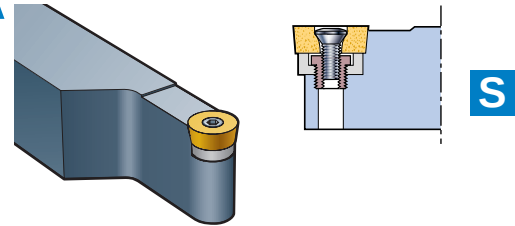
A21

ISO

The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.



	$h=h_1$	b	L	L_1	f	B_1		 torx				 RCMT RCGT RCXT A156-A157
SRDCR/L 2020K06 M	20	20	125	20	20,15	6	FTX072507	NY7X	—	—	—	0602M0
SRDCR/L 2525M06 M	25	25	150	20	25,15							
SRDCR/L 3225P06 M	32	25	170	20	25,15							
SRDCR/L 2020K08 M	20	20	125	20	20,3	8	FTX093008	NY9X	—	—	—	0803M0
SRDCR/L 2525M08 M	25	25	150	20	25,3							
SRDCR/L 3225P08 M	32	25	170	20	25,3							

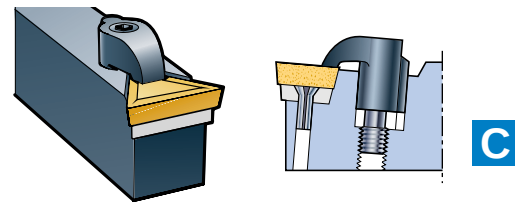
CTCP

Recommendations
Empfehlungen
Rekomendationer

Page:
Seite:
Sida:

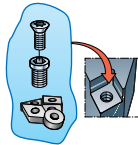
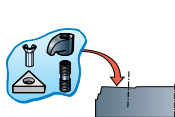
A21

ISO



	H	B	L	L_1	$1) B_1$	r						 TPMR TPUN TPGN TPGR A155
CTCPN 2513R 16M	25	13	200	31	15,3	0,8	U323S	RS2	SH 53K-1	6S 62	NY 4	1603. . .
CTCPN 2019M 22M	20	19	150	34	20,8	0,8	U324S	RS3	SH 53K-1	6S 62K	NY 4	2204. . .
CTCPN 2519R 22M	25	19	200	34						6S 62		
CTCPN 3219R 22M	32	19	200	34						6S 62		
CTCPN 3819R 22M	38	19	200	34						6S 62		

1)	TCMT TCMW	TPMR TPUN TPGN TPGR			 B_1
1102..	—	—	—	0 0,2 0,4 0,8	11,0 10,7 10,4 9,8
16T3..	1603..	—	—	0 0,4 0,8 1,2	16,5 15,9 15,3 14,7
—	2204..	—	—	0 0,4 0,8 1,2 1,6	22,0 21,4 20,8 20,2 19,7



Spare parts shown in the coloured columns are supplied assembled in each tool.
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.



Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A60-A61

Ordering example:
Bestellbeispiel:
Beställningsexempel:

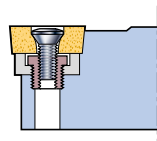
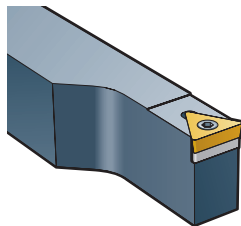
CTCPN 2513R 16M

STFC R/L M

Recommendations
Empfehlungen
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Seite:
Sida: **A21**

ISO



S

The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

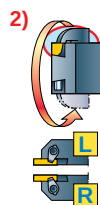
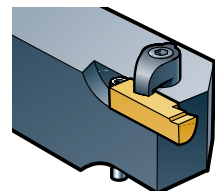
			$h=h_1$	b	L	L_1	f	$1) B_1$	r						*  TCMW TCMT TCGT	Page: Seite: Sida: A154-A155
STFCR/L 2020K11 M			20	20	125	25	20,4	10,4	0,4	FTX072507	NY7X	—	—	—	1102 . .	
STFCR/L 2525M11 M			25	25	150	25	25,4									
STFCR/L 2525M16 M			25	25	150	35	25,6	15,3	0,8	FTX153514	NY15X	UTC16	RSM508	NY 3.5	16T3 . .	
STFCR/L 3225P16 M			32	25	170	35	25,6									

1) Page:
Seite:
Sida: **A82**

153E

Recommendations
Empfehlungen
Rekomendationer

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Seite:
Sida: **A20, A24**



- 2) The holders are assembled for right (R) or left (L) performance by moving the clamp from the holder's upside to its underside.
- 2) Die Halter werden für Rechts(R)- oder Links (L) ausführung montiert durch Versetzen des Spannhakens von der Oberseite des Halters auf dessen Unterseite.
- 2) Hållarna monteras för höger(R)- eller vänster(L)utförande genom att flytta spännhaken ifrån hållarens översida till dess undersida.

Radial use.
Radiale Verwendung.
Radiell användning.

Axial use.
Axiale Verwendung.
Axiell användning.

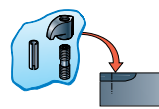
The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

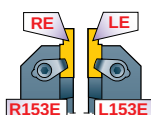
			H	B	L	f	L_2	B_1	D						Page: Seite: Sida: A139
1) R/L153E-1212x3x2.5/14-∞			12	12	90	16	24			RP310			NY 3	R/LE-2b	R/LE-2bQ
2) 153E-1616x3x2.5/14-∞			16	16	110	16	—			RP316				R/LE-2.5b	R/LE-2.5bQ
2) 153E-2020x3x2.5/14-∞			20	20	125	20	—	2-5	14-∞	RP320	SH 51	6S 61K		R/LE-3b	R/LE-3bQ
2) 153E-2525x3x2.5/14-∞			25	25	150	25	—			RP324				R/LE-4b	R/LE-4bQ
2) 153E-3225x3x2.5/14-∞			32	25	170	25	—			RP332				R/LE-5b	R/LE-5bQ

- 1)  **L 1212**
- 1) Schaft 1212 wird in Rechts- oder Linksausführung bestellt.
- 1) Skäft 1212 beställs i höger- eller vänsterutförande.



Spare parts shown in the coloured columns are supplied assembled in each tool.
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

Ordering example:
Bestellbeispiel: **153E-1616 x 3 x 2.5/14-∞**
Beställningsexempel:

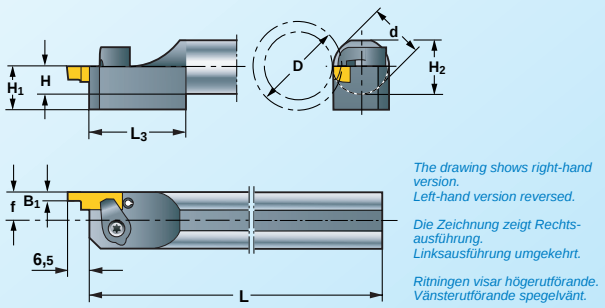
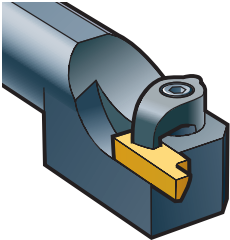
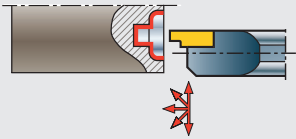


Right-hand inserts (RE) are used in right-hand holders and left-hand inserts (LE) are used in left-hand holders.
Rechtsschneiden (RE) werden in Rechtshaltern und Linksschneiden (LE) in Linkshaltern verwendet.
Högerskär (RE) används i högerhållare och vänsterskär (LE) i vänsterhållare.

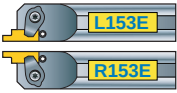
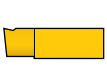
A

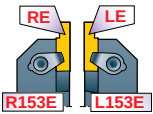
153E-00

Recommendations
Empfehlungen
Rekommendationer
Page:
Seite:
Sida: **A20, A24**



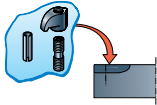
The drawing shows right-hand version.
Left-hand version reversed.
Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.
Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

 	H	H ₁	H ₂	d	L	f	L ₃	B ₁	D						Page: Seite: Sida: A139
R/L153E-0016x3x2.5/14-∞	7,5	15	15	16	120	8	28							R/LE-2b	R/LE-2bQ
R/L153E-0020x3x2.5/14-∞	9	15	18	20	120	10	28	2-5	14-∞	RP310	SH 51	6S 61K	NY 3	R/LE-2.5b	R/LE-2.5bQ
R/L153E-0025x3x2.5/14-∞	11,5	20	23	25	150	12,5	28							R/LE-3b	R/LE-3bQ
														R/LE-4b	R/LE-4bQ
														R/LE-5b	R/LE-5bQ



Right-hand inserts (RE) are used in right-hand holders and left-hand inserts (LE) are used in left-hand holders.
Rechtsschneiden (RE) werden in Rechtshaltern und Linksschneiden (LE) in Linkshaltern verwendet.
Högerskär (RE) används i högerhållare och vänsterskär (LE) i vänsterhållare.

Ordering example:
Bestellbeispiel: **L153E-0016 x 3 x 2.5/14- ∞**
Beställningsexempel:



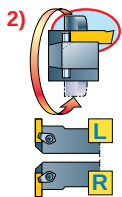
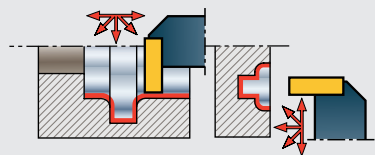
Spare parts shown in the coloured columns are supplied assembled in each tool.
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

158E

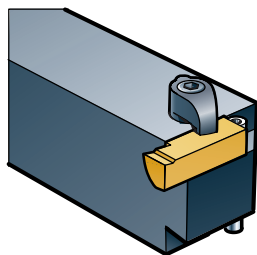
Recommendations
Empfehlungen
Rekommendationer

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Sida:

A25, A32

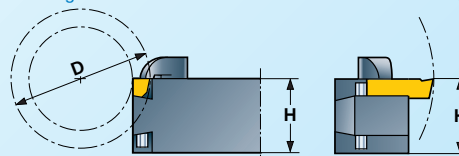


- 2) The holders are assembled for right (R) or left (L) performance by moving the clamp from the holder's upside to its underside.
- 2) Die Halter werden für Rechts (R)- oder Links (L) ausführung montiert durch Versetzen des Spannhakens von der Oberseite des Halters auf dessen Unterseite.
- 2) Hållarna monteras för höger (R)- eller vänster(L)utförande genom att flytta spännhaken ifrån hållarens översida till dess undersida.



Axial use.
Axiale Verwendung.
Axiell användning.

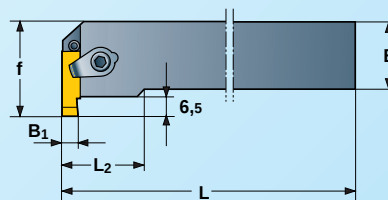
Radial use.
Radiale Verwendung.
Radiell användning.



The drawing shows right-hand version.
Left-hand version reversed.

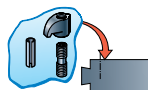
Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.



	H	B	L	f	L ₂	B ₁	D						Page: Seite: Sida:
L158E R158E													A139
1) R/L158E-1212x3x2.5/14-∞	12	12	90	22,5	17			RP310	SH 51	6S 61K	NY 3	R/LE-2b	R/LE-2bQ
2) 158E-1616x3x2.5/14-∞	16	16	110	22,5	—			RP316				R/LE-2.5b	R/LE-2.5bQ
2) 158E-2020x3x2.5/14-∞	20	20	125	26,5	—	2-5	14-∞	RP320				R/LE-3b	R/LE-3bQ
2) 158E-2525x3x2.5/14-∞	25	25	150	31,5	—			RP324				R/LE-4b	R/LE-4bQ
2) 158E-3225x3x2.5/14-∞	32	25	170	31,5	—			RP332				R/LE-5b	R/LE-5bQ

- 1) Shank 1212 is ordered in right- or left-hand version.
- 1) Schaft 1212 wird in Rechts- oder Linksausführung bestellt.
- 1) Skaf 1212 beställs i höger- eller vänsterutförande.



Spare parts shown in the coloured columns are supplied assembled in each tool.
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

Ordering example:
Bestellbeispiel:
Beställningsexempel:

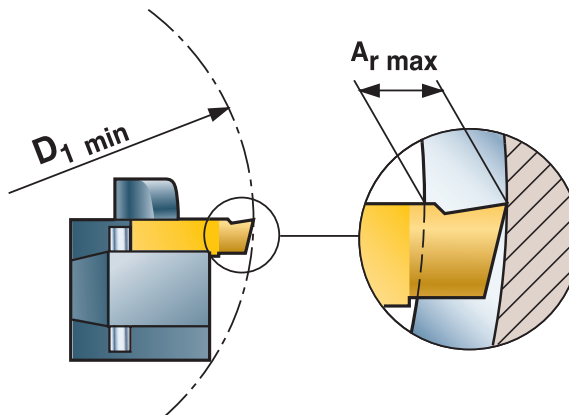
158E-2020 x 3 x 2.5/14-∞



Right-hand inserts (RE) are used in right-hand holders and left-hand inserts (LE) are used in left-hand holders.
Rechtsschneiden (RE) werden in Rechtshaltern und Linksschneiden (LE) in Linkshaltern verwendet.
Högerskär (RE) används i högerhållare och vänsterskär (LE) i vänsterhållare.

Maximum entry length $A_{r\max}$, for internal grooving with type 158E, at smallest hole diameter $D_{1\min}$
Maximale Einstechtiefe $A_{r\max}$, für innen Nutendrehen mit Typ 158E, beim kleinsten Lochdurchmesser $D_{1\min}$
Maximal instickslängd $A_{r\max}$, för invändig spårsvärning med typ 158E, vid minsta håldiameter $D_{1\min}$

	Ar max (mm)	D ₁ min				
		Shank size	Schaft grösse	Schaft storlek		
		1212	1616	2020	2525	3225
R/LE-2b	1	50	54	80	121	193
R/LE-2.5b	2	50	63	95	145	234
R/LE-3b	2,5	50	70	105	162	262
	2,8	—	—	113	175	283
R/LE-4b	1	50	54	80	121	193
R/LE-5b	2	50	63	95	145	234
	3	50	78	120	184	298
	4	62	106	164	254	414
	5	100	174	270	420	686
	5,5	147	259	403	628	1027
	6	290	514	803	1252	2050



By modifying the holder's shank all tools can be adapted to smallest hole diameter $D_{1\min} = 50$ mm.

Beim Modifizieren des Halterschaftes können sämtliche Werkzeuge dem kleinsten Lochdurchmesser $D_{1\min} = 50$ mm angepasst werden.

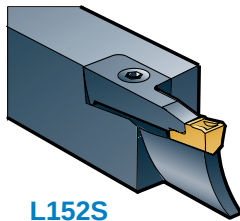
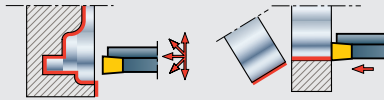
Genom att modifiera hållarens skaf kan samtliga verktyg anpassas till minsta håldiameter $D_{1\min} = 50$ mm.

152S

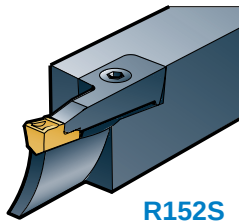
Recommendations
Empfehlungen
Rekomendationer

Page:
Seite:
Sida:

A23

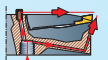


L152S



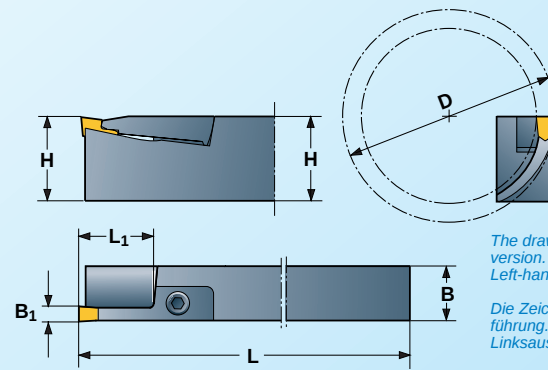
R152S

EB



Page: Seite:
Sida:

A38-A41



The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.



L152S

R152S

H

B

L

L₁

B₁

D



SHR



SHL



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Sida:

A130-A148

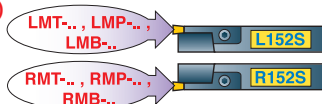
See type 153E, 153E-00 and 158E, page:
Siehe Typ 153E, 153E-00 und 158E, Seite:
Se typ 153E, 153E-00 och 158E, sid:

A83-A86

14-

R/L152S-1616x10x2/20-23 R/L152S-2020x10x2/20-23 R/L152S-2525x10x2/20-23	16 20 25	16 20 25	110 125 150	10	2	20-23	SHR 102Z	SHL 102Z	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	R/LMT-20Z ²⁾ R/LMP-20Z ²⁾
R/L152S-1616x10x2/23-26 R/L152S-2020x10x2/23-26 R/L152S-2525x10x2/23-26	16 20 25	16 20 25	110 125 150	10	2	23-26	SHR 102Z	SHL 102Z	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	R/LMT-20Z ²⁾ R/LMP-20Z ²⁾
R/L152S-1616x10x2/26-30 R/L152S-2020x10x2/26-30 R/L152S-2525x10x2/26-30	16 20 25	16 20 25	110 125 150	10	2	26-30	SHR 102Z	SHL 102Z	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	R/LMT-20Z ²⁾ R/LMP-20Z ²⁾
R/L152S-1616x10x2/30-35 R/L152S-2020x10x2/30-35 R/L152S-2525x10x2/30-35	16 20 25	16 20 25	110 125 150	10	2	30-35	SHR 102P	SHL 102P	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-20 MP-20 MA-20
R/L152S-1616x10x2/35-40 R/L152S-2020x10x2/35-40 R/L152S-2525x10x2/35-40	16 20 25	16 20 25	110 125 150	10	2	35-40	SHR 102P	SHL 102P	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-20 MP-20 MA-20
R/L152S-1616x10x2/40-45 R/L152S-2020x10x2/40-45 R/L152S-2525x10x2/40-45	16 20 25	16 20 25	110 125 150	10	2	40-45	SHR 102	SHL 102	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-20 MP-20 MA-20
R/L152S-1616x10x2/45-50 R/L152S-2020x10x2/45-50 R/L152S-2525x10x2/45-50	16 20 25	16 20 25	110 125 150	10	2	45-50	SHR 102	SHL 102	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-20 MP-20 MA-20
R/L152S-2020x10x2/50-55 R/L152S-2525x10x2/50-55	20 25	20 25	125 150	10	2	50-55	SHR 102	SHL 102	F6S 418	BF 04T	NY 2.5	MT-20 MZ-20 MS-20 MP-20 MA-20
R/L152S-2020x10x2/55-60 R/L152S-2525x10x2/55-60	20 25	20 25	125 150	10	2	55-60	SHR 102	SHL 102	F6S 418	BF 04T	NY 2.5	MT-20 MZ-20 MS-20 MP-20 MA-20
R/L152S-2020x10x2/60-70 R/L152S-2525x10x2/60-70	20 25	20 25	125 150	10	2	60-70	SHR 102	SHL 102	F6S 418	BF 04T	NY 2.5	MT-20 MZ-20 MS-20 MP-20 MA-20
R/L152S-2020x10x2/70-80 R/L152S-2525x10x2/70-80	20 25	20 25	125 150	10	2	70-80	SHR 102	SHL 102	F6S 418	BF 04T	NY 2.5	MT-20 MZ-20 MS-20 MP-20 MA-20
R/L152S-2020x10x2/80-90 R/L152S-2525x10x2/80-90	20 25	20 25	125 150	10	2	80-90	SHR 102	SHL 102	F6S 418	BF 04T	NY 2.5	MT-20 MZ-20 MS-20 MP-20 MA-20
R/L152S-2020x10x2/90-100 R/L152S-2525x10x2/90-100	20 25	20 25	125 150	10	2	90-100	SHR 102	SHL 102	F6S 418	BF 04T	NY 2.5	MT-20 MZ-20 MS-20 MP-20 MA-20
R/L152S-1616x12x2.5/20-23 R/L152S-2020x12x2.5/20-23 R/L152S-2525x12x2.5/20-23	16 20 25	16 20 25	110 125 150	12	2,5	20-23	SHR 122.5Z	SHL 122.5Z	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	R/LMT-25Z ²⁾ R/LMT-2.3r0.5Z ²⁾ R/LMP-25Z ²⁾
R/L152S-1616x12x2.5/23-26 R/L152S-2020x12x2.5/23-26 R/L152S-2525x12x2.5/23-26	16 20 25	16 20 25	110 125 150	12	2,5	23-26	SHR 122.5Z	SHL 122.5Z	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	R/LMT-25Z ²⁾ R/LMT-2.3r0.5Z ²⁾ R/LMP-25Z ²⁾
R/L152S-1616x12x2.5/26-30 R/L152S-2020x12x2.5/26-30 R/L152S-2525x12x2.5/26-30	16 20 25	16 20 25	110 125 150	12	2,5	26-30	SHR 122.5Z	SHL 122.5Z	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	R/LMT-25Z ²⁾ R/LMT-2.3r0.5Z ²⁾ R/LMP-25Z ²⁾
R/L152S-1616x12x2.5/30-35 R/L152S-2020x12x2.5/30-35 R/L152S-2525x12x2.5/30-35	16 20 25	16 20 25	110 125 150	12	2,5	30-35	SHR 122.5P	SHL 122.5P	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-25 MT-25F ³⁾ MT-2.3r0.5 MP-25 MA-25
R/L152S-1616x12x2.5/35-40 R/L152S-2020x12x2.5/35-40 R/L152S-2525x12x2.5/35-40	16 20 25	16 20 25	110 125 150	12	2,5	35-40	SHR 122.5P	SHL 122.5P	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-25 MT-25F ³⁾ MT-2.3r0.5 MP-25 MA-25

2)



2) Right-hand inserts (R) are used in right-hand holders and left-hand inserts (L) in left-hand holders.

2) Rechtsschneiden (R) werden in Rechtshaltern und Linksschneiden (L) in Linkshaltern verwendet.

2) Högerskär (R) används i högerhållare och vänsterskär (L) i vänsterhållare.

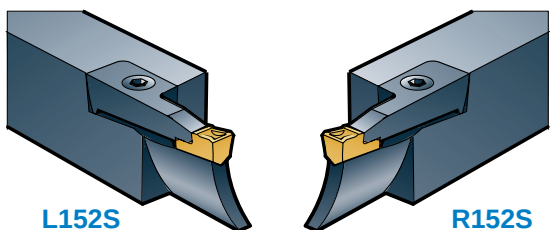


Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58

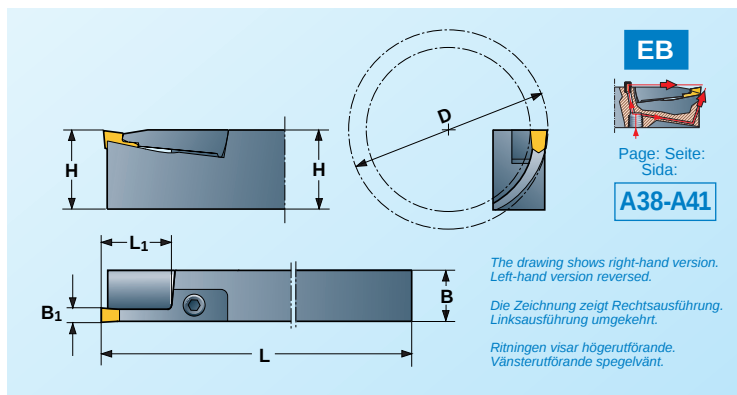
152S

A



L152S

R152S



EB



Page: Seite:
Sida:

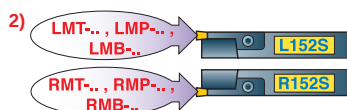
A38-A41

The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

	H	B	L	L ₁	B ₁	D							Page: Seite: Sida: A130-A148	
R/L152S-1616x12x2.5/40-45 R/L152S-2020x12x2.5/40-45 R/L152S-2525x12x2.5/40-45	16 20 25	16 20 25	110 125 150	12	2,5	40-45	SHR 122.5	SHL 122.5	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-25 MT-25Fr ³⁾ MT-2.3r0.5 MS-25 MZ-25 MP-25 MA-25		
R/L152S-1616x12x2.5/45-50 R/L152S-2020x12x2.5/45-50 R/L152S-2525x12x2.5/45-50	16 20 25	16 20 25	110 125 150	12	2,5	45-50								
R/L152S-2020x12x2.5/50-55 R/L152S-2525x12x2.5/50-55	20 25	20 25	125 150	12	2,5	50-55								
R/L152S-2020x12x2.5/55-60 R/L152S-2525x12x2.5/55-60	20 25	20 25	125 150	12	2,5	55-60	SHR 122.5	SHL 122.5	F6S 418	BF 04T				
R/L152S-2020x12x2.5/60-70 R/L152S-2525x12x2.5/60-70	20 25	20 25	125 150	12	2,5	60-70								
R/L152S-2020x12x2.5/70-80 R/L152S-2525x12x2.5/70-80	20 25	20 25	125 150	12	2,5	70-80								
R/L152S-2020x12x2.5/80-90 R/L152S-2525x12x2.5/80-90	20 25	20 25	125 150	12	2,5	80-90								
R/L152S-2020x12x2.5/90-100 R/L152S-2525x12x2.5/90-100	20 25	20 25	125 150	12	2,5	90-100								
R/L152S-1616x12x3/20-23 R/L152S-2020x12x3/20-23 R/L152S-2525x12x3/20-23	16 20 25	16 20 25	110 125 150	12	3	20-23	SHR 133Z	SHL 133Z	F6S 411	-			NY 2.5	R/LMT-3Z ²⁾ R/LMT-3.1r0.5Z ²⁾ R/LMP-30Z ²⁾ R/LMB-3FZU ²⁾³⁾
R/L152S-1616x12x3/23-26 R/L152S-2020x12x3/23-26 R/L152S-2525x12x3/23-26	16 20 25	16 20 25	110 125 150	12	3	23-26								
R/L152S-1616x12x3/26-30 R/L152S-2020x12x3/26-30 R/L152S-2525x12x3/26-30	16 20 25	16 20 25	110 125 150	12	3	26-30								
R/L152S-1616x12x3/30-35 R/L152S-2020x12x3/30-35 R/L152S-2525x12x3/30-35	16 20 25	16 20 25	110 125 150	12	3	30-35					SHR 133P	SHL 133P		
R/L152S-1616x12x3/35-40 R/L152S-2020x12x3/35-40 R/L152S-2525x12x3/35-40	16 20 25	16 20 25	110 125 150	12	3	35-40								
R/L152S-1616x12x3/40-50 R/L152S-2020x12x3/40-50 R/L152S-2525x12x3/40-50	16 20 25	16 20 25	110 125 150	12	3	40-50	SHR 133	SHL 133	F6S 411	-			NY 2.5	MT-3 MP-3 MT-3.1r0.5 MP-30 MT-3b MA-30 MT-3c MB-3FU ³⁾ MS-3 MS-3D MZ-3
R/L152S-2020x12x3/50-60T R/L152S-2525x12x3/50-60T R/L152S-3225x12x3/50-60T	20 25 32	20 25 25	125 150 170	12	3	50-60								
R/L152S-2020x12x3/60-75T R/L152S-2525x12x3/60-75T R/L152S-3225x12x3/60-75T	20 25 32	20 25 25	125 150 170	12	3	60-75					SHR 133	SHL 133		
R/L152S-2020x12x3/75-100T R/L152S-2525x12x3/75-100T R/L152S-3225x12x3/75-100T	20 25 32	20 25 25	125 150 170	12	3	75-100								
R/L152S-2020x12x3/100-140T R/L152S-2525x12x3/100-140T R/L152S-3225x12x3/100-140T	20 25 32	20 25 25	125 150 170	12	3	100-140								



²⁾ Right-hand inserts (R) are used in right-hand holders and left-hand inserts (L) in left-hand holders.

²⁾ Rechtsschneiden (R) werden in Rechtshaltern und Linksschneiden (L) in Linkshaltern verwendet.

²⁾ Högerskär (R) används i högerhållare och vänsterskär (L) i vänsterhållare.

³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktyghållaren.

	H	B	L	L ₁	B ₁	D							Page: Seite: Sida: A130-A148
R/L152S-2020x12x3/140-190T R/L152S-2525x12x3/140-190T R/L152S-3225x12x3/140-190T	20 25 32	20 25 25	125 150 170	12	3	140-190	SHR 133	SHL 133	F6S 411	-	NY 2.5	MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3 MS-3D MZ-3 MP-3 MP-30 MA-30 MB-3F ³⁾ MT-30Fr ³⁾	
R/L152S-2020x12x3/190-300T R/L152S-2525x12x3/190-300T R/L152S-3225x12x3/190-300T	20 25 32	20 25 25	125 150 170	12	3	190-300							
R/L152S-2020x12x3/300-500T R/L152S-2525x12x3/300-500T R/L152S-3225x12x3/300-500T	20 25 32	20 25 25	125 150 170	12	3	300-500							
R/L152S-2020x12x3/500-∞T R/L152S-2525x12x3/500-∞T R/L152S-3225x12x3/500-∞T	20 25 32	20 25 25	125 150 170	12	3	500-∞							
R/L152S-1616x12x4/30-40 R/L152S-2020x12x4/30-40 R/L152S-2525x12x4/30-40	16 20 25	16 20 25	110 125 150	12	4-4,5	30-40	SHR 134P	SHL134P	F6S 411	-		D=30-35 MT-4X MT-3.7r1X ³⁾ MT-4r1X MT-4cX MP-4X MP-40X MB-4FXU ³⁾	D=35-40 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4c MP-40 MA-40 MB-4FU ³⁾
R/L152S-1616x20x4/30-35 R/L152S-2020x20x4/30-35 R/L152S-2525x20x4/30-35	16 20 25	16 20 25	110 125 150	20	4-4,5	30-35	SHR 204MP	SHL 204MP	F6S 415 F6S 418 F6S 418	BF 04M		MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4c MP-40 MA-40 MB-4FU ³⁾	
R/L152S-1616x20x4/35-40 R/L152S-2020x20x4/35-40 R/L152S-2525x20x4/35-40	16 20 25	16 20 25	110 125 150	20	4-4,5	35-40	SHR 204MP	SHL 204MP	F6S 415 F6S 418 F6S 418	BF 04M	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4c MP-4 MP-40 MA-40 MB-4FU ³⁾	
R/L152S-1616x12x4/40-50 R/L152S-2020x12x4/40-50 R/L152S-2525x12x4/40-50	16 20 25	16 20 25	110 125 150	12	4-4,5	40-50	SHR 134	SHL 134	F6S 411	-	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D	MZ-4 MP-40 MA-40 MB-4FU ³⁾
R/L152S-1616x20x4/40-50 R/L152S-2020x20x4/40-50 R/L152S-2525x20x4/40-50	16 20 25	16 20 25	110 125 150	20	4-4,5	40-50	SHR 204MT	SHL 204MT	F6S 418	BF 04M		MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D	MZ-4 MP-40 MA-40 MB-4FU ³⁾
R/L152S-2020x12x4/50-60T R/L152S-2525x12x4/50-60T R/L152S-3225x12x4/50-60T	20 25 32	20 25 25	125 150 170	12	4-4,5	50-60	SHR 134	SHL 134	F6S 411	-			
R/L152S-2020x20x4/50-60 R/L152S-2525x20x4/50-60 R/L152S-3225x20x4/50-60	20 25 32	20 25 25	125 150 170	20	4-4,5	50-60	SHR 204MT	SHL 204MT	F6S 418	BF 04M	NY 2.5		
R/L152S-2525x25x4/50-60 R/L152S-3225x25x4/50-60	25 32	25 25	150 170	25	4-4,5	50-60	SHR 254MT	SHL 254MT	F6S 418	BF 04M			
R/L152S-2020x12x4/60-75T R/L152S-2525x12x4/60-75T R/L152S-3225x12x4/60-75T	20 25 32	20 25 25	125 150 170	12	4-4,5	60-75	SHR 134	SHL 134	F6S 411	-			
R/L152S-2020x20x4/60-75 R/L152S-2525x20x4/60-75 R/L152S-3225x20x4/60-75	20 25 32	20 25 25	125 150 170	20	4-4,5	60-75	SHR 204MT	SHL 204MT	F6S 418	BF 04M		MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D	MZ-4 MP-40 MA-40 MB-4FU ³⁾
R/L152S-2525x25x4/60-75 R/L152S-3225x25x4/60-75	25 32	25 25	150 170	25	4-4,5	60-75	SHR 254MT	SHL 254MT	F6S 418	BF 04M			
R/L152S-2020x12x4/75-100T R/L152S-2525x12x4/75-100T R/L152S-3225x12x4/75-100T	20 25 32	20 25 25	125 150 170	12	4-4,5	75-100	SHR 134	SHL 134	F6S 411	-			
R/L152S-2020x20x4/75-100 R/L152S-2525x20x4/75-100 R/L152S-3225x20x4/75-100	20 25 32	20 25 25	125 150 170	20	4-4,5	75-100	SHR 204MT	SHL 204MT	F6S 418	BF 04M			
R/L152S-2525x25x4/75-100 R/L152S-3225x25x4/75-100	25 32	25 25	150 170	25	4-4,5	75-100	SHR 254MT	SHL 254MT	F6S 418	BF 04M			
R/L152S-2020x12x4/100-140T R/L152S-2525x12x4/100-140T R/L152S-3225x12x4/100-140T	20 25 32	20 25 25	125 150 170	12	4-4,5	100-140	SHR 134	SHL 134	F6S 411	-			
R/L152S-2020x20x4/100-140 R/L152S-2525x20x4/100-140 R/L152S-3225x20x4/100-140	20 25 32	20 25 25	125 150 170	20	4-4,5	100-140	SHR 204MT	SHL 204MT	F6S 418	BF 04M			
R/L152S-2525x25x4/100-140 R/L152S-3225x25x4/100-140	25 32	25 25	150 170	25	4-4,5	100-140	SHR 254MT	SHL 254MT	F6S 418	BF 04M			
R/L152S-2020x12x4/140-190T R/L152S-2525x12x4/140-190T R/L152S-3225x12x4/140-190T	20 25 32	20 25 25	125 150 170	12	4-4,5	140-190	SHR 134	SHL 134	F6S 411	-			
R/L152S-2020x20x4/140-190 R/L152S-2525x20x4/140-190 R/L152S-3225x20x4/140-190	20 25 32	20 25 25	125 150 170	20	4-4,5	140-190	SHR 204MT	SHL 204MT	F6S 418	BF 04M			

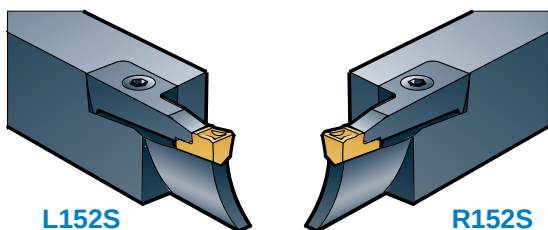


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Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58

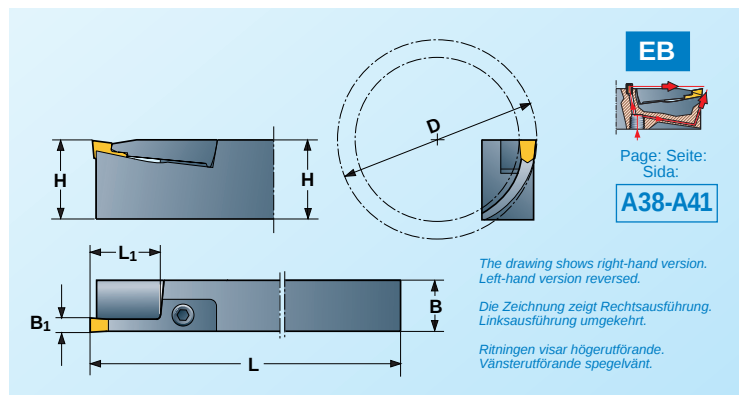
152S

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L152S

R152S



	H	B	L	L ₁	B ₁	D							Page: Seite: Sida: A130-A148
R/L152S-2525x25x4/140-190 R/L152S-3225x25x4/140-190	25 32	25 25	150 170	25	4-4,5	140-190	SHR 254MT	SHL 254MT	F6S 418	BF 04M	NY 2.5	MT-4 MT-3.7r ¹³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D MZ-4 MP-4 MP-40 MA-40 MB-4F ³⁾ MT-40F ³⁾	
R/L152S-2020x12x4/190-∞T R/L152S-2525x12x4/190-∞T R/L152S-3225x12x4/190-∞T	20 25 32	20 25 25	125 150 170	12	4-4,5	190-∞	SHR 134	SHL 134	F6S 411	-			
R/L152S-2020x20x4/190-300 R/L152S-2525x20x4/190-300 R/L152S-3225x20x4/190-300	20 25 32	20 25 25	125 150 170	20	4-4,5	190-300	SHR 204MT	SHL 204MT	F6S 418	BF 04M			
R/L152S-2525x25x4/190-300 R/L152S-3225x25x4/190-300	25 32	25 25	150 170	25	4-4,5	190-300	SHR 254MT	SHL 254MT	F6S 418	BF 04M			
R/L152S-2020x20x4/300-∞ R/L152S-2525x20x4/300-∞ R/L152S-3225x20x4/300-∞	20 25 32	20 25 25	125 150 170	20	4-4,5	300-∞	SHR 204MT	SHL 204MT	F6S 418	BF 04M			
R/L152S-2525x25x4/300-∞ R/L152S-3225x25x4/300-∞	25 32	25 25	150 170	25	4-4,5	300-∞	SHR 254MT	SHL 254MT	F6S 418	BF 04M			
R/L152S-1616x12x5/30-40 R/L152S-2020x12x5/30-40 R/L152S-2525x12x5/30-40	16 20 25	16 20 25	110 125 150	12	5	30-40	SHR 135P	SHL 135P	F6S 411	-	NY 2.5	D=30-35 MT-5X MT-5r1X MT-5cX MP-5X MB-5FXU	D=35-40 MT-5 MT-5r1 MT-5c MP-5 MA-50 MB-5FU ³⁾
R/L152S-2020x20x5/30-40 R/L152S-2525x20x5/30-40	20 25	20 25	125 150	20	5	30-40	SHR 205MP	SHL 205MP	F6S 418	BF 04M			
R/L152S-1616x12x5/40-50 R/L152S-2020x12x5/40-50 R/L152S-2525x12x5/40-50	16 20 25	16 20 25	110 125 150	12	5	40-50	SHR 135	SHL 135	F6S 411	-	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c MS-5	MZ-5 MP-5 MA-50 MB-5FU ³⁾
R/L152S-2020x20x5/40-50 R/L152S-2525x20x5/40-50	20 25	20 25	125 150	20	5	40-50	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
R/L152S-2020x12x5/50-60T R/L152S-2525x12x5/50-60T R/L152S-3225x12x5/50-60T	20 25 32	20 25 25	125 150 170	12	5	50-60	SHR 135	SHL 135	F6S 411	-	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50 MB-5F ³⁾ MT-50Fr ³⁾	
R/L152S-2020x20x5/50-60 R/L152S-2525x20x5/50-60 R/L152S-3225x20x5/50-60	20 25 32	20 25 25	125 150 170	20	5	50-60	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
R/L152S-2525x25x5/50-60 R/L152S-3225x25x5/50-60	25 32	25 25	150 170	25	5	50-60	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
R/L152S-2020x12x5/60-75T R/L152S-2525x12x5/60-75T R/L152S-3225x12x5/60-75T	20 25 32	20 25 25	125 150 170	12	5	60-75	SHR 135	SHL 135	F6S 411	-			
R/L152S-2020x20x5/60-75 R/L152S-2525x20x5/60-75 R/L152S-3225x20x5/60-75	20 25 32	20 25 25	125 150 170	20	5	60-75	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
R/L152S-2525x25x5/60-75 R/L152S-3225x25x5/60-75	25 32	25 25	150 170	25	5	60-75	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
R/L152S-2020x12x5/75-100T R/L152S-2525x12x5/75-100T R/L152S-3225x12x5/75-100T	20 25 32	20 25 25	125 150 170	12	5	75-100	SHR 135	SHL 135	F6S 411	-			
R/L152S-2020x20x5/75-100 R/L152S-2525x20x5/75-100 R/L152S-3225x20x5/75-100	20 25 32	20 25 25	125 150 170	20	5	75-100	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
R/L152S-2525x25x5/75-100 R/L152S-3225x25x5/75-100	25 32	25 25	150 170	25	5	75-100	SHR 255 MT	SHL 255MT	F6S 418	BF 04M			
R/L152S-2020x12x5/100-140T R/L152S-2525x12x5/100-140T R/L152S-3225x12x5/100-140T	20 25 32	20 25 25	125 150 170	12	5	100-140	SHR 135	SHL 135	F6S 411	-			

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	H	B	L	L ₁	B ₁	D							Page: Seite: Sida: A130-A148
R/L152S-2020x20x5/100-140 R/L152S-2525x20x5/100-140 R/L152S-3225x20x5/100-140	20 25 32	20 25 25	125 150 170	20	5	100-140	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
R/L152S-2525x25x5/100-140 R/L152S-3225x25x5/100-140	25 32	25 25	150 170	25	5	100-140	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
R/L152S-2020x12x5/140-190T R/L152S-2525x12x5/140-190T R/L152S-3225x12x5/140-190T	20 25 32	20 25 25	125 150 170	12	5	140-190	SHR 135	SHL 135	F6S 411	–			
R/L152S-2020x20x5/140-190 R/L152S-2525x20x5/140-190 R/L152S-3225x20x5/140-190	20 25 32	20 25 25	125 150 170	20	5	140-190	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
R/L152S-2525x25x5/140-190 R/L152S-3225x25x5/140-190	25 32	25 25	150 170	25	5	140-190	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
R/L152S-2020x12x5/190-∞T R/L152S-2525x12x5/190-∞T R/L152S-3225x12x5/190-∞T	20 25 32	20 25 25	125 150 170	12	5	190-∞	SHR 135	SHL 135	F6S 411	–			
R/L152S-2020x20x5/190-300 R/L152S-2525x20x5/190-300 R/L152S-3225x20x5/190-300	20 25 32	20 25 25	125 150 170	20	5	190-300	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
R/L152S-2525x25x5/190-300 R/L152S-3225x25x5/190-300	25 32	25 25	150 170	25	5	190-300	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
R/L152S-2020x20x5/300-∞ R/L152S-2525x20x5/300-∞ R/L152S-3225x20x5/300-∞	20 25 32	20 25 25	125 150 170	20	5	300-∞	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
R/L152S-2525x25x5/300-∞ R/L152S-3225x25x5/300-∞	25 32	25 25	150 170	25	5	300-∞	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
R/L152S-1616x12x6/40-50 R/L152S-2020x12x6/40-50 R/L152S-2525x12x6/40-50	16 20 25	16 20 25	110 125 150	12	6-7,5	40-50	SHR 136	SHL 136	F6S 411	–			
R/L152S-2020x20x6/40-50 R/L152S-2525x20x6/40-50	20 25	20 25	125 150	20	6-7,5	40-50	SHR 206MT	SHL 206MT	F6S 418	BF 04M			
R/L152S-2020x12x6/50-60T R/L152S-2525x12x6/50-60T R/L152S-3225x12x6/50-60T	20 25 32	20 25 25	125 150 170	12	6-7,5	50-60	SHR 136	SHL 136	F6S 411	–			
R/L152S-2020x20x6/50-60 R/L152S-2525x20x6/50-60 R/L152S-3225x20x6/50-60	20 25 32	20 25 25	125 150 170	20	6-7,5	50-60	SHR 206MT	SHL 206MT	F6S 418	BF 04M			
R/L152S-2525x25x6/50-60 R/L152S-3225x25x6/50-60	25 32	25 25	150 170	25	6-7,5	50-60	SHR 256MT	SHL 256MT	F6S 418	BF 04M			
R/L152S-3225x32x6/50-60	32	25	170	32	6-7,5	50-60	SHR 326MT	SHL 326MT	F6S 519	BF 05M			
R/L152S-2020x12x6/60-75T R/L152S-2525x12x6/60-75T R/L152S-3225x12x6/60-75T	20 25 32	20 25 25	125 150 170	12	6-7,5	60-75	SHR 136	SHL 136	F6S 411	–			
R/L152S-2020x20x6/60-75 R/L152S-2525x20x6/60-75 R/L152S-3225x20x6/60-75	20 25 32	20 25 25	125 150 170	20	6-7,5	60-75	SHR 206MT	SHL 206MT	F6S 418	BF 04M			
R/L152S-2525x25x6/60-75 R/L152S-3225x25x6/60-75	25 32	25 25	150 170	25	6-7,5	60-75	SHR 256MT	SHL 256MT	F6S 418	BF 04M			
R/L152S-3225x32x6/60-75	32	25	170	32	6-7,5	60-75	SHR 326MT	SHL 326MT	F6S 519	BF 05M			
R/L152S-2020x12x6/75-100T R/L152S-2525x12x6/75-100T R/L152S-3225x12x6/75-100T	20 25 32	20 25 25	125 150 170	12	6-7,5	75-100	SHR 136	SHL 136	F6S 411	–			
R/L152S-2020x20x6/75-100 R/L152S-2525x20x6/75-100 R/L152S-3225x20x6/75-100	20 25 32	20 25 25	125 150 170	20	6-7,5	75-100	SHR 206MT	SHL 206MT	F6S 418	BF 04M			
R/L152S-2525x25x6/75-100 R/L152S-3225x25x6/75-100	25 32	25 25	150 170	25	6-7,5	75-100	SHR 256MT	SHL 256MT	F6S 418	BF 04M			
R/L152S-3225x32x6/75-100	32	25	170	32	6-7,5	75-100	SHR 326MT	SHL 326MT	F6S 519	BF 05M			
R/L152S-2020x12x6/100-140T R/L152S-2525x12x6/100-140T R/L152S-3225x12x6/100-140T	20 25 32	20 25 25	125 150 170	12	6-7,5	100-140	SHR 136	SHL 136	F6S 411	–			
R/L152S-2020x20x6/100-140 R/L152S-2525x20x6/100-140 R/L152S-3225x20x6/100-140	20 25 32	20 25 25	125 150 170	20	6-7,5	100-140	SHR 206MT	SHL 206MT	F6S 418	BF 04M			
R/L152S-2525x25x6/100-140 R/L152S-3225x25x6/100-140	25 32	25 25	150 170	25	6-7,5	100-140	SHR 256MT	SHL 256MT	F6S 418	BF 04M			
R/L152S-3225x32x6/100-140	32	25	170	32	6-7,5	100-140	SHR 326MT	SHL 326MT	F6S 519	BF 05M			

MT-5
MT-5r1
MT-5b
MT-5c
MS-5
MZ-5
MP-5
MA-50
MB-5F³⁾
MT-50Fr³⁾

MT-6
MT-6.4r1
MT-6b
MT-6c
MS-6
MZ-6
MP-6
MT-60Fr³⁾
MT-7
MT-7.5r1
MT-7b
MT-7c

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Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

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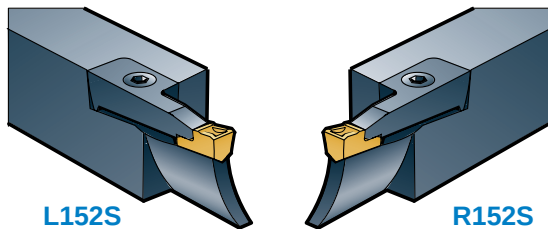
³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.

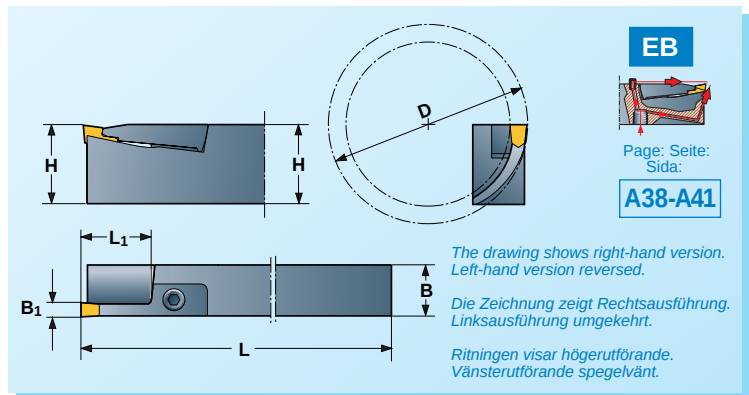
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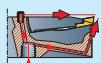


L152S

R152S



EB



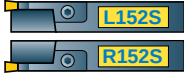
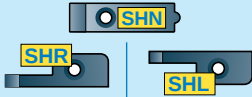
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							SHR	SHL					
R/L152S-2020x12x6/140-190T	20	20	125	12	6-7,5	140-190	SHR 136	SHL 136	F6S 411	—	NY 2.5		
R/L152S-2525x12x6/140-190T	25	25	150										
R/L152S-3225x12x6/140-190T	32	25	170										
R/L152S-2020x20x6/140-190	20	20	125	20	6-7,5	140-190	SHR 206MT	SHL 206MT	F6S 418	BF 04M	NY 2.5		
R/L152S-2525x20x6/140-190	25	25	150										
R/L152S-3225x20x6/140-190	32	25	170										
R/L152S-2525x25x6/140-190	25	25	150	25	6-7,5	140-190	SHR 256MT	SHL 256MT	F6S 418	BF 04M	NY 3		
R/L152S-3225x25x6/140-190	32	25	170										
R/L152S-3225x32x6/140-190	32	25	170										
R/L152S-4032x32x6/140-190	40	32	200	32	6-7,5	140-190	SHR 326MT	SHL 326MT	F6S 519	BF 05M	NY 3		
R/L152S-2020x12x6/190-∞T	20	20	125										
R/L152S-2525x12x6/190-∞T	25	25	150										
R/L152S-3225x12x6/190-∞T	32	25	170	20	6-7,5	190-300	SHR 206MT	SHL 206MT	F6S 418	BF 04M	NY 2.5		
R/L152S-2020x20x6/190-300	20	20	125										
R/L152S-2525x20x6/190-300	25	25	150										
R/L152S-3225x20x6/190-300	32	25	170	25	6-7,5	190-300	SHR 256MT	SHL 256MT	F6S 418	BF 04M	NY 3		
R/L152S-2525x25x6/190-300	25	25	150										
R/L152S-3225x25x6/190-300	32	25	170										
R/L152S-3225x32x6/190-300	32	25	170	32	6-7,5	190-300	SHR 326MT	SHL 326MT	F6S 519	BF 05M	NY 3		
R/L152S-4032x32x6/190-300	40	32	200										
R/L152S-2020x20x6/300-∞	20	20	125										
R/L152S-2525x20x6/300-∞	25	25	150	20	6-7,5	300-∞	SHR 206MT	SHL 206MT	F6S 418	BF 04M	NY 2.5		
R/L152S-3225x20x6/300-∞	32	25	170										
R/L152S-2525x25x6/300-∞	25	25	150										
R/L152S-3225x25x6/300-∞	32	25	170	25	6-7,5	300-∞	SHR 256MT	SHL 256MT	F6S 418	BF 04M	NY 3		
R/L152S-3225x32x6/300-∞	32	25	170										
R/L152S-4032x32x6/300-∞	40	32	200										
R/L152S-2525x20x8/75-100	25	25	150	20	8-9	75-100	SHR 208MT	SHL 208MT	F6S 519	BF 05M	NY 2.5		
R/L152S-3225x20x8/75-100	32	25	170										
R/L152S-4032x30x8/75-100	40	32	200										
R/L152S-2525x20x8/100-140	25	25	150	20	8-9	100-140	SHR 208MT	SHL 208MT	F6S 519	BF 05M	NY 3		
R/L152S-3225x20x8/100-140	32	25	170										
R/L152S-4032x30x8/100-140	40	32	200										
R/L152S-2525x20x8/140-190	25	25	150	20	8-9	140-190	SHR 208MT	SHL 208MT	F6S 519	BF 05M	NY 2.5		
R/L152S-3225x20x8/140-190	32	25	170										
R/L152S-4032x30x8/140-190	40	32	200										
R/L152S-4032x50x8/140-190	40	32	200	30	8-9	140-190	SHR 308MT	SHL 308MT	F6S 519	BF 05M	NY 3		
R/L152S-2525x20x8/190-∞	25	25	150										
R/L152S-3225x20x8/190-∞	32	25	170										
R/L152S-4032x30x8/190-300	40	32	200	30	8-9	190-300	SHR 308MT	SHL 308MT	F6S 519	BF 05M	NY 3		
R/L152S-4032x50x8/190-300	40	32	200										
R/L152S-4032x30x8/300-∞	40	32	200										
R/L152S-4032x50x8/300-500	40	32	200	50	8-9	300-500	SHN 8T	SHN 8T	F6S 418	BF 04T	NY 2.5		
R/L152S-4032x50x8/500-∞	40	32	200										

MT-6
MT-6.4r1
MT-6b
MT-6c
MS-6
MZ-6
MP-6
MT-60F⁽³⁾
MT-7
MT-7.5r1
MT-7b
MT-7c

MT-8
MT-8b
MT-8c
MS-8
MZ-8
MP-8
MT-9
MT-9r1
MT-9c

	H	B	L	L ₁	B ₁	D						Page: Seite: Sida: A130-A148
R/L152S-3225x20x10/75-100 R/L152S-4032x30x10/75-100	32 40	25 32	170 200	20 30	10-11	75-100	SHR 2010MT SHR 3010MT	SHL 2010MT SHL 3010MT	F6S 519 F6S 519	BF 05M BF 05M	NY 3	MT-10 MT-10r1 MT-10b MT-10c MS-10 MZ-10
R/L152S-3225x20x10/100-140 R/L152S-4032x30x10/100-140	32 40	25 32	170 200	20 30	10-11	100-140	SHR 2010MT SHR 3010MT	SHL 2010MT SHL 3010MT	F6S 519 F6S 519	BF 05M BF 05M		
R/L152S-3225x20x10/140-190 R/L152S-4032x30x10/140-190 R/L152S-4032x50x10/140-190	32 40 40	25 32 32	170 200 200	20 30 50	10-11	140-190	SHR 2010MT SHR 3010MT SHN 10T	SHL 2010MT SHL 3010MT	F6S 519 F6S 519 F6S 518T	BF 05M BF 05M BF 05T		
R/L152S-3225x20x10/190-∞	32	25	170	20	10-11	190-∞	SHR 2010MT	SHL 2010MT	F6S 519	BF 05M		
R/L152S-4032x30x10/190-300 R/L152S-4032x50x10/190-300	40 40	32 32	200 200	30 50	10-11	190-300	SHR 3010MT SHN 10T	SHL 3010MT	F6S 519 F6S 518T	BF 05M BF 05T		
R/L152S-4032x30x10/300-∞ R/L152S-4032x50x10/300-∞	40 40	32 32	200 200	30 50	10-11	300-∞	SHR 3010MT SHN 10T	SHL 3010MT	F6S 519 F6S 518T	BF 05M BF 05T		
R/L152S-4032x30x12/75-100 R/L152S-4032x40x12/75-100	40 40	32 32	200 200	30 40	12	75-100	SHR 3012MT SHR 4012MT	SHL 3012MT SHL 4012MT	F6S 519 F6S 526	BF 05M BF 05M	NY 3	MT-12 MT-12b MT-12c MS-12 MZ-12
R/L152S-4032x30x12/100-140 R/L152S-4032x40x12/100-140	40 40	32 32	200 200	30 40	12	100-140	SHR 3012MT SHR 4012MT	SHL 3012MT SHL 4012MT	F6S 519 F6S 526	BF 05M BF 05M		
R/L152S-4032x30x12/140-190 R/L152S-4032x50x12/140-190	40 40	32 32	200 200	30 50	12	140-190	SHR 3012MT SHN 12T	SHL 3012MT	F6S 519 F6S 519	BF 05M BF 05T		
R/L152S-4032x30x12/190-300 R/L152S-4032x50x12/190-300	40 40	32 32	200 200	30 50	12	190-300	SHR 3012MT SHN 12T	SHL 3012MT	F6S 519 F6S 519	BF 05M BF 05T		
R/L152S-4032x30x12/300-∞ R/L152S-4032x50x12/300-∞	40 40	32 32	200 200	30 50	12	300-∞	SHR 3012MT SHN 12T	SHL 3012MT	F6S 519 F6S 519	BF 05M BF 05T		

Ordering example:

Bestellbeispiel:

R152S-2525 x 20 x 4/50-60

Beställningsexempel:

3) See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

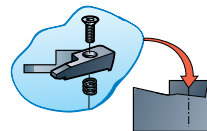
3) Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

3) Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.



Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58



Spare parts shown in the coloured columns are supplied assembled in each tool.

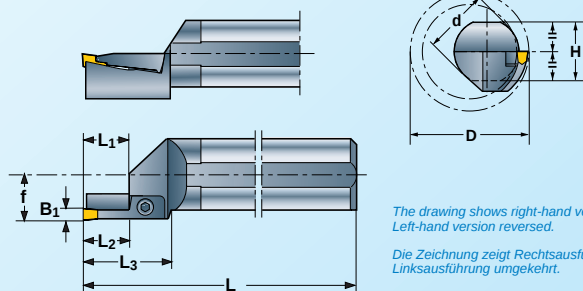
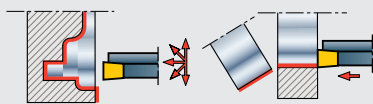
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

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Recommendations
Empfehlungen
Rekomendationer

Page:
Seite:
Sida: **A23, A27-A28**



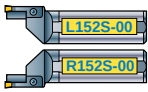
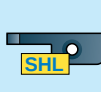
The drawing shows right-hand version.
Left-hand version reversed.

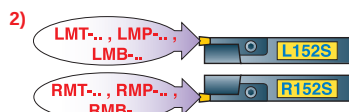
Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

L152S-00

R152S-00

 	H	d	L	f	L ₁	L ₂	L ₃	B ₁	D							Page: Seite: Sida: A130-A148							
See type 153E, 153E-00 and 158E, page: Siehe Typ 153E, 153E-00 und 158E, Seite: Se typ 153E, 153E-00 och 158E, sid:	A83-A86				14–																		
# R/L152S–0016x10x2/20–23 + R/L152S–0020x10x2/20–23 + R/L152S–0025x10x2/20–23	15 18 23	16 20 25	120 120 150	8,5 10,2 12,7	10	10	28	2	20–23	SHR 102Z	SHL 102Z	F6S 411	-	NY 2.5	R/LMT-20Z ²⁾ R/LMP-20Z ²⁾								
# R/L152S–0016x10x2/23–26 # R/L152S–0020x10x2/23–26 + R/L152S–0025x10x2/23–26	15 18 23	16 20 25	120 120 150	8,5 10,5 12,7	10	10	28	2	23–26														
# R/L152S–0016x10x2/26–30 # R/L152S–0020x10x2/26–30 + R/L152S–0025x10x2/26–30	15 18 23	16 20 25	120 120 150	8,5 10,5 12,7	10	10	28	2	26–30														
# R/L152S–0016x10x2/30–35 # R/L152S–0020x10x2/30–35 # R/L152S–0025x10x2/30–35	15 18 23	16 20 25	120 120 150	8,5 10,5 13	10	10	28	2	30–35														
# R/L152S–0016x10x2/35–40 # R/L152S–0020x10x2/35–40 # R/L152S–0025x10x2/35–40	15 18 23	16 20 25	120 120 150	8,5 10,5 13	10	10	28	2	35–40														
# R/L152S–0016x10x2/40–45 # R/L152S–0020x10x2/40–45 # R/L152S–0025x10x2/40–45	15 18 23	16 20 25	120 120 150	10 12 14,5	10	10	28	2	40–45														
# R/L152S–0016x10x2/45–50 # R/L152S–0020x10x2/45–50 # R/L152S–0025x10x2/45–50	15 18 23	16 20 25	120 120 150	10 12 14,5	10	10	28	2	45–50	SHR 102	SHL 102	F6S 411	-	NY 2.5	MT-20 MS-20 MZ-20 MP-20 MA-20								
R/L152S–0016x10x2/50–55 R/L152S–0020x10x2/50–55 R/L152S–0025x10x2/50–55	15 18 23	16 20 25	120 120 150	10 12 14,5	10	–	28	2	50–55														
R/L152S–0016x10x2/55–60 R/L152S–0020x10x2/55–60 R/L152S–0025x10x2/55–60	15 18 23	16 20 25	120 120 150	10 12 14,5	10	–	28	2	55–60														
R/L152S–0020x10x2/60–70 R/L152S–0025x10x2/60–70	18 23	20 25	120 150	12 14,5	10	–	28	2	60–70														
R/L152S–0020x10x2/70–80 R/L152S–0025x10x2/70–80	18 23	20 25	120 150	12 14,5	10	–	28	2	70–80														
R/L152S–0025x10x2/80–90 R/L152S–0025x10x2/90–100	23 23	25 25	150 150	14,5 14,5	10 10	– –	28 28	2 2	80–90 90–100														
# R/L152S–0016x12x2.5/20–23 + R/L152S–0020x12x2.5/20–23 + R/L152S–0025x12x2.5/20–23	15 18 23	16 20 25	120 120 150	8,5 10,2 12,7	12	12	28	2,5	20–23								SHR 122.5Z	SHL 122.5Z	F6S 411	-	NY 2.5	R/LMT-25Z ²⁾ R/LMT-2.3r0.5Z ²⁾ R/LMP-25Z ²⁾	
# R/L152S–0016x12x2.5/23–26 # R/L152S–0020x12x2.5/23–26 + R/L152S–0025x12x2.5/23–26	15 18 23	16 20 25	120 120 150	8,5 10,5 12,7	12	12	28	2,5	23–26														
# R/L152S–0016x12x2.5/26–30 # R/L152S–0020x12x2.5/26–30 + R/L152S–0025x12x2.5/26–30	15 18 23	16 20 25	120 120 150	8,5 10,5 12,7	12	12	28	2,5	26–30														



²⁾ Right-hand inserts (R) are used in right-hand holders and left-hand inserts (L) in left-hand holders.

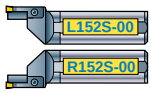
²⁾ Rechtsschneiden (R) werden in Rechtshaltern und Linksschneiden (L) in Linkshaltern verwendet.

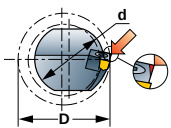
²⁾ Högerskär (R) används i högerhållare och vänsterskär (L) i vänsterhållare.

³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

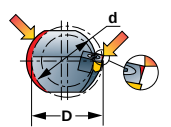
³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktyghållaren.

	H	d	L	f	L ₁	L ₂	L ₃	B ₁	D							Page: Seite: Sida: A130-A148
# R/L152S-0016x12x2.5/30-35 # R/L152S-0020x12x2.5/30-35 # R/L152S-0025x12x2.5/30-35 # R/L152S-0016x12x2.5/35-40 # R/L152S-0020x12x2.5/35-40 # R/L152S-0025x12x2.5/35-40	15 18 23	16 20 25	120 120 150	8,5 10,5 13	12	12	28	2,5	30-35	SHR 122.5P	SHL 122.5P	F6S 411	-	NY 2.5	MT-25 MT-25Fr ³⁾ MT-2.3r0.5 MP-25 MA-25	
# R/L152S-0016x12x2.5/40-45 # R/L152S-0020x12x2.5/40-45 # R/L152S-0025x12x2.5/40-45 # R/L152S-0016x12x2.5/45-50 # R/L152S-0020x12x2.5/45-50 # R/L152S-0025x12x2.5/45-50	15 18 23	16 20 25	120 120 150	10 10,5 13	12	12	28	2,5	40-45							
# R/L152S-0016x12x2.5/50-55 # R/L152S-0020x12x2.5/50-55 # R/L152S-0025x12x2.5/50-55 # R/L152S-0016x12x2.5/55-60 # R/L152S-0020x12x2.5/55-60 # R/L152S-0025x12x2.5/55-60	15 18 23	16 20 25	120 120 150	10 10,5 13	12	-	28	2,5	50-55	SHR 122.5	SHL 122.5	F6S 411	-	NY 2.5	MT-25 MT-25Fr ³⁾ MT-2.3r0.5 MS-25 MZ-25 MP-25 MA-25	
# R/L152S-0016x12x2.5/60-70 # R/L152S-0020x12x2.5/60-70 # R/L152S-0025x12x2.5/60-70 # R/L152S-0020x12x2.5/70-80 # R/L152S-0025x12x2.5/70-80 # R/L152S-0025x12x2.5/80-90 # R/L152S-0025x12x2.5/90-100	15 18 23 18 23 23	16 20 25 20 25 25	120 120 150 120 120 150	10 10,5 13 10 10,5 13	12	-	28	2,5	60-70 70-80 80-90 90-100							
# R/L152S-0016x12x3/20-23 # R/L152S-0020x12x3/20-23 # R/L152S-0025x12x3/20-23 # R/L152S-0016x12x3/23-26 # R/L152S-0020x12x3/23-26 # R/L152S-0025x12x3/23-26	15 18 23	16 20 25	120 120 150	10 10,5 13	12	12	28	3	20-23	SHR 133Z	SHL 133Z	F6S 411	-	NY2.5	R/LMT-3Z ²⁾ R/LMT-3.1r0.5Z ²⁾ R/LMP-3Z ²⁾ R/LMP-30Z ²⁾ R/LMB-3FZU ^{2,3)}	
# R/L152S-0016x12x3/26-30 # R/L152S-0020x12x3/26-30 # R/L152S-0025x12x3/26-30 # R/L152S-0032x12x3/26-30 # R/L152S-0025x12x3/30-35 # R/L152S-0032x12x3/30-35	15 18 23 30	16 20 25 32	120 120 150 170	10 10,5 13 16,5	12	12	28	3	26-30							
# R/L152S-0025x12x3/30-35 # R/L152S-0032x12x3/30-35 # R/L152S-0025x12x3/35-40 # R/L152S-0032x12x3/35-40	23 30	25 32	150 170	13 16,5	12	12	28	3	30-35	SHR 133P	SHL 133P	F6S 411	-	NY 2.5	D=30-40 MT-3 MT-3.1r0.5 MT-3c MP-3 MP-30 MB-3FU ³⁾	
# R/L152S-0025x12x3/40-50 # R/L152S-0032x12x3/40-50	23 30	25 32	150 170	14,5 18	12	12	28	3	40-50	SHR 133	SHL 133	F6S 411	-	NY 2.5	MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3 MS-3D MZ-3 MP-3 MP-30 MA-30 MB-3FU ³⁾	
R/L152S-0025x12x3/50-60 R/L152S-0032x12x3/50-60 R/L152S-0025x12x3/60-75 R/L152S-0032x12x3/60-75 R/L152S-0032x12x3/75-100 R/L152S-0032x12x3/100-140 R/L152S-0032x12x3/140-190 R/L152S-0032x12x3/190-300	23 30 23 30 30 30 30 30	25 32 25 32 32 32 32 32	150 170 150 170 170 170 170 170	14,5 18 14,5 18 18 18 18 18	12	-	28	3	50-60 60-75 75-100 100-140 140-190 190-300	SHR 133	SHL 133	F6S-411	-	NY 2.5	MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3 MS-3D MZ-3 MP-3 MP-30 MA-30 MB-3F ³⁾ MT-30Fr ³⁾	



- #) Modification of the clamp permits larger L₂.
 #) Eine Änderung des Spannhakens lässt grössere L₂ zu.
 #) Modifisering av spännhaken medger längre L₂.



- +) Modification of the tool holder and the clamp permits larger L₂.
 +) Eine Änderung des Werkzeughalters und des Spannhakens lässt grössere L₂ zu.
 +) Modifisering av verktygshållaren och spännhaken medger längre L₂.

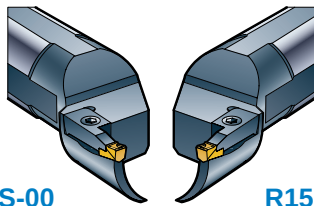


Selection of cutting geometry, page:
 Wahl der Schneidengeometrie, Seite:
 Val av skärgeometri, sid:

A44-A58

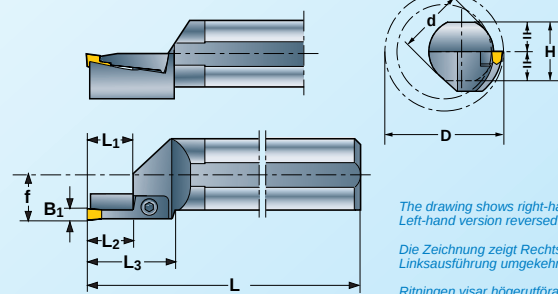
152S-00

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L152S-00

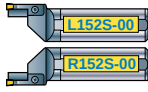
R152S-00



The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

	H	d	L	f	L ₁	L ₂	L ₃	B ₁	D							Page: Seite: Sida: A130-A148	
# R/L152S-0025x12x4/30-40 + R/L152S-0032x12x4/30-40	23 30	25 32	150 170	13 16,5	12	12	28	4	30-40	SHR 134P	SHL 134P	F6S 411	-	NY 2.5	D=30-35 MT-4X MT-3.7r1 ³⁾ MT-4r1X MT-4cX MP-4X MP-40X MB-4FXU ³⁾	D=35-40 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4c MT-4.5r1 MP-4 MP-40 MA-40 MB-4FU ³⁾	
+ R/L152S-0032x20x4/30-35 # R/L152S-0032x20x4/35-40	30 30	32 32	170 170	16,5 16,5	20 20	20 20	44 44	4 4	30-35 35-40	SHR 204MP	SHL 204MP	F6S 415	-				
R/L152S-0025x12x4/40-50 R/L152S-0032x12x4/40-50	23 30	25 32	150 170	14,5 18	12	-	28	4	40-50	SHR 134	SHL 134	F6S 411	-	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4r1b MT-4c	MS-4 MZ-4 MP-4 MP-40 MA-40 MB-4FU ³⁾	
# R/L152S-0032x20x4/40-50 + R/L152S-0040x20x4/40-50	30 37	32 40	170 200	18 20,5	20	20	44	4	40-50	SHR 204MT	SHL 204MT	F6S 415	BF 04M				
R/L152S-0025x12x4/50-60 R/L152S-0032x12x4/50-60	23 30	25 32	150 170	14,5 18	12	-	28	4	50-60	SHR 134	SHL 134	F6S 411	-	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D MZ-4 MP-4 MA-40 MB-4F ³⁾ MT-40Fr ³⁾		
# R/L152S-0032x20x4/50-60 # R/L152S-0040x20x4/50-60	30 37	32 40	170 200	18 22	20	20	44	4	50-60	SHR 204MT	SHL 204MT	F6S 415	BF 04M				
R/L152S-0025x12x4/60-75 R/L152S-0032x12x4/60-75	23 30	25 32	150 170	14,5 18	12	-	28	4	60-75	SHR 134	SHL 134	F6S 411	-				
# R/L152S-0032x20x4/60-75 # R/L152S-0040x20x4/60-75	30 37	32 40	170 200	18 22	20	20	44	4	60-75	SHR 204MT	SHL 204MT	F6S 415	BF 04M				
R/L152S-0032x12x4/75-100 # R/L152S-0032x20x4/75-100 # R/L152S-0040x20x4/75-100	30 30 37	32 32 40	170 170 200	18 18 22	12 20	- 20	28 44	4 4	75-100	SHR 134 SHR 204MT SHR 204MT	SHL 134 SHL 204MT SHL 204MT	F6S 411 F6S 415 F6S 415	- BF 04M BF 04M				
R/L152S-0032x12x4/100-140 # R/L152S-0032x20x4/100-140 # R/L152S-0040x20x4/100-140	30 30 37	32 32 40	170 170 200	18 18 22	12 20	- 20	28 44	4 4	100-140	SHR 134 SHR 204MT SHR 204MT	SHL 134 SHL 204MT SHL 204MT	F6S 411 F6S 418 F6S 418	- BF 04M BF 04M				
R/L152S-0032x12x4/140-190 # R/L152S-0032x20x4/140-190 # R/L152S-0040x20x4/140-190	30 30 37	32 32 40	170 170 200	18 18 22	12 20	- 20	28 44	4 4	140-190	SHR 134 SHR 204MT SHR 204MT	SHL 134 SHL 204MT SHL 204MT	F6S 411 F6S 418 F6S 418	- BF 04M BF 04M				
R/L152S-0032x12x4/190-300 # R/L152S-0032x20x4/190-300 # R/L152S-0040x20x4/190-300	30 30 37	32 32 40	170 170 200	18 18 22	12 20	- 20	28 44	4 4	190-300	SHR 134 SHR 204MT SHR 204MT	SHL 134 SHL 204MT SHL 204MT	F6S 411 F6S 418 F6S 418	- BF 04M BF 04M				
# R/L152S-0032x20x5/40-50 + R/L152S-0040x20x5/40-50	30 37	32 40	170 200	18 20,5	20	20	44	5	40-50	SHR 205MT	SHL 205MT	F6S 415	BF 04M	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c MS-5	MZ-5 MP-5 MA-50 MB-5FU ³⁾	
# R/L152S-0032x20x5/50-60 # R/L152S-0040x20x5/50-60	30 37	32 40	170 200	18 22	20	20	44	5	50-60	SHR 205MT	SHL 205MT	F6S 415	BF 04M				
# R/L152S-0032x25x5/50-60 # R/L152S-0040x25x5/50-60 # R/L152S-0050x25x5/50-60	30 37 47	32 40 50	170 200 250	18 22 22	20	25	49 49 50	5	50-60	SHR 255MT	SHL 255MT	F6S 415	BF 04M				
# R/L152S-0032x20x5/60-75 # R/L152S-0040x20x5/60-75	30 37	32 40	170 200	18 22	20	20	44	5	60-75	SHR 205MT	SHL 205MT	F6S 415	BF 04M	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA50 MB-5F ³⁾ MT-50Fr ³⁾		
# R/L152S-0032x25x5/60-75 # R/L152S-0040x25x5/60-75 # R/L152S-0050x25x5/60-75	30 37 47	32 40 50	170 200 250	18 22 22	20	25	49 49 50	5	60-75	SHR 255MT	SHL 255MT	F6S 415	BF 04M				
# R/L152S-0032x20x5/75-100 # R/L152S-0040x20x5/75-100	30 37	32 40	170 200	18 22	20	20	44	5	75-100	SHR 205MT	SHL 205MT	F6S 415	BF 04M				

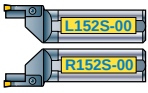
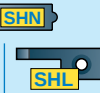
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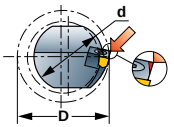
NY 2.5

NY 2.5

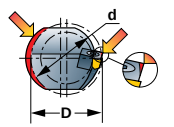
NY 2.5

A44-A58

	H	d	L	f	L ₁	L ₂	L ₃	B ₁	D							Page: Seite: Sida: A130-A148
# R/L152S-0032x25x5/75-100 # R/L152S-0040x25x5/75-100 # R/L152S-0050x25x5/75-100	30 37 47	32 40 50	170 200 250	18 22 22		25 25 25	49 49 50	5	75-100	SHR 255MT	SHL 255MT	F6S 415	BF 04M			
# R/L152S-0032x20x5/100-140 # R/L152S-0040x20x5/100-140	30 37	32 40	170 200	18 22	20	20	44	5	100-140	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
# R/L152S-0032x25x5/100-140 # R/L152S-0040x25x5/100-140	30 37	32 40	170 200	18 22	25	25	49	5	100-140	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
# R/L152S-0032x20x5/140-190 # R/L152S-0040x20x5/140-190	30 37	32 40	170 200	18 22	20	20	44	5	140-190	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
# R/L152S-0032x25x5/140-190 # R/L152S-0040x25x5/140-190	30 37	32 40	170 200	18 22	25	25	49	5	140-190	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
# R/L152S-0032x20x5/190-300 # R/L152S-0040x20x5/190-300	30 37	32 40	170 200	18 22	20	20	44	5	190-300	SHR 205MT	SHL 205MT	F6S 418	BF 04M			
# R/L152S-0032x25x5/190-300 # R/L152S-0040x25x5/190-300	30 37	32 40	170 200	18 22	25	25	49	5	190-300	SHR 255MT	SHL 255MT	F6S 418	BF 04M			
# R/L152S-0032x20x6/40-50 + R/L152S-0040x20x6/40-50	30 37	32 40	170 200	18 20,5	20	20	44	6	40-50							
# R/L152S-0032x20x6/50-60 # R/L152S-0040x20x6/50-60	30 37	32 40	170 200	18 22	20	20	44	6	50-60	SHR 206MT	SHL 206MT	F6S 415	BF 04M			
# R/L152S-0040x32x6/50-60	37	40	200	22	32	32	62	6	50-60	SHR 326MT	SHL 326MT	F6S 519	BF 05M			
# R/L152S-0032x20x6/60-75 # R/L152S-0040x20x6/60-75	30 37	32 40	170 200	18 22	20	20	44	6	60-75	SHR 206MT	SHL 206MT	F6S 415	BF 04M			
# R/L152S-0040x32x6/60-75	37	40	200	22	32	32	62	6	60-75	SHR 326MT	SHL 326MT	F6S 519	BF 05M			
# R/L152S-0032x20x6/75-100 # R/L152S-0040x20x6/75-100	30 37	32 40	170 200	18 22	20	20	44	6	75-100	SHR 206MT	SHL 206MT	F6S 415	BF 04M			
+ R/L152S-0040x32x6/75-100 + R/L152S-0050x32x6/75-100	37 47	40 50	200 250	22 22	32 32	32 32	62 70	6	75-100	SHR 326MT	SHL 326MT	F6S 519	BF 05M			
# R/L152S-0032x20x6/100-140 # R/L152S-0040x20x6/100-140	30 37	32 40	170 200	18 22	20	20	44	6	100-140	SHR 206MT	SHL 206MT	F6S 418	BF 04M			
+ R/L152S-0040x32x6/100-140 + R/L152S-0050x32x6/100-140	37 47	40 50	200 250	22 22	32 32	32 32	62 70	6	100-140	SHR 326MT	SHL 326MT	F6S 519	BF 05M			
# R/L152S-0032x20x6/140-190 # R/L152S-0040x20x6/140-190	30 37	32 40	170 200	18 22	20	20	44	6	140-190	SHR 206MT	SHL 206MT	F6S 418	BF 04M			
+ R/L152S-0040x32x6/140-190 + R/L152S-0050x32x6/140-190	37 47	40 50	200 250	22 22	32 32	32 32	62 70	6	140-190	SHR 326MT	SHL 326MT	F6S 519	BF 05M			
# R/L152S-0032x20x6/190-300 # R/L152S-0040x20x6/190-300	30 37	32 40	170 200	18 22	20	20	44	6	190-300	SHR 206MT	SHL 206MT	F6S 418	BF 04M			
+ R/L152S-0040x32x6/190-300 + R/L152S-0050x32x6/190-300	37 47	40 50	200 250	22 22	32 32	32 32	62 70	6	190-300	SHR 326MT	SHL 326MT	F6S 519	BF 05M			
+ R/L152S-0050x50x8/190-300 + R/L152S-0050x50x8/300-500	47 47	50 50	250 250	22 22	32 32	32 32	70 70	8 8	190-300 300-500	SHN 8T		F6S 418	BF 04T	NY 2.5		

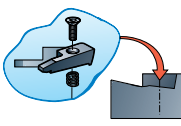


- #) Modification of the clamp permits larger L₂.
- #) Eine Änderung des Spannhakens lässt grössere L₂ zu.
- #) Modifiering av spännhaken medger längre L₂.



- +) Modification of the tool holder and the clamp permits larger L₂.
- +) Eine Änderung des Werkzeughalters und des Spannhakens lässt grössere L₂ zu.
- +) Modifiering av verktygshållaren och spännhaken medger längre L₂.

- 3) See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.
- 3) Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.
- 3) Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.



Spare parts shown in the coloured columns are supplied assembled in each tool.
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

Ordering example:
Bestellbeispiel: **R152S-0040 x 20 x 6/190-300**
Beställningsexempel:



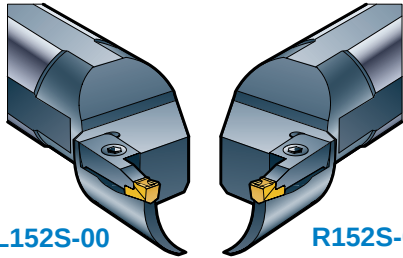
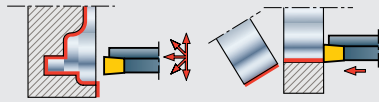
Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:



152S-00

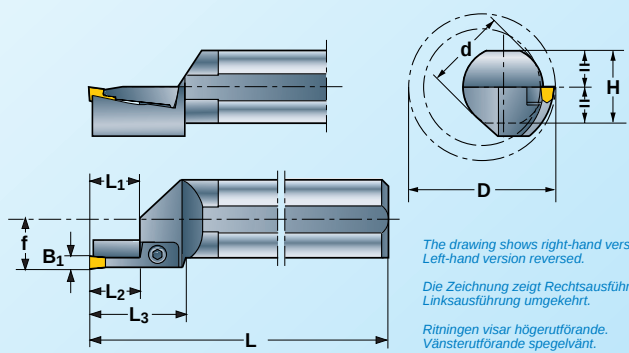
Recommendations
Empfehlungen
Rekommendationer

Page:
Seite:
Sida: **A23, A27-A28**

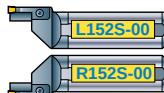
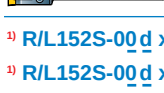


L152S-00

R152S-00



The drawing shows right-hand version.
Left-hand version reversed.
Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.
Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

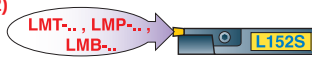
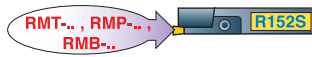
	d	L	f	L ₁	L ₂	B ₁	D							Page: Seite: Sida: A130-A148
 														
¹⁾ R/L152S-00 d x L ₁ x B ₁ /20-23 ²⁾							20- 23							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /23-26 ²⁾							23- 26							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /26-30 ²⁾							26- 30							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /30-40							30- 40							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /40-50							40- 50							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /50-60							50- 60							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /60-75							60- 75							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /75-100							75-100							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /100-140							100-140							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /140-190							140-190							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /190-300							190-300							
¹⁾ R/L152S-00 d x L ₁ x B ₁ /300-∞							300-∞							

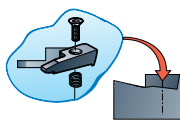
¹⁾ Tool holders of type 152S-00 that are not included in the standard range (see page A94) are manufactured on request as semistandard, whereby diameter of the shank d, total holder length L, measurement centre of shank to external insert corner f, entry length L₁ and cutting width B₁ are specified by the customer for the given diameter range D. The combination L₁, B₁ and D should preferably be selected in accordance with holder type 152S with square shank (see page A87 -A93).

¹⁾ Werkzeughalter vom Typ 152S-00 die im Standardprogramm (siehe Seite A94) nicht enthalten sind, werden auf besondere Bestellung als Semistandard hergestellt, wobei Schaftdurchmesser d, Gesamtlänge des Halters L, Mass Schaftzentrum bis zur aussen Schneidecke f, Einstechlänge L₁ und Einstechbreite B₁ für den angegebenen Durchmesserbereich D vom Kunden spezifiziert werden müssen. Die Kombination L₁, B₁ und D soll vorzugsweise in Übereinstimmung mit dem Halter 152S gewählt werden (siehe Seite A87 - A93).

¹⁾ Verktygshållare av typ 152S-00 som ej ingår i standard-sortimentet (se sid A94) tillverkas mot order som semistandard varvid skaflets diameter d, hållarens totallängd L, mått skaft-centrum till yttre skärhörn f, instickslängd L₁ och insticksbredd B₁ specificeras av kunden för det angivna diameterområdet D. Kombinationen L₁, B₁ och D bör föredrasvis väljas i överensstämmelse med hållare typ 152S med rektangulärt skaft (se sid A87 -A93).

A87-A93

- 2)  **L152S** ²⁾ Right-hand inserts (R) are used in right-hand holders and left-hand inserts (L) in left-hand holders.
- 2)  **R152S** ²⁾ Rechtsschneiden (R) werden in Rechtshaltern und Linksschneiden (L) in Linkshaltern verwendet.
- 2) Högerskär (R) används i högerhållare och vänsterskär (L) i vänsterhållare.



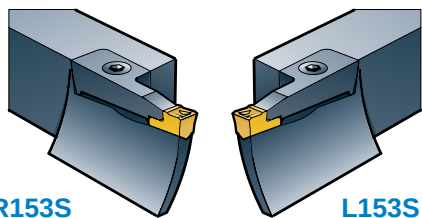
Spare parts shown in the coloured columns are supplied assembled in each tool.
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

Ordering example:
Bestellbeispiel: **R152S-0020 x 12 x 3/50-60**
Beställningsexempel:



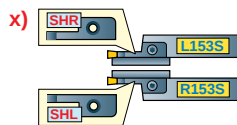
Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite: **A44-A58**
Val av skärgeometri, sid:

153S

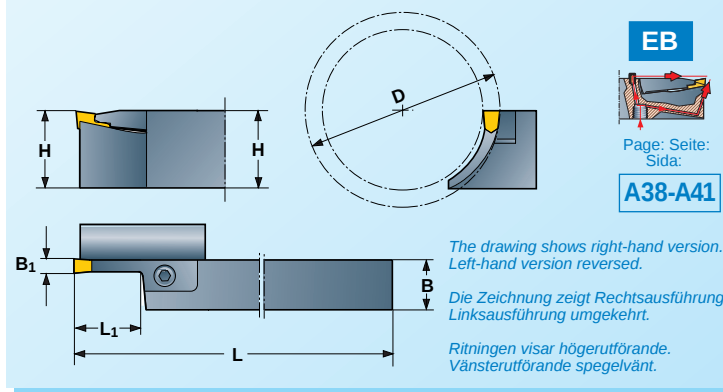


R153S

L153S



- x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
 x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
 x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.

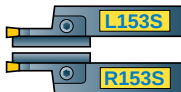


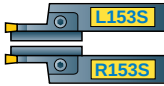
EB

Page: Seite:
Sida:

A38-A41

The drawing shows right-hand version.
Left-hand version reversed.Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

	H	B	L	L ₁	B ₁	D	SHR	SHL				*  Page: Seite: Sida: A130-A148
R/L153S-1616x12x2.5/30-35 R/L153S-2020x12x2.5/30-35 R/L153S-2525x12x2.5/30-35	16 20 25	16 20 25	110 125 150	12	2,5	30-35	x)SHR 122.5P	x)SHL 122.5P	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-25 MT-25Fr ³⁾ MT-2.3r0.5 MP-25 MA-25
R/L153S-1616x12x2.5/35-40 R/L153S-2020x12x2.5/35-40 R/L153S-2525x12x2.5/35-40	16 20 25	16 20 25	110 125 150	12	2,5	35-40	x)SHR 122.5	x)SHL 122.5	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	
R/L153S-1616x12x2.5/40-45 R/L153S-2020x12x2.5/40-45 R/L153S-2525x12x2.5/40-45	16 20 25	16 20 25	110 125 150	12	2,5	40-45	x)SHR 122.5	x)SHL 122.5	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	
R/L153S-1616x12x2.5/45-50 R/L153S-2020x12x2.5/45-50 R/L153S-2525x12x2.5/45-50	16 20 25	16 20 25	110 125 150	12	2,5	45-50			F6S 415 F6S 418 F6S 418			
R/L153S-2020x12x2.5/50-55 R/L153S-2525x12x2.5/50-55	20 25	20 25	125 150	12	2,5	50-55						MT-25 MT-25Fr ³⁾ MT-2.3r0.5 MS-25 MZ-25 MP-25 MA-25
R/L153S-2020x12x2.5/55-60 R/L153S-2525x12x2.5/55-60	20 25	20 25	125 150	12	2,5	55-60						
R/L153S-2020x12x2.5/60-70 R/L153S-2525x12x2.5/60-70	20 25	20 25	125 150	12	2,5	60-70	x)SHR 122.5	x)SHL 122.5	F6S 418	BF 04T	NY 2.5	
R/L153S-2020x12x2.5/70-80 R/L153S-2525x12x2.5/70-80	20 25	20 25	125 150	12	2,5	70-80						
R/L153S-2020x12x2.5/80-90 R/L153S-2525x12x2.5/80-90	20 25	20 25	125 150	12	2,5	80-90						
R/L153S-2020x12x2.5/90-100 R/L153S-2525x12x2.5/90-100	20 25	20 25	125 150	12	2,5	90-100						
R/L153S-1616x12x3/20-23 R/L153S-2020x12x3/20-23 R/L153S-2525x12x3/20-23	16 20 25	16 20 25	110 125 150	12	3	20-23	x)SHR 133Z	x)SHL 133Z	F6S 411	—	NY 2.5	R/LMT-3Z ²⁾ R/LMT-3.1r0.5Z ²⁾ R/LMP-3Z ²⁾ R/LMB-3FZU ²⁾³⁾
R/L153S-1616x12x3/23-26 R/L153S-2020x12x3/23-26 R/L153S-2525x12x3/23-26	16 20 25	16 20 25	110 125 150	12	3	23-26						
R/L153S-1616x12x3/26-30 R/L153S-2020x12x3/26-30 R/L153S-2525x12x3/26-30	16 20 25	16 20 25	110 125 150	12	3	26-30						
R/L153S-1616x12x3/30-35 R/L153S-2020x12x3/30-35 R/L153S-2525x12x3/30-35	16 20 25	16 20 25	110 125 150	12	3	30-35	x)SHR 133P	x)SHL 133P	F6S 411	—	NY 2.5	D = 30-40 MT-3 MP-3 MT-3.1r0.5 MP-30 MT-3c MB-3FU ³⁾ D = 35-40 MA-30
R/L153S-1616x12x3/35-40 R/L153S-2020x12x3/35-40 R/L153S-2525x12x3/35-40	16 20 25	16 20 25	110 125 150	12	3	35-40						
R/L153S-1616x12x3/40-50 R/L153S-2020x12x3/40-50 R/L153S-2525x12x3/40-50	16 20 25	16 20 25	110 125 150	12	3	40-50	x)SHR 133	x)SHL 133	F6S 411	—	NY 2.5	MT-3 MP-3 MT-3.1r0.5 MP-30 MT-3b MA-30 MT-3c MB-3FU ³⁾ MS-3 MS-3D MZ-3
R/L153S-2020x12x3/50-60T R/L153S-2525x12x3/50-60T R/L153S-3225x12x3/50-60T	20 25 32	20 25 25	125 150 170	12	3	50-60						MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3 MS-3D MZ-3
R/L153S-2020x12x3/60-75T R/L153S-2525x12x3/60-75T R/L153S-3225x12x3/60-75T	20 25 32	20 25 25	125 150 170	12	3	60-75	x)SHR 133	x)SHL 133	F6S 411	—	NY 2.5	MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3 MS-3D MZ-3 MP-3 MP-30 MA-30 MB-3FU ³⁾ MT-30Fr ³⁾
R/L153S-2020x12x3/75-100T R/L153S-2525x12x3/75-100T R/L153S-3225x12x3/75-100T	20 25 32	20 25 25	125 150 170	12	3	75-100						
R/L153S-2020x12x3/100-140T R/L153S-2525x12x3/100-140T R/L153S-3225x12x3/100-140T	20 25 32	20 25 25	125 150 170	12	3	100-140						

	H	B	L	L ₁	B ₁	D							Page: Seite: Sida: A130-A148
R/L153S-2020x12x3/140-190T R/L153S-2525x12x3/140-190T R/L153S-3225x12x3/140-190T	20 25 32	20 25 25	125 150 170	12	3	140-190	✗SHR 133	✗SHL 133	F6S 411	-	NY 2.5	MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3 MS-3D MZ-3 MP-3 MP-30 MA-30 MB-3F ³⁾ MT-30F ³⁾	
R/L153S-2020x12x3/190-300T R/L153S-2525x12x3/190-300T R/L153S-3225x12x3/190-300T	20 25 32	20 25 25	125 150 170	12	3	190-300							
R/L153S-2020x12x3/300-500T R/L153S-2525x12x3/300-500T R/L153S-3225x12x3/300-500T	20 25 32	20 25 25	125 150 170	12	3	300-500							
R/L153S-2020x12x3/500-∞T R/L153S-2525x12x3/500-∞T R/L153S-3225x12x3/500-∞T	20 25 32	20 25 25	125 150 170	12	3	500-∞							
R/L153S-1616x12x4/30-40 R/L153S-2020x12x4/30-40 R/L153S-2525x12x4/30-40	16 20 25	16 20 25	110 125 150	12	4-4,5	30-40	✗SHR 134P	✗SHL134P	F6S 411	-	NY 2.5	D=30-35 MT-4X MT-3.7r1X ³⁾ MT-4r1X MT-4.5r1X MT-4cX MP-4X MP-40X MB-4FXU ³⁾	D=35-40 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4c MP-4 MP-40 MA-40 MB-4FU ³⁾
R/L153S-1616x20x4/30-35 R/L153S-2020x20x4/30-35 R/L153S-2525x20x4/30-35	16 20 25	16 20 25	110 125 150	20	4-4,5	30-35	✗SHR 204MP	✗SHL 204MP	F6S 415 F6S 418 F6S 418	BF 04M		MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4c	MP-4 MP-40 MA-40 MB-4FU ³⁾
R/L153S-1616x20x4/35-40 R/L153S-2020x20x4/35-40 R/L153S-2525x20x4/35-40	16 20 25	16 20 25	110 125 150	20	4-4,5	35-40	✗SHR 204MP	✗SHL 204MP	F6S 415 F6S 418 F6S 418	BF 04M		MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4c	MP-4 MP-40 MA-40 MB-4FU ³⁾
R/L153S-1616x12x4/40-50 R/L153S-2020x12x4/40-50 R/L153S-2525x12x4/40-50	16 20 25	16 20 25	110 125 150	12	4-4,5	40-50	✗SHR 134	✗SHL 134	F6S 411	-	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4	MS-4D MZ-4 MP-4 MP-40 MA-40 MB-4FU ³⁾
R/L153S-1616x20x4/40-50 R/L153S-2020x20x4/40-50 R/L153S-2525x20x4/40-50	16 20 25	16 20 25	110 125 150	20	4-4,5	40-50	✗SHR 204MT	✗SHL 204MT	F6S 418	BF 04M			
R/L153S-2020x12x4/50-60T R/L153S-2525x12x4/50-60T R/L153S-3225x12x4/50-60T	20 25 32	20 25 25	125 150 170	12	4-4,5	50-60	✗SHR 134	✗SHL 134	F6S 411	-	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MZ-4 MP-4 MP-40 MA-40 MB-4F ³⁾ MT-40F ³⁾	
R/L153S-2020x20x4/50-60 R/L153S-2525x20x4/50-60 R/L153S-3225x20x4/50-60	20 25 32	20 25 25	125 150 170	20	4-4,5	50-60	✗SHR 204MT	✗SHL 204MT	F6S 418	BF 04M			
R/L153S-2525x25x4/50-60 R/L153S-3225x25x4/50-60	25 32	25 25	150 170	25	4-4,5	50-60	✗SHR 254MT	✗SHL 254MT	F6S 418	BF 04M			
R/L153S-2020x12x4/60-75T R/L153S-2525x12x4/60-75T R/L153S-3225x12x4/60-75T	20 25 32	20 25 25	125 150 170	12	4-4,5	60-75	✗SHR 134	✗SHL 134	F6S 411	-			
R/L153S-2020x20x4/60-75 R/L153S-2525x20x4/60-75 R/L153S-3225x20x4/60-75	20 25 32	20 25 25	125 150 170	20	4-4,5	60-75	✗SHR 204MT	✗SHL 204MT	F6S 418	BF 04M			
R/L153S-2525x25x4/60-75 R/L153S-3225x25x4/60-75	25 32	25 25	150 170	25	4-4,5	60-75	✗SHR 254MT	✗SHL 254MT	F6S 418	BF 04M			
R/L153S-2020x12x4/75-100T R/L153S-2525x12x4/75-100T R/L153S-3225x12x4/75-100T	20 25 32	20 25 25	125 150 170	12	4-4,5	75-100	✗SHR 134	✗SHL 134	F6S 411	-			
R/L153S-2020x20x4/75-100 R/L153S-2525x20x4/75-100 R/L153S-3225x20x4/75-100	20 25 32	20 25 25	125 150 170	20	4-4,5	75-100	✗SHR 204MT	✗SHL 204MT	F6S 418	BF 04M			
R/L153S-2525x25x4/75-100 R/L153S-3225x25x4/75-100	25 32	25 25	150 170	25	4-4,5	75-100	✗SHR 254MT	✗SHL 254MT	F6S 418	BF 04M			
R/L153S-2020x12x4/100-140T R/L153S-2525x12x4/100-140T R/L153S-3225x12x4/100-140T	20 25 32	20 25 25	125 150 170	12	4-4,5	100-140	✗SHR 134	✗SHL 134	F6S 411	-			
R/L153S-2020x20x4/100-140 R/L153S-2525x20x4/100-140 R/L153S-3225x20x4/100-140	20 25 32	20 25 25	125 150 170	20	4-4,5	100-140	✗SHR 204MT	✗SHL 204MT	F6S 418	BF 04M			
R/L153S-2525x25x4/100-140 R/L153S-3225x25x4/100-140	25 32	25 25	150 170	25	4-4,5	100-140	✗SHR 254MT	✗SHL 254MT	F6S 418	BF 04M			
R/L153S-2020x12x4/140-190T R/L153S-2525x12x4/140-190T R/L153S-3225x12x4/140-190T	20 25 32	20 25 25	125 150 170	12	4-4,5	140-190	✗SHR 134	✗SHL 134	F6S 411	-			



2) Right-hand inserts (R) are used in right-hand holders and left-hand inserts (L) in left-hand holders.

2) Rechtsschneiden (R) werden in Rechtshaltern und Linksschneiden (L) in Linkshaltern verwendet.

2) Högerskär (R) används i högerhållare och vänsterskär (L) i vänsterhållare.

3) See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

3) Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

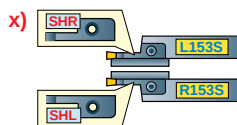
3) Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.



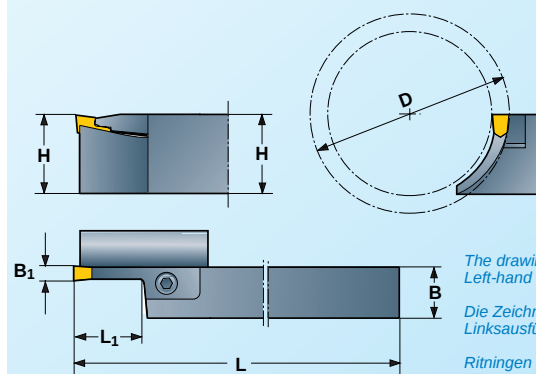
Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58

A



L153S

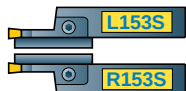


A diagram illustrating a water pump system. A red arrow indicates the flow of water from a well (represented by a vertical pipe) into a reservoir (represented by a horizontal pipe). The water level in the reservoir is shown to be higher than the water level in the well, indicating that the pump is lifting the water.

A38-A41

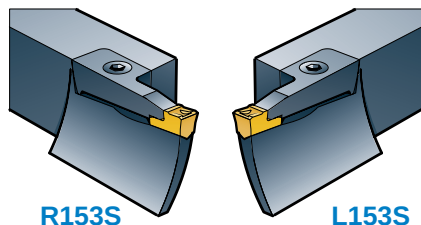
Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

建德刀具

	H	B	L	L ₁	B ₁	D							Page: Seite: Sida: A130-A148
R/L153S-2020x20x5/100-140 R/L153S-2525x20x5/100-140 R/L153S-3225x20x5/100-140	20 25 32	20 25 25	125 150 170	20	5	100-140	✗SHR 205MT	✗SHL 205MT	F6S 418	BF 04M	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50 MB-5F ³⁾ MT-50Fr ³⁾	A
R/L153S-2525x25x5/100-140 R/L153S-3225x25x5/100-140	25 32	25 25	150 170	25	5	100-140	✗SHR 255MT	✗SHL 255MT	F6S 418	BF 04M			
R/L153S-2020x12x5/140-190T R/L153S-2525x12x5/140-190T R/L153S-3225x12x5/140-190T	20 25 32	20 25 25	125 150 170	12	5	140-190	✗SHR 135	✗SHL 135	F6S 411	—			
R/L153S-2020x20x5/140-190 R/L153S-2525x20x5/140-190 R/L153S-3225x20x5/140-190	20 25 32	20 25 25	125 150 170	20	5	140-190	✗SHR 205MT	✗SHL 205MT	F6S 418	BF 04M			
R/L153S-2525x25x5/140-190 R/L153S-3225x25x5/140-190	25 32	25 25	150 170	25	5	140-190	✗SHR 255MT	✗SHL 255MT	F6S 418	BF 04M			
R/L153S-2020x12x5/190-∞T R/L153S-2525x12x5/190-∞T R/L153S-3225x12x5/190-∞T	20 25 32	20 25 25	125 150 170	12	5	190-∞	✗SHR 135	✗SHL 135	F6S 411	—			
R/L153S-2020x20x5/190-300 R/L153S-2525x20x5/190-300 R/L153S-3225x20x5/190-300	20 25 32	20 25 25	125 150 170	20	5	190-300	✗SHR 205MT	✗SHL 205MT	F6S 418	BF 04M			
R/L153S-2525x25x5/190-300 R/L153S-3225x25x5/190-300	25 32	25 25	150 170	25	5	190-300	✗SHR 255MT	✗SHL 255MT	F6S 418	BF 04M			
R/L153S-2020x20x5/300-∞ R/L153S-2525x20x5/300-∞ R/L153S-3225x20x5/300-∞	20 25 32	20 25 25	125 150 170	20	5	300-∞	✗SHR 205MT	✗SHL 205MT	F6S 418	BF 04M			
R/L153S-2525x25x5/300-∞ R/L153S-3225x25x5/300-∞	25 32	25 25	150 170	25	5	300-∞	✗SHR 255MT	✗SHL 255MT	F6S 418	BF 04M			
R/L153S-1616x12x6/40-50 R/L153S-2020x12x6/40-50 R/L153S-2525x12x6/40-50	16 20 25	16 20 25	110 125 150	12	6-7,5	40-50	✗SHR 136	✗SHL 136	F6S 411	—	NY 2.5	MT-6 MT-6.4r1 MT-6b MT-6c MS-6 MZ-6 MP-6 MT-60Fr MT-7 MT-7.5r1 MT-7b MT-7c	
R/L153S-2020x20x6/40-50 R/L153S-2525x20x6/40-50	20 25	20 25	125 150	20	6-7,5	40-50	✗SHR 206MT	✗SHL 206MT	F6S 418	BF 04M			
R/L153S-2020x12x6/50-60T R/L153S-2525x12x6/50-60T R/L153S-3225x12x6/50-60T	20 25 32	20 25 25	125 150 170	12	6-7,5	50-60	✗SHR 136	✗SHL 136	F6S 411	—			
R/L153S-2020x20x6/50-60 R/L153S-2525x20x6/50-60 R/L153S-3225x20x6/50-60	20 25 32	20 25 25	125 150 170	20	6-7,5	50-60	✗SHR 206MT	✗SHL 206MT	F6S 418	BF 04M			
R/L153S-2525x25x6/50-60 R/L153S-3225x25x6/50-60	25 32	25 25	150 170	25	6-7,5	50-60	✗SHR 256MT	✗SHL 256MT	F6S 418	BF 04M			
R/L153S-3225x32x6/50-60	32	25	170	32	6-7,5	50-60	✗SHR 326MT	✗SHL 326MT	F6S 519	BF 05M	NY 3		
R/L153S-2020x12x6/60-75T R/L153S-2525x12x6/60-75T R/L153S-3225x12x6/60-75T	20 25 32	20 25 25	125 150 170	12	6-7,5	60-75	✗SHR 136	✗SHL 136	F6S 411	—	NY 2.5		
R/L153S-2020x20x6/60-75 R/L153S-2525x20x6/60-75 R/L153S-3225x20x6/60-75	20 25 32	20 25 25	125 150 170	20	6-7,5	60-75	✗SHR 206MT	✗SHL 206MT	F6S 418	BF 04M			
R/L153S-2525x25x6/60-75 R/L153S-3225x25x6/60-75	25 32	25 25	150 170	25	6-7,5	60-75	✗SHR 256MT	✗SHL 256MT	F6S 418	BF 04M			
R/L153S-3225x32x6/60-75	32	25	170	32	6-7,5	60-75	✗SHR 326MT	✗SHL 326MT	F6S 519	BF 05M	NY 3		
R/L153S-2020x12x6/75-100T R/L153S-2525x12x6/75-100T R/L153S-3225x12x6/75-100T	20 25 32	20 25 25	125 150 170	12	6-7,5	75-100	✗SHR 136	✗SHL 136	F6S 411	—	NY 2.5		
R/L153S-2020x20x6/75-100 R/L153S-2525x20x6/75-100 R/L153S-3225x20x6/75-100	20 25 32	20 25 25	125 150 170	20	6-7,5	75-100	✗SHR 206MT	✗SHL 206MT	F6S 418	BF 04M			
R/L153S-2525x25x6/75-100 R/L153S-3225x25x6/75-100	25 32	25 25	150 170	25	6-7,5	75-100	✗SHR 256MT	✗SHL 256MT	F6S 418	BF 04M			
R/L153S-3225x32x6/75-100	32	25	170	32	6-7,5	75-100	✗SHR 326MT	✗SHL 326MT	F6S 519	BF 05M	NY 3		
R/L153S-2020x12x6/100-140T R/L153S-2525x12x6/100-140T R/L153S-3225x12x6/100-140T	20 25 32	20 25 25	125 150 170	12	6-7,5	100-140	✗SHR 136	✗SHL 136	F6S 411	—	NY 2.5		
R/L153S-2020x20x6/100-140 R/L153S-2525x20x6/100-140 R/L153S-3225x20x6/100-140	20 25 32	20 25 25	125 150 170	20	6-7,5	100-140	✗SHR 206MT	✗SHL 206MT	F6S 418	BF 04M			
R/L153S-2525x25x6/100-140 R/L153S-3225x25x6/100-140	25 32	25 25	150 170	25	6-7,5	100-140	✗SHR 256MT	✗SHL 256MT	F6S 418	BF 04M			
R/L153S-3225x32x6/100-140	32	25	170	32	6-7,5	100-140	✗SHR 326MT	✗SHL 326MT	F6S 519	BF 05M	NY 3		
R/L153S-2020x12x6/140-190T R/L153S-2525x12x6/140-190T R/L153S-3225x12x6/140-190T	20 25 32	20 25 25	125 150 170	12	6-7,5	140-190	✗SHR 136	✗SHL 136	F6S 411	—	NY 2.5		

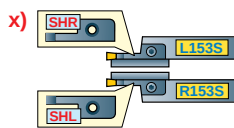
* Selection of cutting geometry, page:
 Wahl der Schneidengeometrie, Seite: **A44-A58**
 Val av skärgeometri, sid:

3) See page A131(MT-3.7r1), A137(MB) and A148(MT...Fr) for modification of the tool holder.
 3) Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT...Fr) für Modifizierung des Werkzeughalters.
 3) Se sid A131(MT-3.7r1), A137(MB) och A148(MT...Fr) för modifiering av verktygshållaren.

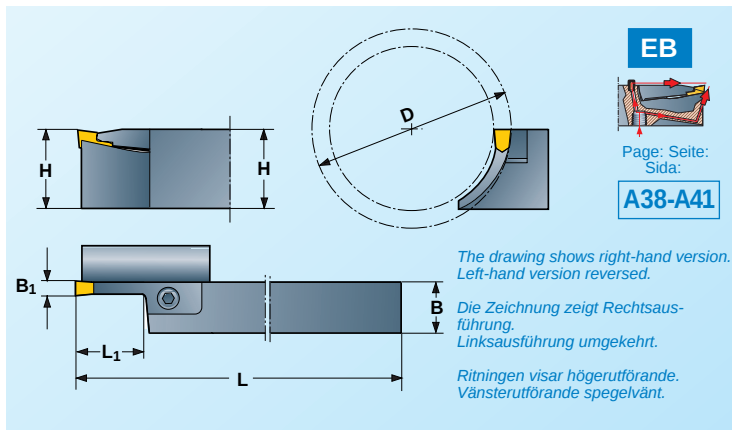


R153S

L153S



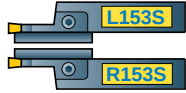
- x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
 x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
 x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.



Page: Seite:
Sida:

A38-A41

	H	B	L	L ₁	B ₁	D							Page: Seite: Sida:	A130-A148
R/L153S-2020x20x6/140-190 R/L153S-2525x20x6/140-190 R/L153S-3225x20x6/140-190	20 25 32	20 25 25	125 150 170	20	6-7,5	140-190	x)SHR 206MT	x)SHL 206MT	F6S 418	BF 04M	NY 2.5			
R/L153S-2525x25x6/140-190 R/L153S-3225x25x6/140-190	25 32	25 25	150 170	25	6-7,5	140-190	x)SHR 256MT	x)SHL 256MT	F6S 418	BF 04M				
R/L153S-3225x32x6/140-190 R/L153S-4032x32x6/140-190	32 40	25 32	170 200	32	6-7,5	140-190	x)SHR 326MT	x)SHL 326MT	F6S 519	BF 05M	NY 3			
R/L153S-2020x12x6/190-∞T R/L153S-2525x12x6/190-∞T R/L153S-3225x12x6/190-∞T	20 25 32	20 25 25	125 150 170	12	6-7,5	190-∞	x)SHR 136	x)SHL 136	F6S 411	—				
R/L153S-2020x20x6/190-300 R/L153S-2525x20x6/190-300 R/L153S-3225x20x6/190-300	20 25 32	20 25 25	125 150 170	20	6-7,5	190-300	x)SHR 206MT	x)SHL 206MT	F6S 418	BF 04M	NY 2.5			MT-6 MT-6.4r1 MT-6b MT-6c MS-6 MZ-6 MP-6 MT-60Fi ³⁾ MT-7 MT-7.5r1 MT-7b MT-7c
R/L153S-2525x25x6/190-300 R/L153S-3225x25x6/190-300	25 32	25 25	150 170	25	6-7,5	190-300	x)SHR 256MT	x)SHL 256MT	F6S 418	BF 04M				
R/L153S-3225x32x6/190-300 R/L153S-4032x32x6/190-300	32 40	25 32	170 200	32	6-7,5	190-300	x)SHR 326MT	x)SHL 326MT	F6S 519	BF 05M	NY 3			
R/L153S-2020x20x6/300-∞ R/L153S-2525x20x6/300-∞ R/L153S-3225x20x6/300-∞	20 25 32	20 25 25	125 150 170	20	6-7,5	300-∞	x)SHR 206MT	x)SHL 206MT	F6S 418	BF 04M	NY 2.5			
R/L153S-2525x25x6/300-∞ R/L153S-3225x25x6/300-∞	25 32	25 25	150 170	25	6-7,5	300-∞	x)SHR 256MT	x)SHL 256MT	F6S 418	BF 04M				
R/L153S-3225x32x6/300-∞ R/L153S-4032x32x6/300-∞	32 40	25 32	170 200	32	6-7,5	300-∞	x)SHR 326MT	x)SHL 326MT	F6S 519	BF 05M	NY 3			
R/L153S-2525x20x8/75-100 R/L153S-3225x20x8/75-100	25 32	25 25	150 170	20	8-9	75-100	x)SHR 208MT	x)SHL 208MT	F6S 519	BF 05M				
R/L153S-4032x30x8/75-100	40	32	200	30	8-9	75-100	x)SHR 308MT	x)SHL 308MT	F6S 519	BF 05M				
R/L153S-2525x20x8/100-140 R/L153S-3225x20x8/100-140	25 32	25 25	150 170	20	8-9	100-140	x)SHR 208MT	x)SHL 208MT	F6S 519	BF 05M	NY 3			
R/L153S-4032x30x8/100-140	40	32	200	30	8-9	100-140	x)SHR 308MT	x)SHL 308MT	F6S 519	BF 05M				
R/L153S-2525x20x8/140-190 R/L153S-3225x20x8/140-190	25 32	25 25	150 170	20	8-9	140-190	x)SHR 208MT	x)SHL 208MT	F6S 519	BF 05M				
R/L153S-4032x30x8/140-190 R/L153S-4032x50x8/140-190	40 40	32 32	200 200	30 50	8-9	140-190	x)SHR 308MT	x)SHL 308MT SHN 8T	F6S 519 F6S 418	BF 05M BF 04T	NY 3 NY 2.5			
R/L153S-2525x20x8/190-∞ R/L153S-3225x20x8/190-∞	25 32	25 25	150 170	20	8-9	190-∞	x)SHR 208MT	x)SHL 208MT	F6S 519	BF 05M	NY 3			
R/L153S-4032x30x8/190-300 R/L153S-4032x50x8/190-300	40 40	32 32	200 200	30 50	8-9	190-300	x)SHR 308MT	x)SHL 308MT SHN 8T	F6S 519 F6S 418	BF 05M BF 04T	NY 3 NY 2.5			
R/L153S-4032x30x8/300-∞	40	32	200	30	8-9	300-∞	x)SHR 308MT	x)SHL 308MT	F6S 519	BF 05M	NY 3			
R/L153S-4032x50x8/300-500 R/L153S-4032x50x8/500-∞	40 40	32 32	200 200	50 50	8-9	300-500 500-∞	SHN 8T		F6S 418	BF 04T	NY 2.5			
R/L153S-3225x20x10/75-100 R/L153S-4032x30x10/75-100	32 40	25 32	170 200	20 30	10-11	75-100	x)SHR 2010MT x)SHR 3010MT	x)SHL 2010MT x)SHL 3010MT	F6S 519 F6S 519	BF 05M BF 05M				
R/L153S-3225x20x10/100-140 R/L153S-4032x30x10/100-140	32 40	25 32	170 200	20 30	10-11	100-140	x)SHR 2010MT x)SHR 3010MT	x)SHL 2010MT x)SHL 3010MT	F6S 519 F6S 519	BF 05M BF 05M				
R/L153S-3225x20x10/140-190 R/L153S-4032x30x10/140-190 R/L153S-4032x50x10/140-190	32 40 40	25 32 32	170 200 200	20 30 50	10-11	140-190	x)SHR 2010MT x)SHR 3010MT SHN 10T	x)SHL 2010MT x)SHL 3010MT F6S 518T	F6S 519 F6S 519 F6S 518T	BF 05M BF 05M BF 05T				
R/L153S-3225x20x10/190-∞	32	25	170	20	10-11	190-∞	x)SHR 2010MT	x)SHL 2010MT	F6S 519	BF 05M				
R/L153S-4032x30x10/190-300 R/L153S-4032x50x10/190-300	40 40	32 32	200 200	30 50	10-11	190-300	x)SHR 3010MT SHN 10T	x)SHL 3010MT	F6S 519 F6S 518T	BF 05M BF 05T				
R/L153S-4032x30x10/300-∞ R/L153S-4032x50x10/300-∞	40 40	32 32	200 200	30 50	10-11	300-∞	x)SHR 3010MT SHN 10T	x)SHL 3010MT	F6S 519 F6S 518T	BF 05M BF 05T				

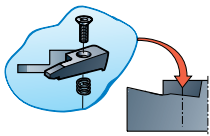
	H	B	L	L ₁	B ₁	D							Page: Seite: Sida: A130-A148
							SHR	SHL					
R/L153S-4032x30x12/75-100	40	32	200	30	12	75-100	✗SHR 3012MT	✗SHL 3012MT	F6S 519	BF 05M	NY 3	MT-12 MT-12b MT-12c MS-12 MZ-12	A
R/L153S-4032x40x12/75-100	40	32	200	40	12	75-100	✗SHR 4012MT	✗SHL 4012MT	F6S 526	BF 05M			
R/L153S-4032x30x12/100-140	40	32	200	30	12	100-140	✗SHR 3012MT	✗SHL 3012MT	F6S 519	BF 05M			
R/L153S-4032x40x12/100-140	40	32	200	40	12	100-140	✗SHR 4012MT	✗SHL 4012MT	F6S 526	BF 05M			
R/L153S-4032x30x12/140-190	40	32	200	30	12	140-190	✗SHR 3012MT	✗SHL 3012MT	F6S 519	BF 05M			
R/L153S-4032x50x12/140-190	40	32	200	50	12	140-190	SHN 12T		F6S 519	BF 05T			
R/L153S-4032x30x12/190-300	40	32	200	30	12	190-300	✗SHR 3012MT	✗SHL 3012MT	F6S 519	BF 05M			
R/L153S-4032x50x12/190-300	40	32	200	50	12	190-300	SHN 12T		F6S 519	BF 05T			
R/L153S-4032x30x12/300-∞	40	32	200	30	12	300-∞	✗SHR 3012MT	✗SHL 3012MT	F6S 519	BF 05M			
R/L153S-4032x50x12/300-∞	40	32	200	50	12	300-∞	SHN 12T		F6S 519	BF 05T			

Ordering example:
 Bestellbeispiel: **R153S-2525 x 20 x 4/50-60**
 Beställningsexempel:

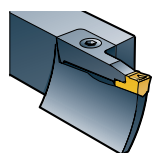
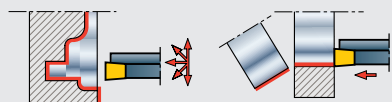
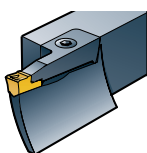
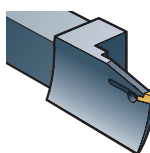
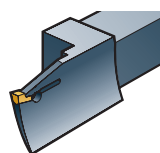
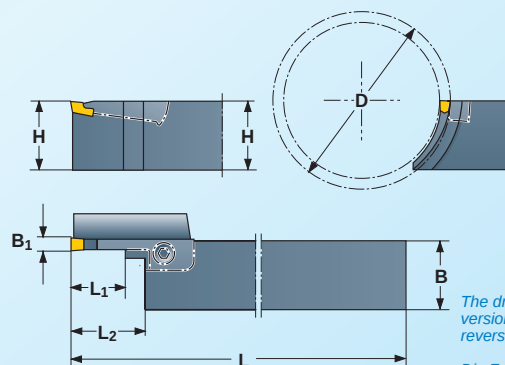

 Selection of cutting geometry, page:
 Wahl der Schneidengeometrie, Seite:
 Val av skärgeometri, sid:

A44-A58

- 3) See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.
 3) Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.
 3) Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.



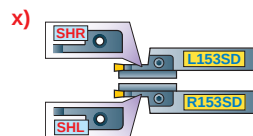
Spare parts shown in the coloured columns are supplied assembled in each tool.
 Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
 Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

153SD**153CD**Recommendations
Empfehlungen
RekommendationerPage:
Seite:
Sida: **A24****R153SD****L153SD** $B_1 = 3 \text{ mm}$ **R153CD****L153CD** $B_1 = 4 \text{ mm}$ The drawing shows right-hand
version. Left-hand version
reversed.Die Zeichnung zeigt Rechtsaus-
führung. Linksausführung
umgekehrt.Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

	H	B	L	L ₁	L ₂	B ₁	D	SHR	SHL							
L153SD/CD R153SD/CD																
²⁾ R/L153SD-2020x15/20x3/30-35 ²⁾ R/L153SD-2525x15/20x3/30-35	20 25	20 25	125 150	15	20	3	30-35	x) SHR 15/ 203MP	x) SHL 15/ 203MP	F6S 418	BF 04M	NY 2,5				D = 30-40 MT-3 MP-3 MT-3.1r0.5 MP-30 MT-3c MB-3FU ³⁾
²⁾ R/L153SD-2020x15/20x3/35-40 ²⁾ R/L153SD-2525x15/20x3/35-40	20 25	20 25	125 150	15	20	3	35-40									D = 35-40 MA-30
²⁾ R/L153SD-2020x15/20x3/40-50 ²⁾ R/L153SD-2525x15/20x3/40-50	20 25	20 25	125 150	15	20	3	40-50	x) SHR 15/ 203MP	x) SHL 15/ 203MP	F6S 418	BF 04M	NY 2.5				MT-3 MZ-3 MT-3.1r0.5 MP-3 MT-3b MP-30 MT-3c MA-30 MS-3 MB-3FU ³⁾ MS-3D
²⁾ R/L153SD-2020x15/20x3/50-60 ²⁾ R/L153SD-2525x15/20x3/50-60	20 25	20 25	125 150	15	20	3	50-60	x) SHR203M	x) SHL203M	F6S 418	BF 04M	NY 2.5				MT-3 MZ-3 MT-3.1r0.5 MP-3 MT-3b MP-30 MT-3c MA-30 MS-3 MB-3FU ³⁾ MS-3D MT-30Fr ³⁾
²⁾ R/L153SD-2020x15/20x3/60-75 ²⁾ R/L153SD-2525x15/20x3/60-75	20 25	20 25	125 150	15	20	3	60-75									
²⁾ R/L153SD-2020x15/20x3/75-100 ²⁾ R/L153SD-2525x15/20x3/75-100	20 25	20 25	125 150	15	20	3	75-100									
²⁾ R/L153SD-2020x15/20x3/100-140 ²⁾ R/L153SD-2525x15/20x3/100-140	25 25	25 25	150 150	15	20	3	100-140									
²⁾ R/L153SD-2525x15/20x3/140-190	25	25	150	15	20	3	140-190									
⁴⁾ R/L153CD-2525x32/40x4/40-50	25	25	150	32	40	4	40-50	-	-	-	-	¹⁾ EX5NY				MT-4 MZ-4 MT-3.7r1 ³⁾ MP-4 MT-4r1 MP-40 MT-4.5r1 MA-40 MT-4b MB-4FU ³⁾ MT-4c MS-4 MS-4D
⁴⁾ R/L153CD-2525x32/40x4/50-60 ⁴⁾ R/L153CD-2525x32/40x4/60-75 ⁴⁾ R/L153CD-2525x32/40x4/75-100 ⁴⁾ R/L153CD-2525x32/40x4/100-140 ⁴⁾ R/L153CD-2525x32/40x4/140-190	25 25 25 25 25	25 25 25 25 25	150 150 150 150 150	32 32 32 32 32	40 40 40 40 40	4 4 4 4 4	50-60 60-75 75-100 100-140 140-190	-	-	-	-	¹⁾ EX5NY				MT-4 MZ-4 MT-3.7r1 ³⁾ MP-4 MT-4r1 MP-40 MT-4.5r1 MA-40 MT-4b MB-4FU ³⁾ MT-4c MT-40Fr ³⁾ MS-4 MS-4D

Ordered separately.
Ist separat zu bestellen.
Beställs separat.

- ³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.
- ³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.
- ³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.



- x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
- x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
- x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.

- ²⁾ Design of the clamp permits modification of the tool holder to 20 mm entry length.
- ²⁾ Die Ausführung des Spannhakens lässt eine Änderung des Werkzeughalters zu 20 mm Einstechlänge zu.
- ²⁾ Spännhakens utformning medger modifiering av verktygshållaren till 20 mm insticks längd.

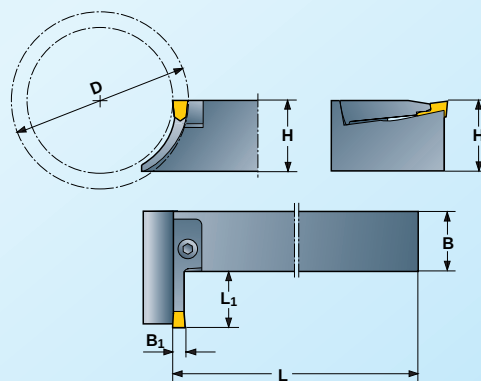
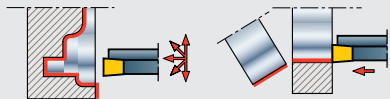
- ⁴⁾ Design of the clamp permits modification of the tool holder to larger entry length.
- ⁴⁾ Die Ausführung des Spannhakens lässt eine Änderung des Werkzeughalters zu grösserer Einstechlänge zu.
- ⁴⁾ Spännhakens utformning medger modifiering av verktygshållaren till större insticks längd.

158S

Recommendations
Empfehlungen
Rekomendationer

Page:
Seite:
Sida:

A25



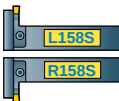
The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

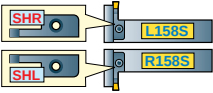
Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

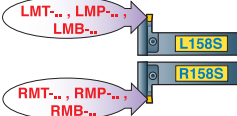
R158S

L158S

	H	B	L	L ₁	B ₁	D						 	Page: Seite: Sida: A130-A148
See type 153E, 153E-00 and 158E, page: Siehe Typ 153E, 153E-00 und 158E, Seite: Se typ 153E, 153E-00 och 158E, sid:	A83-A86					14–							
R/L158S–1616x10x2/20–23 R/L158S–2020x10x2/20–23 R/L158S–2525x10x2/20–23	16 20 25	16 20 25	110 125 150	10	2	20–23	x) SHR 102Z	x) SHL 102Z	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	R/LMT-20Z ²⁾ R/LMP-20Z ²⁾	
R/L158S–1616x10x2/23–26 R/L158S–2020x10x2/23–26 R/L158S–2525x10x2/23–26	16 20 25	16 20 25	110 125 150	10	2	23–26			F6S 415 F6S 418 F6S 418				
R/L158S–1616x10x2/26–30 R/L158S–2020x10x2/26–30 R/L158S–2525x10x2/26–30	16 20 25	16 20 25	110 125 150	10	2	26–30			F6S 415 F6S 418 F6S 418				
R/L158S–1616x10x2/30–35 R/L158S–2020x10x2/30–35 R/L158S–2525x10x2/30–35	16 20 25	16 20 25	110 125 150	10	2	30–35	x) SHR 102P	x) SHL 102P	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-20 MP-20 MA-20	
R/L158S–1616x10x2/35–40 R/L158S–2020x10x2/35–40 R/L158S–2525x10x2/35–40	16 20 25	16 20 25	110 125 150	10	2	35–40			F6S 415 F6S 418 F6S 418				
R/L158S–1616x10x2/40–45 R/L158S–2020x10x2/40–45 R/L158S–2525x10x2/40–45	16 20 25	16 20 25	110 125 150	10	2	40–45			F6S 415 F6S 418 F6S 418				
R/L158S–1616x10x2/45–50 R/L158S–2020x10x2/45–50 R/L158S–2525x10x2/45–50	16 20 25	16 20 25	110 125 150	10	2	45–50	x) SHR 102	x) SHL 102	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5		
R/L158S–1616x10x2/50–55 R/L158S–2525x10x2/50–55	20 25	20 25	125 150	10	2	50–55			F6S 415 F6S 418 F6S 418				
R/L158S–2020x10x2/55–60 R/L153S–2525x10x2/55–60	20 25	20 25	125 150	10	2	55–60			F6S 415 F6S 418 F6S 418				
R/L158S–2020x10x2/60–70 R/L158S–2525x10x2/60–70	20 25	20 25	125 150	10	2	60–70	x) SHR 102	x) SHL 102	F6S 418	BF 04T	NY 2.5	MT-20 MS-20 MZ-20 MP-20 MA-20	
R/L158S–2020x10x2/70–80 R/L158S–2525x10x2/70–80	20 25	20 25	125 150	10	2	70–80							
R/L158S–2020x10x2/80–90 R/L158S–2525x10x2/80–90	20 25	20 25	125 150	10	2	80–90							
R/L158S–2020x10x2/90–100 R/L158S–2525x10x2/90–100	20 25	20 25	125 150	10	2	90–100							
R/L158S–1616x12x2.5/20–23 R/L158S–2020x12x2.5/20–23 R/L158S–2525x12x2.5/20–23	16 20 25	16 20 25	110 125 150	12	2,5	20–23	x) SHR 122.5Z	x) SHL 122.5Z	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	R/LMT-25Z ²⁾ R/LMT-2.3r0.5Z ²⁾ R/LMP-25Z ²⁾	
R/L158S–1616x12x2.5/23–26 R/L158S–2020x12x2.5/23–26 R/L158S–2525x12x2.5/23–26	16 20 25	16 20 25	110 125 150	12	2,5	23–26			F6S 415 F6S 418 F6S 418				
R/L158S–1616x12x2.5/26–30 R/L158S–2020x12x2.5/26–30 R/L158S–2525x12x2.5/26–30	16 20 25	16 20 25	110 125 150	12	2,5	26–30			F6S 415 F6S 418 F6S 418				
R/L158S–1616x12x2.5/30–35 R/L158S–2020x12x2.5/30–35 R/L158S–2525x12x2.5/30–35	16 20 25	16 20 25	110 125 150	12	2,5	30–35	x) SHR 122.5P	x) SHL 122.5P	F6S 415 F6S 418 F6S 418	BF 04T	NY 2.5	MT-25 MT-25FR ³⁾ MT-2.3r0.5 MP-25 MA-25	
R/L158S–1616x12x2.5/35–40 R/L158S–2020x12x2.5/35–40 R/L158S–2525x12x2.5/35–40	16 20 25	16 20 25	110 125 150	12	2,5	35–40			F6S 415 F6S 418 F6S 418				

	H	B	L	L ₁	B ₁	D	SHR	SHL	F6S	BF	NY	* A130-A148
R/L158S-1616x12x2.5/40-45 R/L158S-2020x12x2.5/40-45 R/L158S-2525x12x2.5/40-45	16 20 25	16 20 25	110 125 150	12	2,5	40-45	x) SHR 122.5	x) SHL 122.5	F6S 415 F6S 418 F6S 418	BF 04T		
R/L158S-1616x12x2.5/45-50 R/L158S-2020x12x2.5/45-50 R/L158S-2525x12x2.5/45-50	16 20 25	16 20 25	110 125 150	12	2,5	45-50			F6S 415 F6S 418 F6S 418			
R/L158S-2020x12x2.5/50-55 R/L158S-2525x12x2.5/50-55	20 25	20 25	125 150	12	2,5	50-55					NY 2.5	MT-25 MT-25Fr ³⁾ MT-2.3r0.5 MS-25 MZ-25 MP-25 MA-25
R/L158S-2020x12x2.5/55-60 R/L158S-2525x12x2.5/55-60	20 25	20 25	125 150	12	2,5	55-60						
R/L158S-2020x12x2.5/60-70 R/L158S-2525x12x2.5/60-70	20 25	20 25	125 150	12	2,5	60-70	x) SHR 122.5	x) SHL 122.5	F6S 418	BF 04T		
R/L158S-2020x12x2.5/70-80 R/L158S-2525x12x2.5/70-80	20 25	20 25	125 150	12	2,5	70-80						
R/L158S-2020x12x2.5/80-90 R/L158S-2525x12x2.5/80-90	20 25	20 25	125 150	12	2,5	80-90						
R/L158S-2020x12x2.5/90-100 R/L158S-2525x12x2.5/90-100	20 25	20 25	125 150	12	2,5	90-100						
R/L158S-1616x12x3/20-23 R/L158S-2020x12x3/20-23 R/L158S-2525x12x3/20-23	16 20 25	16 20 25	110 125 150	12	3	20-23					NY 2.5	R/LMT-3Z ²⁾ R/LMT-3.1r0.5Z ²⁾ R/LMP-3Z ²⁾ R/LMP-3Z ²⁾ R/LMB-3FZU ²⁾³⁾
R/L158S-1616x12x3/23-26 R/L158S-2020x12x3/23-26 R/L158S-2525x12x3/23-26	16 20 25	16 20 25	110 125 150	12	3	23-26	x) SHR 133Z	x) SHL 133Z	F6S 411	–		
R/L158S-1616x12x3/26-30 R/L158S-2020x12x3/26-30 R/L158S-2525x12x3/26-30	16 20 25	16 20 25	110 125 150	12	3	26-30						
R/L158S-1616x12x3/30-35 R/L158S-2020x12x3/30-35 R/L158S-2525x12x3/30-35	16 20 25	16 20 25	110 125 150	12	3	30-35	x) SHR 133P	x) SHL 133P	F6S 411	–	NY 2.5	D = 30-40 MT-3 MP-3 MT-3.1r0.5 MP-30 MT-3c MB-3FU ³⁾ D = 35-40 MA-30
R/L158S-1616x12x3/35-40 R/L158S-2020x12x3/35-40 R/L158S-2525x12x3/35-40	16 20 25	16 20 25	110 125 150	12	3	35-40						
R/L158S-1616x12x3/40-50 R/L158S-2020x12x3/40-50 R/L158S-2525x12x3/40-50 R/L158S-3225x12x3/40-50	16 20 25 32	16 20 25 25	110 125 150 170	12	3	40-50	x) SHR 133	x) SHL 133	F6S 411	–	NY 2.5	MT-3 MP-3 MT-3.1r0.5 MP-30 MT-3b MA-30 MT-3c MB-3FU ³⁾ MS-3 MS-3D MZ-3
R/L158S-2020x12x3/50-60 R/L158S-2525x12x3/50-60 R/L158S-3225x12x3/50-60	20 25 32	20 25 25	125 150 170	12	3	50-60						
R/L158S-2020x12x3/60-75 R/L158S-2525x12x3/60-75 R/L158S-3225x12x3/60-75	20 25 32	20 25 25	125 150 170	12	3	60-75						
R/L158S-2020x12x3/75-100 R/L158S-2525x12x3/75-100 R/L158S-3225x12x3/75-100	20 25 32	20 25 25	125 150 170	12	3	75-100	x) SHR 133	x) SHL 133	F6S 411	–	NY 2.5	MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3 MS-3D MZ-3 MP-3 MP-30 MA-30 MB-3F ³⁾ MT-30F ³⁾
R/L158S-2020x12x3/100-140 R/L158S-2525x12x3/100-140 R/L158S-3225x12x3/100-140	20 25 32	20 25 25	125 150 170	12	3	100-140						
R/L158S-2020x12x3/140-190 R/L158S-2525x12x3/140-190 R/L158S-3225x12x3/140-190	20 25 32	20 25 25	125 150 170	12	3	140-190						
R/L158S-2020x12x3/190-300 R/L158S-2525x12x3/190-300 R/L158S-3225x12x3/190-300	20 25 32	20 25 25	125 150 170	12	3	190-300						

- x)  x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.

- 2)  2) Right-hand inserts (R) are used in right-hand holders and left-hand inserts (L) in left-hand holders.
2) Rechtsschneiden (R) werden in Rechtshaltern und Linksschneiden (L) in Linkshaltern verwendet.
2) Högerskär (R) används i högerhållare och vänsterskär (L) i vänsterhållare.



Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58

3) See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

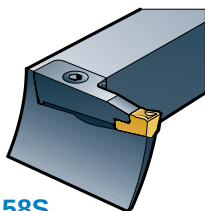
3) Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

3) Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktyghållaren.

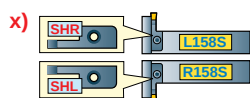
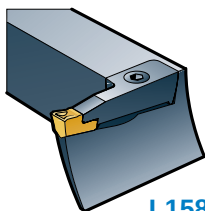
158S

A

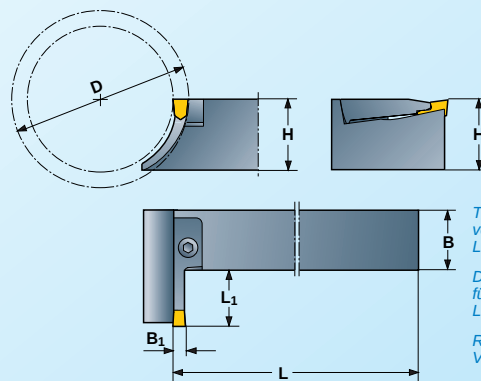
R158S



L158S



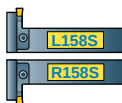
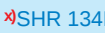
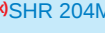
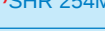
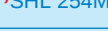
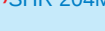
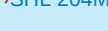
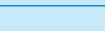
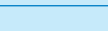
- x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
- x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
- x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.

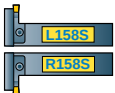


The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

	H	B	L	L ₁	B ₁	D							Page: Seite: Sida: A130-A148															
R/L158S-2020x12x3/300-500 R/L158S-2525x12x3/300-500 R/L158S-3225x12x3/300-500	20 25 32	20 25 25	125 150 170	12	3	300-500			F6S 411			NY 2.5	 MT-3 MT-3.1r0.5 MT-3b MT-3c MS-3 MS-3D	 MZ-3 MP-3 MP-30 MA-30 MB-3F ³⁾ MT-30Fr ³⁾														
R/L158S-2020x12x3/500-∞ R/L158S-2525x12x3/500-∞ R/L158S-3225x12x3/500-∞	20 25 32	20 25 25	125 150 170	12	3	500-∞																						
R/L158S-1616x12x4/30-40 R/L158S-2020x12x4/30-40 R/L158S-2525x12x4/30-40	16 20 25	16 20 25	110 125 150	12	4-4,5	30-40											F6S 411		NY 2.5	 MT-4X MT-3.7r1X ³⁾ MT-4r1X MT-4cX MP-4X MP-40X MB-4FXU ³⁾	 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4c MP-4 MP-40 MA-40 MB-4FU ³⁾							
R/L158S-2020x20x4/30-35 R/L158S-2525x20x4/30-35	20 25	20 25	125 150	20	4-4,5	30-35																		F6S 418	BF 04M			
R/L158S-2020x20x4/35-40 R/L158S-2525x20x4/35-40	20 25	20 25	125 150	20	4-4,5	35-40											F6S 418	BF 04M	NY 2.5	 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4c	 MP-4 MP-40 MA-40 MB-4FU ³⁾							
R/L158S-1616x12x4/40-50 R/L158S-2020x12x4/40-50 R/L158S-2525x12x4/40-50 R/L158S-3225x12x4/40-50	16 20 25 32	16 20 25 25	110 125 150 170	12	4-4,5	40-50			F6S 411			NY 2.5	 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D	 MZ-4 MP-4 MP-40 MA-40 MB-4FU ³⁾														
R/L158S-2020x20x4/40-50 R/L158S-2525x20x4/40-50 R/L158S-3225x20x4/40-50	20 25 32	20 25 25	125 150 170	20	4-4,5	40-50											F6S 418	BF 04M										
R/L158S-2020x12x4/50-60 R/L158S-2525x12x4/50-60 R/L158S-3225x12x4/50-60	20 25 32	20 25 25	125 150 170	12	4-4,5	50-60											F6S 411			NY 2.5	 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D MP-4 MP-40 MA-40 MB-4F ³⁾ MT-40Fr ³⁾	 MZ-4 MP-4 MP-40 MA-40 MB-4FU ³⁾						
R/L158S-2020x20x4/50-60 R/L158S-2525x20x4/50-60 R/L158S-3225x20x4/50-60	20 25 32	20 25 25	125 150 170	20	4-4,5	50-60																			F6S 418	BF 04M		
R/L158S-2525x25x4/50-60 R/L158S-3225x25x4/50-60	25 32	25 25	150 170	25	4-4,5	50-60																			F6S 418	BF 04M		
R/L158S-2020x12x4/60-75 R/L158S-2525x12x4/60-75 R/L158S-3225x12x4/60-75	20 25 32	20 25 25	125 150 170	12	4-4,5	60-75			F6S 411			NY 2.5	 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D MP-4 MP-40 MA-40 MB-4F ³⁾ MT-40Fr ³⁾	 MZ-4 MP-4 MP-40 MA-40 MB-4FU ³⁾														
R/L158S-2020x20x4/60-75 R/L158S-2525x20x4/60-75 R/L158S-3225x20x4/60-75	20 25 32	20 25 25	125 150 170	20	4-4,5	60-75																			F6S 418	BF 04M		
R/L158S-2525x25x4/60-75 R/L158S-3225x25x4/60-75	25 32	25 25	150 170	25	4-4,5	60-75											F6S 418	BF 04M										
R/L158S-2020x12x4/75-100 R/L158S-2525x12x4/75-100 R/L158S-3225x12x4/75-100	20 25 32	20 25 25	125 150 170	12	4-4,5	75-100											F6S 411			NY 2.5	 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D MP-4 MP-40 MA-40 MB-4F ³⁾ MT-40Fr ³⁾	 MZ-4 MP-4 MP-40 MA-40 MB-4FU ³⁾						
R/L158S-2020x20x4/75-100 R/L158S-2525x20x4/75-100 R/L158S-3225x20x4/75-100	20 25 32	20 25 25	125 150 170	20	4-4,5	75-100																			F6S-418	BF 04M		
R/L158S-2525x25x4/75-100 R/L158S-3225x25x4/75-100	25 32	25 25	150 170	25	4-4,5	75-100																			F6S 418	BF 04M		
R/L158S-2020x12x4/100-140 R/L158S-2525x12x4/100-140 R/L158S-3225x12x4/100-140	20 25 32	20 25 25	125 150 170	12	4-4,5	100-140			F6S 411			NY 2.5	 MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D MP-4 MP-40 MA-40 MB-4F ³⁾ MT-40Fr ³⁾	 MZ-4 MP-4 MP-40 MA-40 MB-4FU ³⁾														

	H	B	L	L ₁	B ₁	D						 Page: Seite: Sida:	A130-A148
R/L158S-2020x20x4/100-140 R/L158S-2525x20x4/100-140 R/L158S-3225x20x4/100-140	20 25 32	20 25 25	125 150 170	20	4-4,5	100-140	✗SHR 204MT	✗SHL 204MT	F6S 418	BF 04M	NY 2.5	MT-4 MT-3.7r1³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4 MS-4D MZ-4 MP-4 MP-40 MA-40 MB-4F³⁾ MT-40Fr³⁾	
R/L158S-2525x25x4/100-140 R/L158S-3225x25x4/100-140	25 32	25 25	150 170	25	4-4,5	100-140	✗SHR 254MT	✗SHL 254MT	F6S 418	BF 04M			
R/L158S-2020x12x4/140-190 R/L158S-2525x12x4/140-190 R/L158S-3225x12x4/140-190	20 25 32	20 25 25	125 150 170	12	4-4,5	140-190	✗SHR 134	✗SHL 134	F6S 411	—			
R/L158S-2020x20x4/140-190 R/L158S-2525x20x4/140-190 R/L158S-3225x20x4/140-190	20 25 32	20 25 25	125 150 170	20	4-4,5	140-190	✗SHR 204MT	✗SHL 204MT	F6S 418	BF 04M			
R/L158S-2525x25x4/140-190 R/L158S-3225x25x4/140-190	25 32	25 25	150 170	25	4-4,5	140-190	✗SHR 254MT	✗SHL 254MT	F6S 418	BF 04M			
R/L158S-2020x12x4/190-∞ R/L158S-2525x12x4/190-∞ R/L158S-3225x12x4/190-∞	20 25 32	20 25 25	125 150 170	12	4-4,5	190-∞	✗SHR 134	✗SHL 134	F6S 411	—			
R/L158S-2020x20x4/190-300 R/L158S-2525x20x4/190-300 R/L158S-3225x20x4/190-300	20 25 32	20 25 25	125 150 170	20	4-4,5	190-300	✗SHR 204MT	✗SHL 204MT	F6S 418	BF 04M			
R/L158S-2525x25x4/190-300 R/L158S-3225x25x4/190-300	25 32	25 25	150 170	25	4-4,5	190-300	✗SHR 254MT	✗SHL 254MT	F6S 418	BF 04M			
R/L158S-2020x20x4/300-∞ R/L158S-2525x20x4/300-∞ R/L158S-3225x20x4/300-∞	20 25 32	20 25 25	125 150 170	20	4-4,5	300-∞	✗SHR 204MT	✗SHL 204MT	F6S 418	BF 04M			
R/L158S-2525x25x4/300-∞ R/L158S-3225x25x4/300-∞	25 32	25 25	150 170	25	4-4,5	300-∞	✗SHR 254MT	✗SHL 254MT	F6S 418	BF 04M			
R/L158S-1616x12x5/30-40 R/L158S-2020x12x5/30-40 R/L158S-2525x12x5/30-40	16 20 25	16 20 25	110 125 150	12	5	30-40	✗SHR 135P	✗SHL 135P	F6S 411	—	NY 2.5	D=30-35 MT-5X MT-5r1X MT-5cX MP-5X MB-5FXU³⁾ D=35-40 MT-5 MT-5r1 MT-5c MP-5 MA-50 MB-5FU³⁾	
R/L158S-2020x20x5/30-40 R/L158S-2525x20x5/30-40	20 25	20 25	125 150	20	5	30-40	✗SHR 205MP	✗SHL 205MP	F6S 418	BF 04M			
R/L158S-1616x12x5/40-50 R/L158S-2020x12x5/40-50 R/L158S-2525x12x5/40-50 R/L158S-3225x12x5/40-50	16 20 25 32	16 20 25 25	110 125 150 170	12	5	40-50	✗SHR 135	✗SHL 135	F6S 411	—	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50 MB-5FU³⁾	
R/L158S-2020x20x5/40-50 R/L158S-2525x20x5/40-50 R/L158S-3225x20x5/40-50	20 25 32	20 25 25	125 150 170	20	5	40-50	✗SHR 205MT	✗SHL 205MT	F6S 418	BF 04M			
R/L158S-2020x12x5/50-60 R/L158S-2525x12x5/50-60 R/L158S-3225x12x5/50-60	20 25 32	20 25 25	125 150 170	12	5	50-60	✗SHR 135	✗SHL 135	F6S 411	—	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50 MB-5F³⁾ MT-50Fr³⁾	
R/L158S-2020x20x5/50-60 R/L158S-2525x20x5/50-60 R/L158S-3225x20x5/50-60	20 25 32	20 25 25	125 150 170	20	5	50-60	✗SHR 205MT	✗SHL 205MT	F6S 418	BF 04M			
R/L158S-2525x25x5/50-60 R/L158S-3225x25x5/50-60	25 32	25 25	150 170	25	5	50-60	✗SHR 255MT	✗SHL 255MT	F6S 418	BF 04M			
R/L158S-2020x12x5/60-75 R/L158S-2525x12x5/60-75 R/L158S-3225x12x5/60-75	20 25 32	20 25 25	125 150 170	12	5	60-75	✗SHR 135	✗SHL 135	F6S 411	—			
R/L158S-2020x20x5/60-75 R/L158S-2525x20x5/60-75 R/L158S-3225x20x5/60-75	20 25 32	20 25 25	125 150 170	20	5	60-75	✗SHR 205MT	✗SHL 205MT	F6S 418	BF 04M			
R/L158S-2525x25x5/60-75 R/L158S-3225x25x5/60-75	25 32	25 25	150 170	25	5	60-75	✗SHR 255MT	✗SHL 255MT	F6S 418	BF 04M			
R/L158S-2020x12x5/75-100 R/L158S-2525x12x5/75-100 R/L158S-3225x12x5/75-100	20 25 32	20 25 25	125 150 170	12	5	75-100	✗SHR 135	✗SHL 135	F6S 411	—			
R/L158S-2020x20x5/75-100 R/L158S-2525x20x5/75-100 R/L158S-3225x20x5/75-100	20 25 32	20 25 25	125 150 170	20	5	75-100	✗SHR 205MT	✗SHL 205MT	F6S 418	BF 04M			
R/L158S-2525x25x5/75-100 R/L158S-3225x25x5/75-100	25 32	25 25	150 170	25	5	75-100	✗SHR 255 MT	✗SHL 255MT	F6S 418	BF 04M			
R/L158S-2020x12x5/100-140 R/L158S-2525x12x5/100-140 R/L158S-3525x12x5/100-140	20 25 32	20 25 25	125 150 170	12	5	100-140	✗SHR 135	✗SHL 135	F6S 411	—			
R/L158S-2020x20x5/100-140 R/L158S-2525x20x5/100-140 R/L158S-3225x20x5/100-140	20 25 32	20 25 25	125 150 170	20	5	100-140	✗SHR 205MT	✗SHL 205MT	F6S 418	BF 04M			
R/L158S-2525x25x5/100-140 R/L158S-3225x25x5/100-140	25 32	25 25	150 170	25	5	100-140	✗SHR 255MT	✗SHL 255MT	F6S 418	BF 04M			



Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58

³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

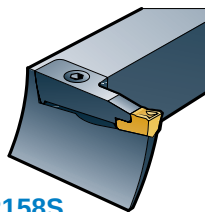
³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktyghållaren.

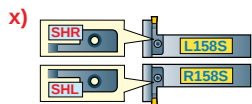
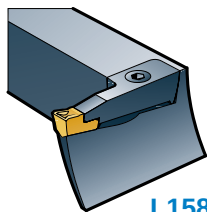
158S

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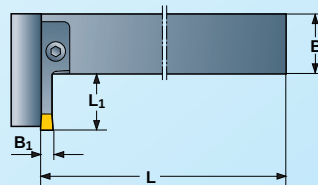
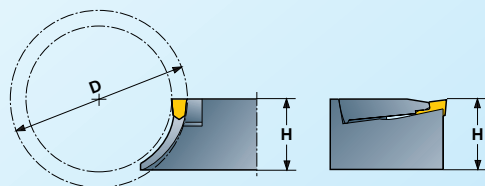
R158S



L158S



- x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
- x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
- x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.



The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

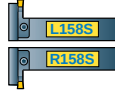
	H	B	L	L ₁	B ₁	D	SHR	SHL							
R/L158S-2020x12x5/140-190 R/L158S-2525x12x5/140-190 R/L158S-3225x12x5/140-190	20 25 32	20 25 25	125 150 170	12	5	140-190	x)SHR 135	x)SHL 135	F6S 411	—					
R/L158S-2020x20x5/140-190 R/L158S-2525x20x5/140-190 R/L158S-3225x20x5/140-190	20 25 32	20 25 25	125 150 170	20	5	140-190	x)SHR 205MT	x)SHL 205MT	F6S 418	BF 04M					
R/L158S-2525x25x5/140-190 R/L158S-3225x25x5/140-190	25 32	25 25	150 170	25	5	140-190	x)SHR 255MT	x)SHL 255MT	F6S 418	BF 04M					
R/L158S-2020x12x5/190-∞ R/L158S-2525x12x5/190-∞ R/L158S-3225x12x5/190-∞	20 25 32	20 25 25	125 150 170	12	5	190-∞	x)SHR 135	x)SHL 135	F6S 411	—					
R/L158S-2020x20x5/190-300 R/L158S-2525x20x5/190-300 R/L158S-3225x20x5/190-300	20 25 32	20 25 25	125 150 170	20	5	190-300	x)SHR 205MT	x)SHL 205MT	F6S 418	BF 04M					
R/L158S-2525x25x5/190-300 R/L158S-3225x25x5/190-300	25 32	25 25	150 170	25	5	190-300	x)SHR 255MT	x)SHL 255MT	F6S 418	BF 04M					
R/L158S-2020x20x5/300-∞ R/L158S-2525x20x5/300-∞ R/L158S-3225x20x5/300-∞	20 25 32	20 25 25	125 150 170	20	5	300-∞	x)SHR 205MT	x)SHL 205MT	F6S 418	BF 04M					
R/L158S-2525x25x5/300-∞ R/L158S-3225x25x5/300-∞	25 32	25 25	150 170	25	5	300-∞	x)SHR 255MT	x)SHL 255MT	F6S 418	BF 04M					
R/L158S-1616x12x6/40-50 R/L158S-2020x12x6/40-50 R/L158S-2525x12x6/40-50 R/L158S-3225x12x6/40-50	16 20 25 32	16 20 25 25	110 125 150 170	12	6-7,5	40-50	x)SHR 136	x)SHL 136	F6S 411	—					
R/L158S-2020x20x6/40-50 R/L158S-2525x20x6/40-50 R/L158S-3225x20x6/40-50	20 25 32	20 25 25	125 150 170	20	6-7,5	40-50	x)SHR 206MT	x)SHL 206MT	F6S 418	BF 04M					
R/L158S-2020x12x6/50-60 R/L158S-2525x12x6/50-60 R/L158S-3225x12x6/50-60	20 25 32	20 25 25	125 150 170	12	6-7,5	50-60	x)SHR 136	x)SHL 136	F6S 411	—					
R/L158S-2020x20x6/50-60 R/L158S-2525x20x6/50-60 R/L158S-3225x20x6/50-60	20 25 32	20 25 25	125 150 170	20	6-7,5	50-60	x)SHR 206MT	x)SHL 206MT	F6S 418	BF 04M					
R/L158S-2525x25x6/50-60 R/L158S-3225x25x6/50-60	25 32	25 25	150 170	25	6-7,5	50-60	x)SHR 256MT	x)SHL 256MT	F6S 418	BF 04M					
R/L158S-3232x32x6/50-60	32	32	170	32	6-7,5	50-60	x)SHR 326MT	x)SHL 326MT	F6S 519	BF 05M					
R/L158S-2020x12x6/60-75 R/L158S-2525x12x6/60-75 R/L158S-3225x12x6/60-75	20 25 32	20 25 25	125 150 170	12	6-7,5	60-75	x)SHR 136	x)SHL 136	F6S 411	—					
R/L158S-2020x20x6/60-75 R/L158S-2525x20x6/60-75 R/L158S-3225x20x6/60-75	20 25 32	20 25 25	125 150 170	20	6-7,5	60-75	x)SHR 206MT	x)SHL 206MT	F6S 418	BF 04M					
R/L158S-2525x25x6/60-75 R/L158S-3225x25x6/60-75	25 32	25 25	150 170	25	6-7,5	60-75	x)SHR 256MT	x)SHL 256MT	F6S 418	BF 04M					
R/L158S-3232x32x6/60-75	32	32	170	32	6-7,5	60-75	x)SHR 326MT	x)SHL 326MT	F6S 519	BF 05M					
R/L158S-2020x12x6/75-100 R/L158S-2525x12x6/75-100 R/L158S-3225x12x6/75-100	20 25 32	20 25 25	125 150 170	12	6-7,5	75-100	x)SHR 136	x)SHL 136	F6S 411	—					
R/L158S-2020x20x6/75-100 R/L158S-2525x20x6/75-100 R/L158S-3225x20x6/75-100	20 25 32	20 25 25	125 150 170	20	6-7,5	75-100	x)SHR 206MT	x)SHL 206MT	F6S 418	BF 04M					
R/L158S-2525x25x6/75-100 R/L158S-3225x25x6/75-100	25 32	25 25	150 170	25	6-7,5	75-100	x)SHR 256MT	x)SHL 256MT	F6S 418	BF 04M					
R/L158S-3232x32x6/75-100	32	32	170	32	6-7,5	75-100	x)SHR 326MT	x)SHL 326MT	F6S 519	BF 05M					

Page:
Seite:
Sida:..

A130-A148

MT-5
MT-5r1
MT-5b
MT-5c
MS-5
MZ-5
MP-5
MA-50
MB-5F³⁾
MT-50Fr³⁾

MT-6
MT-6.4r1
MT-6b
MT-6c
MS-6
MZ-6
MP-6
MT-60Fr³⁾
MT-7
MT-7.5r1
MT-7b
MT-7c

	H	B	L	L ₁	B ₁	D						 Page: Seite: Sida: A130-A148
R/L158S-2020x12x6/100-140 R/L158S-2525x12x6/100-140 R/L158S-3225x12x6/100-140	20 25 32	20 25 25	125 150 170	12	6-7,5	100-140	✗SHR 136	✗SHL 136	F6S 411	—		
R/L158S-2020x20x6/100-140 R/L158S-2525x20x6/100-140 R/L158S-3225x20x6/100-140	20 25 32	20 25 25	125 150 170	20	6-7,5	100-140	✗SHR 206MT	✗SHL 206MT	F6S 418	BF 04M	NY 2.5	
R/L158S-2525x25x6/100-140 R/L158S-3225x25x6/100-140	25 32	25 25	150 170	25	6-7,5	100-140	✗SHR 256MT	✗SHL 256MT	F6S 418	BF 04M		
R/L158S-3232x32x6/100-140	32	32	170	32	6-7,5	100-140	✗SHR 326MT	✗SHL 326MT	F6S 519	BF 05M	NY 3	
R/L158S-2020x12x6/140-190 R/L158S-2525x12x6/140-190 R/L158S-3225x12x6/140-190	20 25 32	20 25 25	125 150 170	12	6-7,5	140-190	✗SHR 136	✗SHL 136	F6S 411	—		
R/L158S-2020x20x6/140-190 R/L158S-2525x20x6/140-190 R/L158S-3225x20x6/140-190	20 25 32	20 25 25	125 150 170	20	6-7,5	140-190	✗SHR 206MT	✗SHL 206MT	F6S 418	BF 04M	NY 2.5	MT-6 MT-6.4r1 MT-6b MT-6c MS-6 MZ-6 MP-6 MT-60Fr ³⁾ MT-7 MT-7.5r1 MT-7b MT-7c
R/L158S-2525x25x6/140-190 R/L158S-3225x25x6/140-190	25 32	25 25	150 170	25	6-7,5	140-190	✗SHR 256MT	✗SHL 256MT	F6S 418	BF 04M		
R/L158S-3232x32x6/140-190 R/L158S-4032x32x6/140-190	32 40	32 32	170 200	32	6-7,5	140-190	✗SHR 326MT	✗SHL 326MT	F6S 519	BF 05M	NY 3	
R/L158S-2020x12x6/190-∞ R/L158S-2525x12x6/190-∞ R/L158S-3225x12x6/190-∞	20 25 32	20 25 25	125 150 170	12	6-7,5	190-∞	✗SHR 136	✗SHL 136	F6S 411	—	NY 2.5	
R/L158S-2020x20x6/190-300 R/L158S-2525x20x6/190-300 R/L158S-3225x20x6/190-300	20 25 32	20 25 25	125 150 170	20	6-7,5	190-300	✗SHR 206MT	✗SHL 206MT	F6S 418	BF 04M	NY 2.5	
R/L158S-2525x25x6/190-300 R/L158S-3225x25x6/190-300	25 32	25 25	150 170	25	6-7,5	190-300	✗SHR 256MT	✗SHL 256MT	F6S 418	BF 04M		
R/L158S-3232x32x6/190-300 R/L158S-4032x32x6/190-300	32 40	32 32	170 200	32	6-7,5	190-300	✗SHR 326MT	✗SHL 326MT	F6S 519	BF 05M	NY 3	
R/L158S-2020x20x6/300-∞ R/L158S-2525x20x6/300-∞ R/L158S-3225x20x6/300-∞	20 25 32	20 25 25	125 150 170	20	6-7,5	300-∞	✗SHR 206MT	✗SHL 206MT	F6S 418	BF 04M	NY 2.5	
R/L158S-2525x25x6/300-∞ R/L158S-3225x25x6/300-∞	25 32	25 25	150 170	25	6-7,5	300-∞	✗SHR 256MT	✗SHL 256MT	F6S 418	BF 04M		
R/L158S-3232x32x6/300-∞ R/L158S-4032x32x6/300-∞	32 40	32 32	170 200	32	6-7,5	300-∞	✗SHR 326MT	✗SHL 326MT	F6S 519	BF 05M	NY 3	
R/L158S-2525x20x8/75-100 R/L158S-3225x20x8/75-100	25 32	25 25	150 170	20	8-9	75-100	✗SHR 208MT	✗SHL 208MT	F6S 519	BF 05M		
R/L158S-4032x30x8/75-100	40	32	200	30	8-9	75-100	✗SHR 308MT	✗SHL 308MT	F6S 519	BF 05M		
R/L158S-2525x20x8/100-140 R/L158S-3225x20x8/100-140	25 32	25 25	150 170	20	8-9	100-140	✗SHR 208MT	✗SHL 208MT	F6S 519	BF 05M	NY 2.5	
R/L158S-4032x30x8/100-140	40	32	200	30	8-9	100-140	✗SHR 308MT	✗SHL 308MT	F6S 519	BF 05M		
R/L158S-2525x20x8/140-190 R/L158S-3225x20x8/140-190	25 32	25 25	150 170	20	8-9	140-190	✗SHR 208MT	✗SHL 208MT	F6S 519	BF 05M		
R/L158S-4032x30x8/140-190 R/L158S-4032x50x8/140-190	40 40	32 32	200 200	30 50	8-9	140-190	✗SHR 308MT SHN 8T	✗SHL 308MT	F6S 519 F6S 418	BF 05M BF 04T	NY 3 NY 2.5	MT-8 MT-8b MT-8c MS-8 MZ-8 MP-8 MT-9 MT-9r1 MT-9c
R/L158S-2525x20x8/190-∞ R/L158S-3225x20x8/190-∞	25 32	25 25	150 170	20	8-9	190-∞	✗SHR 208MT	✗SHL 208MT	F6S 519	BF 05M	NY 3	
R/L158S-4032x30x8/190-300 R/L158S-4032x50x8/190-300	40 40	32 32	200 200	30 50	8-9	190-300	✗SHR 308MT SHN 8T	✗SHL 308MT	F6S 519 F6S 418	BF 05M BF 04T	NY 3 NY 2.5	
R/L158S-4032x30x8/300-∞	40	32	200	30	8-9	300-∞	✗SHR 308MT	✗SHL 308MT	F6S 519	BF 05M	NY 3	
R/L158S-4032x50x8/300-500 R/L158S-4032x50x8/500-∞	40 40	32 32	200 200	50 50	8-9	300-500 500-∞	SHN 8T		F6S 418	BF 04T	NY 2.5	
R/L158S-3225x20x10/75-100 R/L158S-4032x30x10/75-100	32 40	25 32	170 200	20 30	10-11	75-100	✗SHR 2010MT ✗SHR 3010MT	✗SHL 2010MT ✗SHL 3010MT	F6S 519 F6S 519	BF 05M BF 05M		
R/L158S-3225x20x10/100-140 R/L158S-4032x30x10/100-140	32 40	25 32	170 200	20 30	10-11	100-140	✗SHR 2010MT ✗SHR 3010MT	✗SHL 2010MT ✗SHL 3010MT	F6S 519 F6S 519	BF 05M BF 05M		
R/L158S-3225x20x10/140-190 R/L158S-4032x30x10/140-190 R/L158S-4032x50x10/140-190	32 40 40	25 32 32	170 200 200	20 30 50	10-11	140-190	✗SHR 2010MT ✗SHR 3010MT SHN 10T	✗SHL 2010MT ✗SHL 3010MT	F6S 519 F6S 519 F6S 518T	BF 05M BF 05M BF 05T	NY 3	MT-10 MT-10r1 MT-10b MT-10c MS-10 MZ-10
R/L158S-3225x20x10/190-∞ R/L158S-4032x30x10/190-300 R/L158S-4032x50x10/190-300	32 40 40	25 32 32	170 200 200	20 30 50	10-11	190-300	✗SHR 2010MT ✗SHR 3010MT SHN 10T	✗SHL 2010MT ✗SHL 3010MT	F6S 519 F6S 519 F6S 518T	BF 05M BF 05M BF 05T		
R/L158S-4032x30x10/300-∞ R/L158S-4032x50x10/300-∞	40 40	32 32	200 200	30 50	10-11	300-∞	✗SHR 3010MT SHN 10T	✗SHL 3010MT	F6S 519 F6S 518T	BF 05M BF 05T		

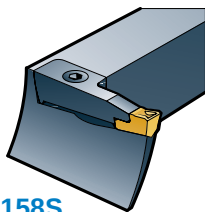
 Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sida:
A44-A58

- ³⁾ See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.
³⁾ Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.
³⁾ Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.

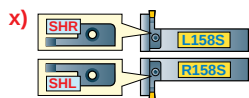
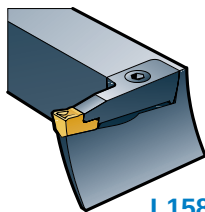
158S

A

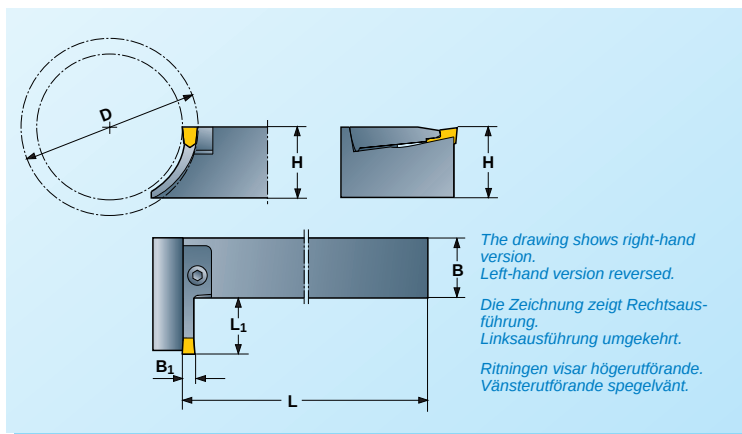
R158S



L158S



- x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
 x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
 x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.



	H	B	L	L ₁	B ₁	D	SHR	SHL						
R/L158S-4032x30x12/75-100 R/L158S-4032x40x12/75-100	40	32	200	30	12	75-100	✗SHR 3012MT ✗SHR 4012MT	✗SHL 3012MT ✗SHL 4012MT	F6S-519 F6S-526	BF 05M BF 05M	NY 3	MT-12 MT-12b MT-12c MS-12 MZ-12	A130-A148	Page: Seite: Sida:
R/L158S-4032x30x12/100-140 R/L158S-4032x40x12/100-140	40	32	200	30	12	100-140	✗SHR 3012MT ✗SHR 4012MT	✗SHL 3012MT ✗SHL 4012MT	F6S-519 F6S-526	BF 05M BF 05M				
R/L158S-4032x30x12/140-190 R/L158S-4032x50x12/140-190	40	32	200	30	12	140-190	✗SHR 3012MT SHN 12T	✗SHL 3012MT SHL 12T	F6S-519 F6S-519	BF 05M BF 05T				
R/L158S-4032x30x12/190-300 R/L158S-4032x50x12/190-300	40	32	200	30	12	190-300	✗SHR 3012MT SHN 12T	✗SHL 3012MT SHL 12T	F6S-519 F6S-519	BF 05M BF 05T				
R/L158S-4032x30x12/300-∞ R/L158S-4032x50x12/300-∞	40	32	200	30	12	300-∞	✗SHR 3012MT SHN 12T	✗SHL 3012MT SHL 12T	F6S-519 F6S-519	BF 05M BF 05T				

Ordering example:

Bestellbeispiel:

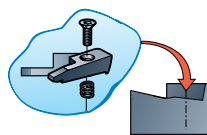
R158S-2525 x 20 x 4/50-60

Beställningsexempel:



Selection of cutting geometry, page:
 Wahl der Schneidengeometrie, Seite:
 Val av skärgeometri, sid:

A44-A58



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

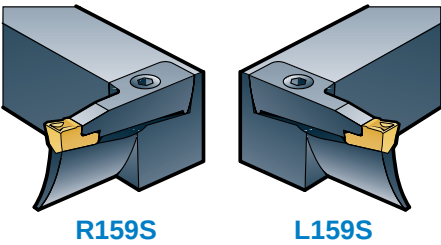
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

159S

Recommendations
Empfehlungen
Rekommendationer

Page:
Seite:
Sida:

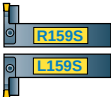
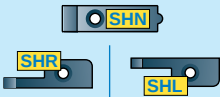
A27



The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

	H	B	L	L ₁	B ₁	D						Page: Seite: Sida: A130-A148
¹⁾ R/L159S-HB x L₁ x B₁/20-23²⁾ ¹⁾ R/L159S-HB x L₁ x B₁/23-26²⁾ ¹⁾ R/L159S-HB x L₁ x B₁/26-30²⁾ ¹⁾ R/L159S-HB x L₁ x B₁/30-40 ¹⁾ R/L159S-HB x L₁ x B₁/40-50 ¹⁾ R/L159S-HB x L₁ x B₁/50-60 ¹⁾ R/L159S-HB x L₁ x B₁/60-75 ¹⁾ R/L159S-HB x L₁ x B₁/75-100 ¹⁾ R/L159S-HB x L₁ x B₁/100-140 ¹⁾ R/L159S-HB x L₁ x B₁/140-190 ¹⁾ R/L159S-HB x L₁ x B₁/190-300 ¹⁾ R/L159S-HB x L₁ x B₁/300-∞	Specified by the customer. Wird vom Kunden spezifiziert. Specificeras av kunden.	20- 23 23- 26 26- 30 30- 40 40- 50 50- 60 60- 75 75-100 100-140 140-190 190-300 300-∞	   Spare parts and inserts in accordance with corresponding type 152S (L₁, B₁ and D identical). See page: Ersatzteile und Schneiden in Übereinstimmung mit Halter 152S (L₁, B₁ und D gleich). Siehe Seite: Reservdelar och skär i överensstämmelse med motsvarande hållare typ 152S (L₁, B₁ och D lika). Se sida: A87-A93									

¹⁾ Type 159S is manufactured on request as semistandard whereby shank dimension HxB, total holder length L, entry length L₁ and cutting width B₁ are specified by the customer for the given diameter range D. The combination L₁, B₁ and D should preferably be selected in accordance with holder type 152S (see page A87 - A93).

¹⁾ Typ 159S wird auf besondere Bestellung als Semi-standard hergestellt, wobei die Schaftabmessung HxB, die Gesamtlänge des Halters L, die Einstechlänge L₁ und die Einstechbreite B₁ für den angegebenen Durchmesserbereich D vom Kunden spezifiziert werden. Die Kombination L₁, B₁ und D soll vorzugsweise in Übereinstimmung mit dem Halter 152S gewählt werden (siehe Seite A87 - A93).

¹⁾ Typ 159S tillverkas mot order som semistandard varvid skaftdimension HxB, hållarens total längd L, instickslängd L₁ och insticksbredd B₁ specificeras av kunden för det givna diameterområdet D. Kombinationen L₁, B₁ och D bör företrädesvis väljas i överensstämmelse med hållare typ 152S (se sid A87 - A93).

- 2)

RMT-... , RMP-... , RMB-...

LMT-... , LMP-... , LMB-...

2) Right-hand inserts (R) are used in right-hand holders and left-hand inserts (L) in left-hand holders.

2) Rechtsschneiden (R) werden in Rechtshaltern und Linksschneiden (L) in Linkshaltern verwendet.

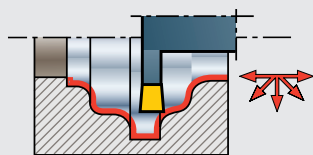
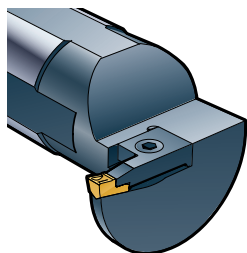
2) Högerskär (R) används i högerhållare och vänsterskär (L) i vänsterhållare.
-
- Spare parts shown in the coloured columns are supplied assembled in each tool.
- Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
- Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.
- Ordering example:
Bestellbeispiel:
Beställningsexempel:
- L159S-2525 x 20 x 6/75-100
-
- Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:
- A44-A58
- 建德刀具
- MIRCONA
- A115

157S-00

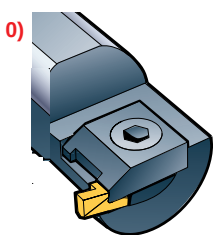
157G-00

Recommendations
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RekommendationerPage:
Seite:
Sida:

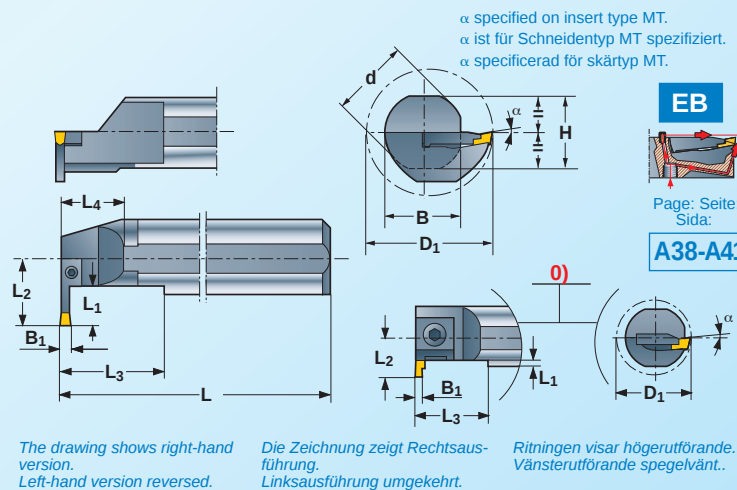
A30

Circlip grooves - Sicherungsringnuten -
Låsringsspår

157S-00



157G-00



α specified on insert type MT.

α ist für Schneidentyp MT spezifiziert.

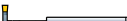
α specificerad för skärty MT.

EB

Page: Seite: Sida:

A38-A41

	α	H	B	D ₁ min	d	L	L ₂	L ₃	L ₄	L ₁	B ₁	SHN	SHR	SHL	F6S 411	NY 2.5	R/LG-050b R/LG-060b R/LG-070b R/LG-080b R/LG-090b R/LG-105b	R/LG-110b R/LG-125b R/LG-130b R/LG-155b R/LG-160b R/LG-185b
⁰⁾ R/L157G-0016x3x1/16	5	15	15,5	16	16	150	7,5	30	—	3	—	^{x)} SHR 43S ^{x)} SHL 43S	F6S 411	—	—	NY 2.5	R/LG-050b R/LG-060b R/LG-070b R/LG-080b R/LG-090b R/LG-105b	R/LG-110b R/LG-125b R/LG-130b R/LG-155b R/LG-160b R/LG-185b
⁰⁾ R/L157G-0016x3x1T	9	15	15,5	20	16	150	10,5	—	—	—	0,5	SHN 43	F6S 411	—	—	NY 2.5	R/LG-215b ²⁾ R/LG-265b ²⁾ R/LG-315b ²⁾	R/LG-110b R/LG-125b R/LG-130b R/LG-155b R/LG-160b R/LG-185b
⁰⁾ R/L157G-0020x3x1T	9	18	19	24	20	180	12,5	—	—	—	—							
⁰⁾ R/L157G-0025x3x1T	11	23	23,5	29	25	200	15	—	—	3	1,85							
⁰⁾ R/L157G-0032x3x1T	13	30	30	36	32	250	18,5	—	—	—	—							
⁰⁾ R/L157G-0040x3x1T	13	37	38	44	40	300	22,5	—	—	—	—							
R/L157G-0016x4x2/16	5	15	15,5	16	16	150	7,5	30	—	4	—	^{x)} SHR 43S ^{x)} SHL 43S	F6S 411	—	—	NY 2.5	R/LG-215b ²⁾ R/LG-265b ²⁾ R/LG-315b ²⁾	R/LG-110b R/LG-125b R/LG-130b R/LG-155b R/LG-160b R/LG-185b
R/L157G-0020x4x2	9	18	19	25	20	180	14	—	30	—	2,15	SHN 43	F6S 411	—	—	NY 2.5	R/LG-215b ²⁾ R/LG-265b ²⁾ R/LG-315b ²⁾	R/LG-110b R/LG-125b R/LG-130b R/LG-155b R/LG-160b R/LG-185b
R/L157G-0025x4x2	11	23	23,5	30	25	200	16,5	—	40	—	—							
R/L157G-0032x4x2	13	30	30	37	32	250	20	—	45	—	—							
R/L157G-0040x4x2	13	37	38	45	40	300	24	—	55	—	—							
R/L157S-0016x3x3/16	20	15	15,5	16	16	150	7,5	30	—	3	3	^{x)} SHR 43S ^{x)} SHL 43S	F6S 411	—	—	NY 2.5	MT-3c MP-30 MP-3 MA-30	
R/L157S-0016x3x3	1	15	15,5	20	16	150	11	—	25	3	—	SHN 43	F6S 411	—	—	NY 2.5	MT-3 MT-3b MT-3c MS-3D MS-3 MZ-3 MP-30 MP-3 MA-30 MB-3F MT-30Fr ³⁾	
R/L157S-0020x4x3	1	18	19	25	20	180	14	—	30	4	3							
R/L157S-0025x4x3	3	23	23,5	30	25	200	16,5	—	40	4	—							
R/L157S-0020x6x3	1	18	19	27	20	180	16	—	35	—	6	^{x)} SHR 43 ^{x)} SHL 43	F6S 411	—	—	NY 2.5	MT-3 MT-3b MT-3c MS-3D MS-3 MZ-3 MP-30 MP-3 MA-30 MB-3F MT-30Fr ³⁾	
R/L157S-0025x6x3	3	23	23,5	32	25	200	18,5	—	40	—	—	^{x)} SHR 133 ^{x)} SHL 133	F6S 411	—	—	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4D MS-4 MZ-4 MP-40 MP-4	MA-40 MB-4F ³⁾ MT-40Fr ³⁾ MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50
R/L157S-0025x8x3T	5	23	23,5	34	25	200	20,5	—	40	8	—							
R/L157S-0032x8x3	5	30	30	41	32	250	24	—	45	8	3							
R/L157S-0040x8x3	8	37	38	49	40	300	28	—	55	8	—							
R/L157S-0040x12x3T	8	37	38	53	40	300	32	—	55	12	—	^{x)} SHR 134 ^{x)} SHL 134	F6S 411	—	—	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4D MS-4 MZ-4 MP-40 MP-4	MA-40 MB-4F ³⁾ MT-40Fr ³⁾ MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50
R/L157S-0020x4x4	1	18	19	25	20	180	14	—	30	4	4-6,4							
R/L157S-0025x4x4	3	23	23,5	30	25	200	16,5	—	40	—	—							
R/L157S-0020x6x4	1	18	19	27	20	180	16	—	35	—	6	^{x)} SHR 43 ^{x)} SHL 43	F6S 411	—	—	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4D MS-4 MZ-4 MP-40 MP-4	MA-40 MB-4F ³⁾ MT-40Fr ³⁾ MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50
R/L157S-0025x6x4	3	23	23,5	32	25	200	18,5	—	40	—	—	^{x)} SHR 134 ^{x)} SHL 134	F6S 411	—	—	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4D MS-4 MZ-4 MP-40 MP-4	MA-40 MB-4F ³⁾ MT-40Fr ³⁾ MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50
R/L157S-0025x8x4T	5	23	23,5	34	25	200	20,5	—	40	—	—							
R/L157S-0032x8x4	5	30	30	41	32	250	24	—	45	8	4-6,4							
R/L157S-0040x8x4	8	37	38	49	40	300	28	—	55	—	—							
R/L157S-0040x12x4T	8	37	38	53	40	300	32	—	55	12	4-4,5	^{x)} SHR 134 ^{x)} SHL 134	F6S 411	—	—	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b MT-4c MS-4D MS-4 MZ-4 MP-40 MP-4	MA-40 MB-4F ³⁾ MT-40Fr ³⁾ MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50
R/L157S-0032x8x5	5	30	30	41	32	250	24	—	45	—	8	^{x)} SHR 135 ^{x)} SHL 135	F6S 411	—	—	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50	MA-50 MB-5F ³⁾ MT-50Fr ³⁾ MT-6 MT-6.4r1 MT-6b MT-6c
R/L157S-0040x8x5	8	37	38	49	40	300	28	—	55	—	—							
R/L157S-0040x12x5T	8	37	38	53	40	300	32	—	55	12	5	^{x)} SHR 135 ^{x)} SHL 135	F6S 411	—	—	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c MS-5 MZ-5 MP-5 MA-50	MA-50 MB-5F ³⁾ MT-50Fr ³⁾ MT-6 MT-6.4r1 MT-6b MT-6c

  α H B D₁ min d L L₂ L₃ L₄ L₁ B₁        Page: Seite: Sida: A130-A148	R/L157S-0040x12x6T	8	37	38	53	40	300	32	–	55	12	6-7,5	✗SHR 136	✗SHL 136	F6S 411	–	NY 2.5	MT-6 MT-6.4r1 MT-6b MT-6c MS-6	MZ-6 MP-6 MT-60Fr ³⁾ MT-7 MT-7.5r1	MT-7b MT-7c
R/L157S-0040x13x8	4	37	38	54	40	300	33	–	55	13	8-10	SHN 8T		F6S 418	BF 04T	NY 2.5	MT-8 MT-8b MT-8c MS-8	MZ-8 MP-8 MT-9 MT-9r1	MT-9c	

- x)   x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
-   x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
- x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.

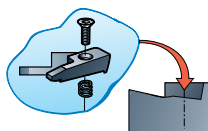
- 3) See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.
- 3) Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.
- 3) Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktyghållaren.

- 2)   2) Left-hand inserts (LG) are used in right-hand holders and right-hand inserts (RG) are used in left-hand holders.
-   2) Linksschneiden (LG) werden in Rechtshaltern und Rechtsschneiden (RG) in Linkshaltern verwendet.
- 2) Vänsterskär (LG) används i högerhållare och högerskär (RG) i vänsterhållare.



Selection of cutting geometry, page: **A44-A58**
 Wahl der Schneidengeometrie, Seite:
 Val av skärgeometri, sid:

Ordering example:
 Bestellbeispiel: **R157S-0025 x 6 x 4**
 Beställningsexempel:



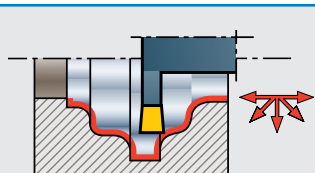
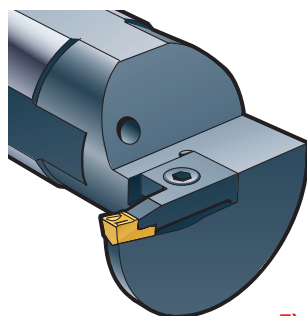
Spare parts shown in the coloured columns are supplied assembled in each tool.
 Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.
 Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

157SA-00

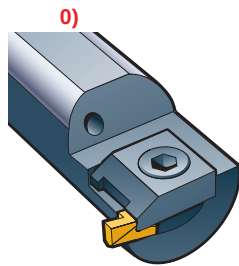
157GA-00

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Seite:
Sida:

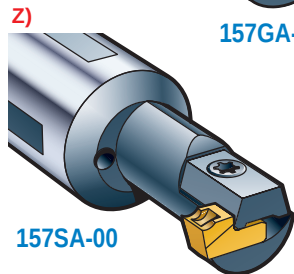
A31

Through coolant
Innere Kühlmittelzufuhr
Invändig kylvätske-
tillförselCirclip grooves
Sicherungsringnuten
Låsringsspår

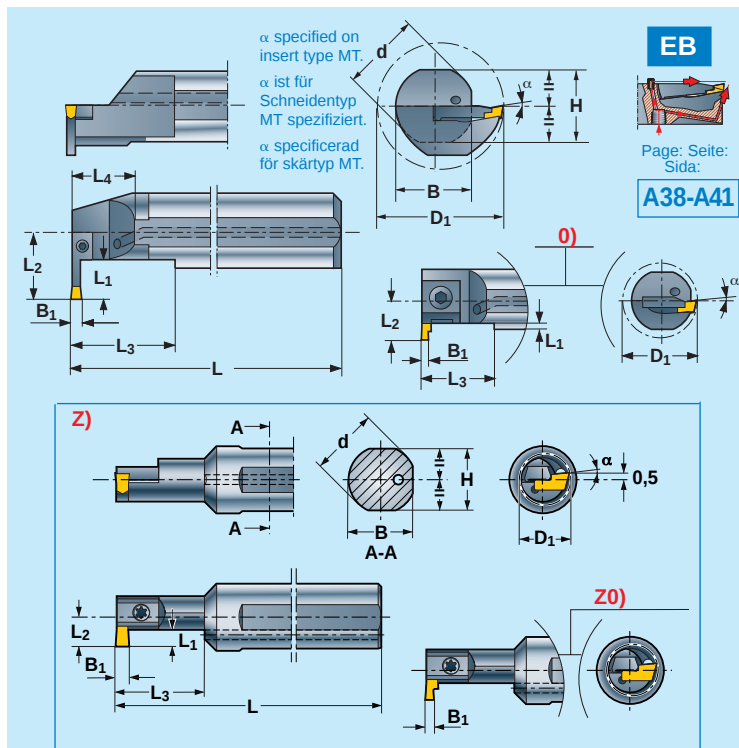
157SA-00



157GA-00



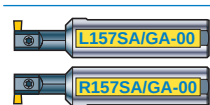
157SA-00

The drawing shows right-hand
version.
Left-hand version reversed.Die Zeichnung zeigt Rechtsaus-
führung.
Linksausführung umgekehrt.Ritningen visar högerutförande.
Vänsterutförande spegelvänt..

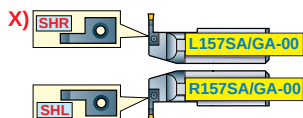
EB

Page: Seite:
Sida:

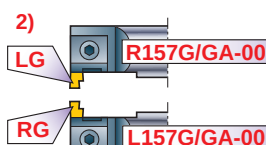
A38-A41



	α	H	B	D_1 min	d	L	L_2	L_3	L_4	L_1	B_1	SHN SHR	SHL	FTX072507 F6S 411	NY7X NY2.5	R/LG-050b R/LG-060b R/LG-070b R/LG-080b R/LG-090b R/LG-105b	R/LG-110b R/LG-125b R/LG-130b R/LG-155b R/LG-160b R/LG-185b
20) R/L157GA-0016x3x1/12 0) R/L157GA-0016x3x1/16	5 5	15 15	15,5 15,5	12 16	16 16	130 150	6,0 7,5	25 30	— —	— —	0,50 1,85	SHN 33 *SHR 43S	*SHL 43S	FTX072507 F6S 411	— —	NY7X NY2.5	R/LG-110b R/LG-125b R/LG-130b R/LG-155b R/LG-160b R/LG-185b
0) R/L157GA-0016x3x1 0) R/L157GA-0020x3x1 0) R/L157GA-0025x3x1	9 9 11	15 18 23	15,5 19 23,5	20 24 29	16 20 25	150 160 180	10,5 12,5 15	— — —	— — —	3 — —	— — —	— — —	— — —	— — —	— — —	— — —	— — —
R/L157GA-0016x4x2/16 R/L157GA-0020x4x2 R/L157GA-0025x4x2	5 9 11	15 18 23	15,5 19 23,5	16 25 30	16 20 25	150 160 180	7,5 14 16,5	30 — 40	— — —	— 4 —	2,15 — 3,15	*SHR 43S *SHR 43G	*SHL 43S *SHL 43L	F6S 411 F6S 411	— — —	NY2.5 NY2.5	R/LG-215b ²⁾ R/LG-265b ²⁾ R/LG-215b ²⁾ R/LG-315b ²⁾ R/LG-265b ²⁾
2) R/L157SA-0016x3x2/12 R/L157SA-0016x3x2/16 R/L157SA-0016x3x2	20 20 20	15 15 15,5	15,5 16 16	12 16 16	16 16 150	130 150 150	6,0 7,5 10,5	25 30 —	— — 25	3 3 —	2 2 —	SHN 33 *SHR 43S *SHR 43G	*SHL 43S *SHL 43S *SHL 43G	FTX072507 F6S 411	— — —	NY7X NY2.5	MP-20 MA-20
R/L157SA-0020x4x2 R/L157SA-0025x4x2 R/L157SA-0020x6x2 R/L157SA-0025x6x2 R/L157SA-0025x8x2	5 7 5 7 9	18 23 18 23 23	19 23,5 19 23,5 23,5	25 30 27 32 34	20 25 20 25 25	160 180 160 180 180	14 16,5 16 18,5 20,5	— — — — —	25 4 25 6 25	4 2 6 2 8	2 2 2 2 2	*SHR 43G *SHR 43G *SHR 42 *SHR 42 *SHR 102	*SHL 43G *SHL 43G *SHL 42 *SHL 42 *SHL 102	F6S 411 F6S 411 F6S 411	— — — — —	NY 2.5	MT-20 MP-20 MA-20 MZ-20
2) R/L157SA-0016x3x2.5/12 R/L157SA-0016x3x2.5/16 R/L157SA-0016x3x2.5	20 20 20	15 15 15,5	15,5 16 16	12 16 16	16 16 150	130 150 150	6,0 7,5 10,5	25 30 —	— — 25	3 3 —	2,5 2,5 2,5	SHN 33 *SHR 43S *SHR 43G	*SHL 43S *SHL 43S *SHL 43G	FTX072507 F6S 411	— — —	NY7X NY2.5	MP-25 MA-25
R/L157SA-0020x4x2.5 R/L157SA-0025x4x2.5 R/L157SA-0020x6x2.5 R/L157SA-0025x6x2.5 R/L157SA-0025x8x2.5	5 7 5 7 9	18 23 18 23 23	19 23,5 19 23,5 23,5	25 30 27 32 34	20 25 20 25 25	160 180 160 180 180	14 16,5 16 18,5 20,5	— — — — —	25 4 25 6 25	4 2 6 2 8	2,5 2,5 2,5 2,5 2,5	*SHR 43G *SHR 43G *SHR 42 *SHR 42 *SHR 102.5	*SHL 43G *SHL 43G *SHL 42 *SHL 42 *SHL 102.5	F6S 411 F6S 411 F6S 411	— — — — —	NY 2.5	MT-25 MT-25Fr ³⁾ MT-2.3r0.5 MP-25 MA-25 MZ-25
2) R/L157SA-0016x3x3/12 R/L157SA-0016x3x3/16 R/L157SA-0016x3x3	20 20 20	15 15 15,5	15,5 16 16	12 16 16	16 16 150	130 150 150	6,0 7,5 10,5	25 30 —	— — 25	3 3 —	2,5 2,5 2,5	SHN 33 *SHR 43S *SHR 43G	*SHL 43S *SHL 43S *SHL 43G	FTX072507 F6S 411	— — —	NY7X NY2.5	MP-3 MP-30 MA-30
R/L157SA-0020x4x3 R/L157SA-0025x4x3 R/L157SA-0020x6x3 R/L157SA-0025x6x3 R/L157SA-0025x8x3	5 7 5 7 9	18 23 18 23 23	19 23,5 19 23,5 23,5	25 30 27 32 34	20 25 20 25 25	160 180 160 180 180	14 16,5 16 18,5 20,5	— — — — —	25 4 25 6 25	4 2 6 2 8	2,5 2,5 2,5 2,5 2,5	*SHR 43G *SHR 43G *SHR 43 *SHR 43 *SHR 133	*SHL 43G *SHL 43G *SHL 43 *SHL 43 *SHL 133	F6S 411 F6S 411 F6S 411	— — — — —	NY 2.5	MT-3 MT-3.1r0.5 MT-3b MT-3c MZ-3 MP-3



x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.



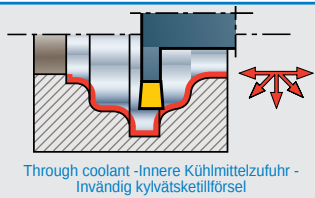
2) Left-hand inserts (LG) are used in right-hand holders and right-hand inserts (RG) are used in left-hand holders.
2) Linksschneiden (LG) werden in Rechtshaltern und Rechtsschneiden (RG) in Linkshaltern verwendet.
2) Vänsterskar (LG) används i högerhållare och högerskar (RG) i vänsterhållare.

157TA-00

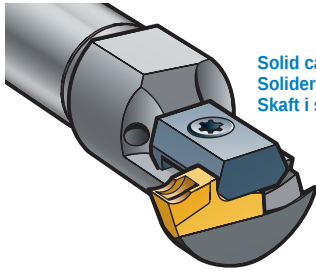
Recommendations
Empfehlungen
Rekommendationer

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Sida:

A31



Through coolant -Innere Kühlmittelzufuhr -
Invändig kylvätske tillförsel



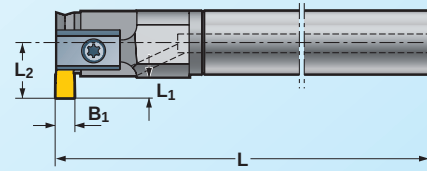
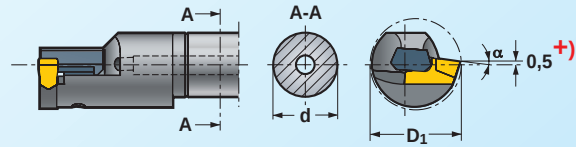
Solid carbide shank
Solider Hartmetallschaft
Skaft i solid hårdmetall

$f_n = 0,01 - 0,03$

f_n = Feed, mm/rev

f_n = Vorschub, mm/U

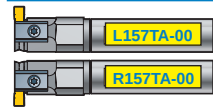
f_n = Matning, mm/varv



The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.



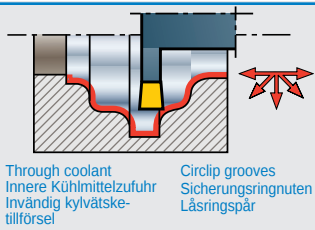
	α	D_1 min	d	L	L_1	B_1	SHN	FTX072507	NY7X	MP-20 MA-20
+) R/L157TA-0008x3x2/12 R/L157TA-0010x3x2/14	20 20	12 14	8 10	130 150	3	2	SHN 33	FTX072507	NY7X	MP-20 MA-20
+) R/L157TA-0008x3x2.5/12 R/L157TA-0010x3x2.5/14	20 20	12 14	8 10	130 150	3	2,5	SHN 33	FTX072507	NY7X	MP-25 MA-25
+) R/L157TA-0008x3x3/12 R/L157TA-0010x3x3/14	20 20	12 14	8 10	130 150	3	3	SHN 33	FTX072507	NY7X	MP-3 MA-30 MP-30
+) R/L157TA-0008x3x4/12 R/L157TA-0010x3x4/14	20 20	12 14	8 10	130 150	3	4	SHN 33	FTX072507	NY7X	MP-40 MA-40 MP-4

157HA-00

Recommendations
Empfehlungen
Rekommendationer

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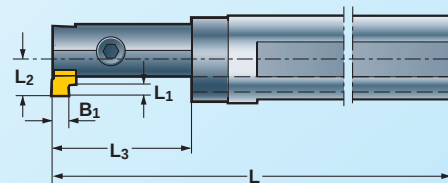
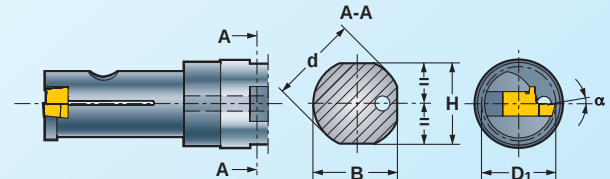
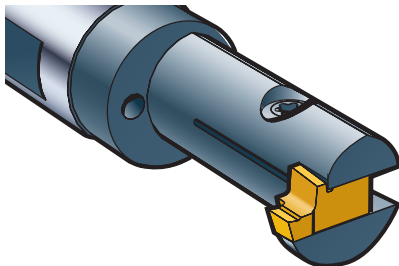
Through coolant
Innere Kühlmittelzufuhr
Invändig kylvätske-
tillförsel

$f_n = 0,01 - 0,03$

f_n = Feed, mm/rev

f_n = Vorschub, mm/U

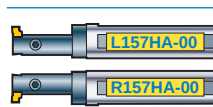
f_n = Matning, mm/varv



The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.



	α	H	B	D_1 min	d	L	L_2	L_3	L_1	B_1	FTX072206	NY7X	R/LH-040b ¹⁾ R/LH-090b ¹⁾	R/LH-110b ¹⁾ R/LH-125b ¹⁾
R/L157HA-0012x2x1/8	10	11	11,5	8	12	125	3,6	21	1 - 1,5	0,4 - 1,25	FTX072206	NY7X	R/LH-040b ¹⁾ R/LH-090b ¹⁾	R/LH-110b ¹⁾ R/LH-125b ¹⁾
R/L157HA-0012x2.5x2/10	10	11	11,5	10	12	125	4,6	21	2,5	2	MC6S-205	NY1.5	R/LH-200b ¹⁾	



Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

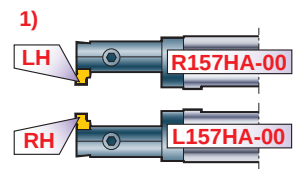
A44-A58

Ordering example:

Bestellbeispiel:

Beställningsexempel:

R157TA-0008 x 3 x 2/12



1) Left-hand inserts (LH) are used in right-hand holders and right-hand inserts (RH) are used in left-hand holders.

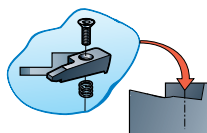
1) Linksskneiden (LH) werden in Rechtshaltern und Rechtsschneiden (RH) in Linkshaltern verwendet.

1) Vänsterskär (LH) används i högerhållare och högerskär (RH) i vänsterhållare.

3) See page A131(MT-3.7r1), A137(MB) and A148(MT-..Fr) for modification of the tool holder.

3) Siehe Seite A131(MT-3.7r1), A137(MB) und A148(MT-..Fr) für Modifizierung des Werkzeughalters.

3) Se sid A131(MT-3.7r1), A137(MB) och A148(MT-..Fr) för modifiering av verktygshållaren.



Spare parts shown in the coloured columns are supplied assembled in each tool.

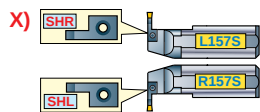
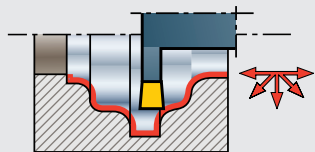
Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

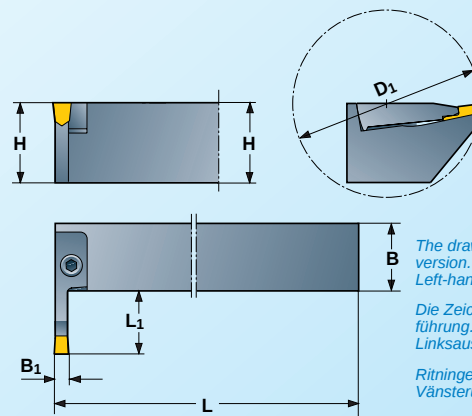
157S

Recommendations
Empfehlungen
RekommendationerPage:
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A32



- x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
 x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
 x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.

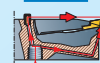


The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

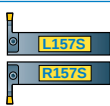
Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

EB



Page: Seite: Sida:

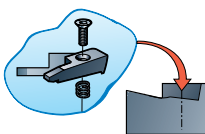
A38-A41

	D ₁ min	H	B	L	L ₁	B ₁						 	Page: Seite: Sida: A130-A148	
R/L157S–2525x20x3	90	25	25	160	20	3	❗SHR 203M	❗SHL 203M	F6S 418	BF 04M	NY 2.5	MT-3 MT-3.1r0.5 MT-3b MT-3c	MS-3D MS-3 MZ-3 MP-30	MP-3 MA-30 MB-3F ³⁾ MT-30Fr ³⁾
R/L157S–2520x20x4	90	25	20	160	20	4-4,5	❗SHR 204MT	❗SHL 204MT	F6S 418	BF 04M	NY 2.5	MT-4 MT-3.7r1 ³⁾ MT-4r1 MT-4.5r1 MT-4b	MT-4c MS-4D MS-4 MZ-4 MP-40	MP-4 MA-40 MB-4F ³⁾ MT-40Fr ³⁾
R/L157S–2520x20x5 R/L157S–3220x25x5	90 90	25 32	20 20	160 200	20 25	5	❗SHR 205MT ❗SHR 255MT	❗SHL 205MT ❗SHL 255MT	F6S 418 F6S 418	BF 04M BF 04M	NY 2.5	MT-5 MT-5r1 MT-5b MT-5c	MS-5 MZ-5 MP-5 MA-50	MB-5F ³⁾ MT-50Fr ³⁾
R/L157S–2020x20x6 R/L157S–3220x20x6	90 90	20 32	20 20	160 200	20 20	6-7,5	❗SHR 206MT	❗SHL 206MT	F6S 418	BF 04M	NY 2.5	MT-6 MT-6.4r1 MT-6b MT-6c MS-6	MZ-6 MP-6 MT-60Fr ³⁾ MT-7 MT-7.5r1	MT-7b MT-7c MT-70Fr ³⁾
R/L157S–3225x25x6	90	32	25	200	25	6-7,5	❗SHR 256MT	❗SHL 256MT	F6S 418	BF 04M				
R/L157S–2525x20x8 R/L157S–3220x20x8 R/L157S–4025x20x8	140 140 140	25 32 40	25 20 25	200 200 250	20	8-9	❗SHR 208MT	❗SHL 208MT	F6S 519	BF 05M	NY 3	MT-8 MT-8b MT-8c MS-8	MZ-8 MP-8 MT-9 MT-9r1	MT-9b MT-9c
R/L157S–3232x30x10 R/L157S–4025x30x10	140 140	32 40	32 25	250 250	30	10-11	❗SHR3010MT	❗SHL3010MT	F6S 519	BF 05M	NY 3	MT-10 MT-10r1 MT-10b MT-10c MS-10	MZ-10	
R/L157S–4040x30x12	140	40	40	250	30	12	❗SHR3012MT	❗SHL3012MT	F6S 519	BF 05M	NY 3	MT-12 MT-12b MT-12c	MS-12 MZ-12	



Selection of cutting geometry, page:
Wahl der Schneidengeometrie, Seite:
Val av skärgeometri, sid:

A44-A58



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

Ordering example:

Bestellbeispiel:

Beställningsexempel:

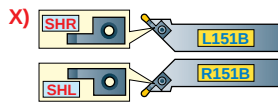
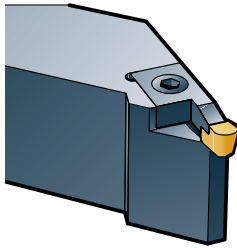
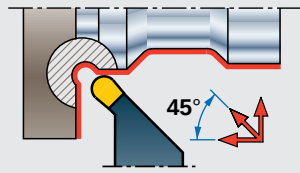
L157S-3225 x 25 x 6

151B

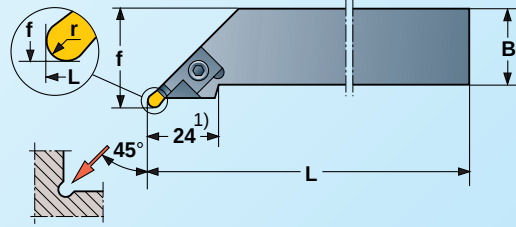
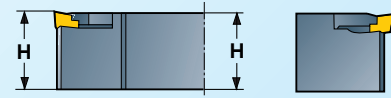
Recommendations
Empfehlungen
Rekommendationer

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Seite:
Sida:

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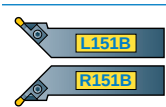
- x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
- x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
- x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.



The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt..



	H	B	¹⁾ L	¹⁾ f ±0,08	r	SHN SHR SHL					Page: Seite: Sida: A138
R/L151B-1616x2x2	16	16	100	20							
R/L151B-2020x2x2	20	20	125	25	1-1,5	x)SHR 134	*SHL 134	F6S 411	—	NY 2.5	B-200r1 B-300r1.5
R/L151B-2525x2x2	25	25	150	32							
R/L151B-3225x2x2	32	25	150	32							
R/L151B-1616x4x4	16	16	100	20							
R/L151B-2020x4x4	20	20	125	25	2-3	x)SHR 134	*SHL 134	F6S 411	—	NY 2.5	B-400r2 B-500r2.5 B-600r3
R/L151B-2525x4x4	25	25	150	32							
R/L151B-3225x4x4	32	25	150	32							
R/L151B-2020x8x8T	20	20	125	25	4	SHN 8T		F6S 418	BF 04T	NY 2.5	B-800r4
R/L151B-2525x8x8T	25	25	150	32							
R/L151B-3225x8x8T	32	25	150	32							

1) On master inserts with:
r = 1,5 mm
r = 3,0 mm
r = 4,0 mm

1) Für Schneiden mit:
r = 1,5 mm
r = 3,0 mm
r = 4,0 mm

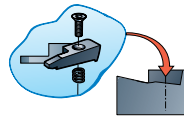
1) Till masterskär med:
r = 1,5 mm
r = 3,0 mm
r = 4,0 mm

Ordering example:

Bestellbeispiel:

Beställningsexempel:

R151B-2525 x 4 x 4



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

A

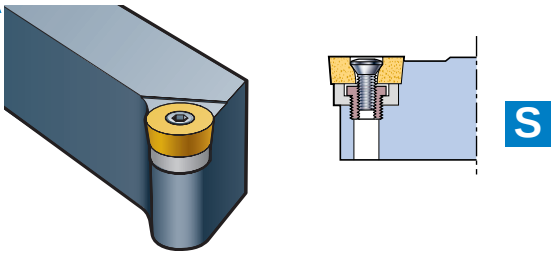
SRSC R/L

Recommendations
Empfehlungen
Rekommendationer

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Seite:
Sida:

A33

ISO



0°

45°

The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

	$h=h_1$	b	L	L_2	f	L_1	B_1							RCMT RCGT RCXT Page: Seite: Sida: A156-A157
SRSCR/L 1212F06	12	12	80	10	16									
SRSCR/L 1616H06	16	16	100	12	20									
SRSCR/L 2020K06	20	20	125	14	25	3	6	FTX072507	NY7X	—	—	—	—	0602M0
SRSCR/L 2525M06	25	25	150	16	32									
SRSCR/L 1616H08	16	16	100	14	20									
SRSCR/L 2020K08	20	20	125	16	25	4	8	FTX093008	NY9X	—	—	—	—	0803M0
SRSCR/L 2525M08	25	25	150	18	32									
SRSCR/L 1616H10	16	16	100	16	20									
SRSCR/L 2020K10	20	20	125	18	25	5	10	FTX153514	NY15X	URC10	RSM508	NY 3.5	—	10T3M0
SRSCR/L 2525M10	25	25	150	20	32									
SRSCR/L 2525M12	25	25	150	25	32									
SRSCR/L 3225P12	32	25	170	25	32	6	12	FTX153514	NY15X	URC12	RSM508	NY3.5	—	1204M0

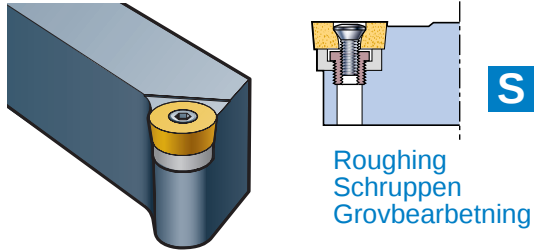
SRSC R/L M

Recommendations
Empfehlungen
Rekommendationer

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Seite:
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ISO



0°

30°

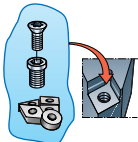
The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

	$h=h_1$	b	L	L_2	f	L_1	B_1							RCMX RCMT Page: Seite: Sida: A156-A157
SRSCR/L 2525-12M	25	25	150	18	32									
SRSCR/L 3225-12M	32	25	170	18	32	6	12	URN1203	RS61K	D61	F6S12	NY 3	—	120400/MO
SRSCR/L 3225-16M	32	25	170	20	32									
SRSCR/L 4032-16M	40	32	200	20	40	8	16	URN1604	RS62	D62	F6S16F	NY 3	—	160600/MO
SRSCR/L 3225-20M	32	25	170	25	32									
SRSCR/L 4032-20M	40	32	200	25	40	10	20	URN2004	RS62	D64	F6S20F	NY 4	—	200600/MO

Ordering example:
Bestellbeispiel: **SRSCL 2020K08**
Beställningsexempel:



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

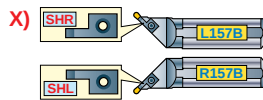
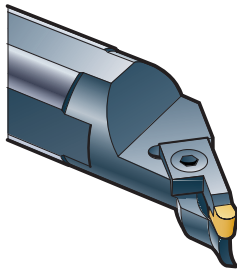
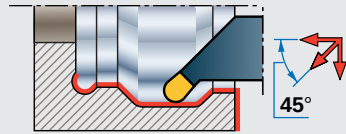
Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

157B

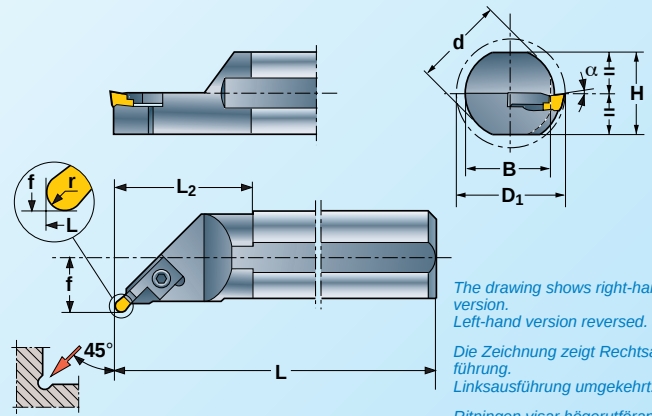
Recommendations
Empfehlungen
Rekommendationer

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Seite:
Sida:

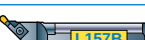
A33



- x) Clamp SHR is used in L-holders and clamp SHL in R-holders.
- x) Spannhaken SHR wird in L-Haltern und Spannhaken SHL in R-Haltern verwendet.
- x) Spännhake SHR används i L-hållare och spännhake SHL i R-hållare.



The drawing shows right-hand version.
Left-hand version reversed.
Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.
Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

 	α	H	B	D _{1 min}	d	¹ L	¹ f ±0,08	L ₂	r	 					 Page: Seite: Sida: A138
R/L157B-0016x2x2	-2	15	15,5	21	16	150	9,5	—	1-1,5	^x SHR 43	^x SHL 43	F6S 411	—	NY 2.5	B-200r1 B-300r1.5
R/L157B-0020x2x2	3	18	19	25	20	180	11,5	—	1-1,5	^x SHR 134	^x SHL 134	F6S 411			
R/L157B-0025x2x2	3	23	23,5	30	25	200	14,0	—							
R/L157B-0032x2x2	3	30	30	37	32	250	18,0	—							
R/L157B-0040x2x2	3	37	38	45	40	300	22,0	—							
R/L157B-0025x4x4	3	23	23,5	32	25	200	17,0	35	2-3	^x SHR 134	^x SHL 134	F6S 411	—	NY 2.5	B-400r2 B-500r2.5 B-600r3
R/L157B-0032x4x4	3	30	30	39	32	250	20,5	50							
R/L157B-0040x4x4	3	37	38	47	40	300	24,5	60							
R/L157B-0040x8x8T	3	37	38	50	40	300	27,0	60	4	SHN 8T		F6S 418	BF 04T	NY 2.5	B-800r4

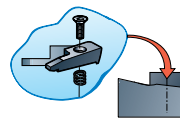
1) On master inserts with:
r = 1,5 mm
r = 3,0 mm
r = 4,0 mm

1) Für Schneiden mit:
r = 1,5 mm
r = 3,0 mm
r = 4,0 mm

1) Till masterskär med:
r = 1,5 mm
r = 3,0 mm
r = 4,0 mm

Ordering example:
Bestellbeispiel:
Beställningsexempel:

R157B-0025 x 4 x 4



Spare parts shown in the coloured columns are supplied assembled in each tool.

Die in den farbigen Spalten aufgeführten Ersatzteile sind in den Werkzeugen montiert.

Reservdelar i de färgade kolumnerna ingår monterade i varje verktyg.

Technical Specifications on Carbide Inserts Technische Spezifikationen über Hartmetallschneiden Tekniska specifikationer på hårdmetallskär

A

MT

MTr

Recommendations
Empfehlungen
Rekommendationer

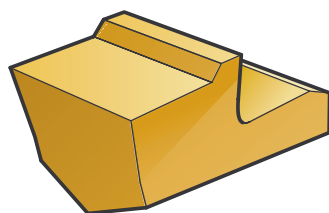
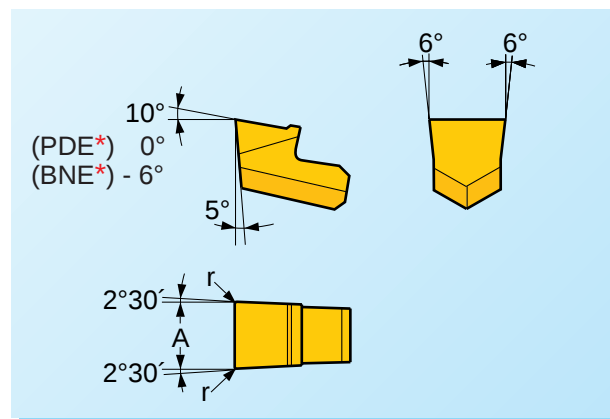
Page:
Seite:
Sida:

A44-A58

O-ring
O-Ring
O-ring

Application:
Gebrauch:
Tillämpning:

●	●	●	●	●	●	1)
●	●	●	●	●	●	
●	●	●	●	●	●	
●	●	●	●	●	●	
●	●	●	●	●	●	
●	●	●	●	●	●	



For holder types Für Haltertypen För hållartyper	151F, 151FA, 151RF, 151S, 151G, 156C, 156S, HD56S, 155S, 152S, 152S-00, 153S, 153SD, 153CD, 158S, 159S, 157S-00, 157SA-00, 157S			A ^{+0,15} ₋₀	r	TNC 100 P40/M40	TNC 150 P35/M30	TNC 250 P25/M20/K25	ALC 350 P15/ M10/K10/S10	TNP 175 P25/M25	TNP 2105 P30/ M30/K25/S30/N25	TNP 2255 P20/ M20/K15/S20/N15	S1V P10	SAFM P25/M20	S6 P40/M30	M4 P50/M40	H10 K10/N10	H20 M20/K20/ S25/N20/H20
	2 2,5	MT-20 MT-25	2,0 2,5	0,2			■			■		■		■				
	3 4 5 6 6	MT-3 MT-4 MT-5 MT-6 MT-7	3,2 4,1 5,1 6,1 7,1	0,25		■	■	■	■	■	■	■	■	■	■	■	■	■
Page: Seite: Sida:	A66-A120	8 8 10 12	MT-8 MT-9 MT-10 MT-12	8,1 9,1 10,1 12,1	0,35		■	■	■					■	■			■

	A ^{+0,15} ₋₀	r	FG 20 P30/M25/ K20/S25/N25/H25	H30 M30/K30/N30	CER 500 P15/M15	PDE 1000 N05	BNE 500 K05/H05	BNE 800 K10/H10
MT-20 MT-25	2,0 2,5	0,2	■			■		
MT-3 MT-4 MT-5 MT-6 MT-7	3,2 4,1 5,1 6,1 7,1	0,25	■	■	■	■	■	■
MT-8 MT-9 MT-10 MT-12	8,1 9,1 10,1 12,1	0,35		■				

● Coated carbide grades ● Beschichtete Hartmetallsorten
● Belagda hårdmetallsorter.

CVD TiN/TiCN/TiN
 CVD TiN/TiCN/Al₂O₃/TiN
 PVD TiN
 PVD TiAlN
CVD = Chemical Vapour Deposition
PVD = Physical Vapour Deposition

* ● Diamond, boron nitride ● Diamant, Bornitrid
● Diamant, bornitrid

PCD
 CBN
Page:
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Sida:

A146

MT...Fr



Page:
Seite:
Sida:

A148

■ Stocked - Ab Lager - Lagerfört

□ Limited stocked - Begrenzt ab Lager - Begränsat lagerfört

Selection of insert grade, page:
Wahl der Schneidsorte, Seite:
Val av skärsort, sida:

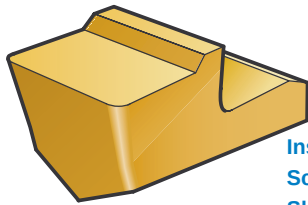
A124-A128

Cutting data, page:
Schnittdaten, Seite:
Skärdata, sida:

A158-A169

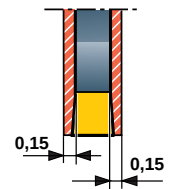
1) Page:
Seite:
Sida:

A128



Insert type MT with corner radii (MTr)
Schneidentyp MT mit Eckradien (MTr)
Skärtyp MT med hörnradier (MTr)

For holder types Für Haltertypen För hållartyper	151F, 151FA, 151RF, 151S, 151G, 156C, 156S, HD56S, 155S, 152S, 152S-00, 153S, 153SD, 153CD, 158S, 159S, 157S-00, 157SA-00, 157S			A _{-0,15} ⁺⁰	r	TNC 150 P35/M30	TNC 250 P25/M20/K25	ALC 350 P15/ M10/K10/S10	TNP 175 P25/M25	TNP 2105 P30/ M30/K25/S30/N25	SAFM P25/M20	H20 M20/K20/ S25/N20/H20	FG 20 P30/M25/ K20/S25/N25/H25	H30 M30/K30/N30
				2,5 3	MT-2.3r0.5 MT-3.1r0.5	2,5 3,3	0,5							
				2,4 4 4 5 6 6	MT-3.7r1 MT-4r1 MT-4.5r1 MT-5r1 MT-6.4r1 MT-7.5r1	3,9 4,2 4,7 5,2 6,6 7,7	1							
				8 10	MT-9r1 MT-10r1	9,2 10,2	1							
						A ₋₀ ^{+0,05}								
				3	MT-3.0+0.05/-0r0.5 MT-3.0+0.05/-0r1	3,0 3,0	0,5 1							
				4	MT-4.0+0.05/-0r0.5 MT-4.0+0.05/-0r1	4,0 4,0	0,5 1							
				5	MT-5.0+0.05/-0r0.5 MT-5.0+0.05/-0r1	5,0 5,0	0,5 1							
				6	MT-6.0+0.05/-0r0.5 MT-6.0+0.05/-0r1	6,0 6,0	0,5 1							



- 2) Clamp and tool must be ground 0.15 mm on both sides.
2) Der Spannhaken und die Werkzeugzunge müssen auf beiden Seiten 0,15 mm geschliffen werden.
2) Spännhake och verktygs-tunga måste slipas 0,15 mm på båda sidor.

Page: A66-A120
Seite:
Sida:

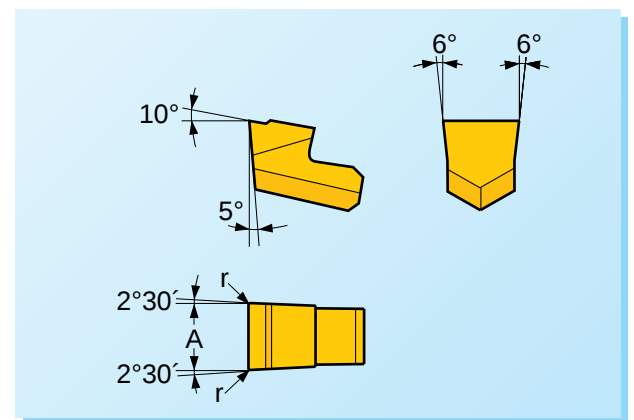
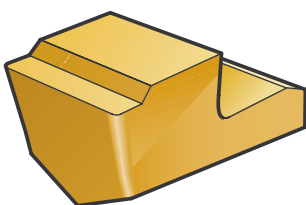
Ordering example:
Bestellbeispiel: MT-4 TNC 150 P35
Beställningsexempel:

MT-... X
R/LMT-... Z

Page: A142-A143
Seite:
Sida:

MTb
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Empfehlungen
Rekommendationer
Page: A44-A58
Seite:
Sida:

Application:
Gebrauch:
Tillämpning:



For holder types Für Haltertypen För hållartyper	151F, 151RF, 151S, 151G, 156C, 156S, HD56S, 155S, 152S, 152S-00, 153S, 153SD, 153CD, 158S, 159S, 157S-00, 157SA-00, 157S			A ₋₀ ^{+0,15}	r	TNC 150 P35/M30	ALC 350 P15/ M10/K10/S10	TNP 175 P25/M25	SAFM P25/M20	H20 M20/K20/ S25/N20/H20
				3 4 5 6 6	MT-3b MT-4b MT-5b MT-6b MT-7b	3,2 4,1 5,1 6,1 7,1	0,25			
				8 10 12	MT-8b MT-10b MT-12b	8,1 10,1 12,1	0,35			

Page: A66-A120
Seite:
Sida:

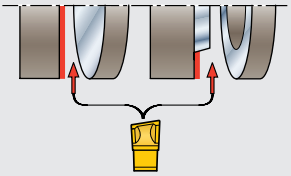
Ordering example:
Bestellbeispiel: MT-4b TNC 150 P35
Beställningsexempel:

R/L MS

Recommendations
Empfehlungen
Rekommandationer

Page:
Seite:
Sida:

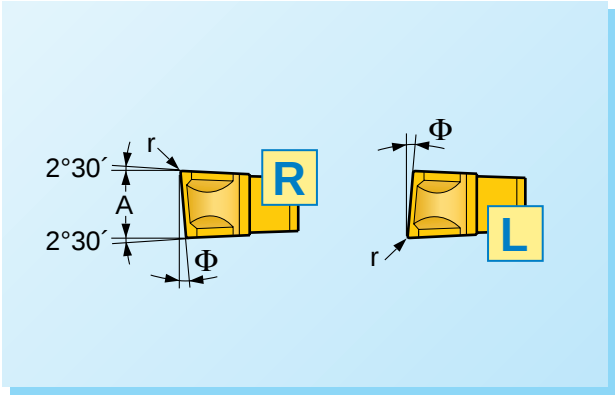
A44-A51



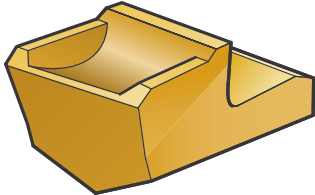
Application:
Gebrauch:
Tillämpning:

1	2	3	4	5	6
1	2	3	4	5	6

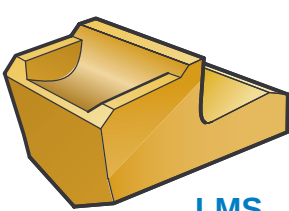
¹⁾



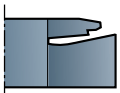
A



RMS



LMS

For holder types Für Haltertypen För hållartyper	151F, 151FA, 151RF, 151S, 151G, 156C, 156S, HD56S, 155S, 157S-00, 157SA-00, 157S			A ^{+0,15 -0}	Φ	r	TNC 100 P40/M40	TNC 150 P35/M30	TNC 250 P25/M20/K25	ALC 355 P15/ M15/K15/S15	TNP 175 P25/M25	TNP 2105 P30/ M30/K25/S30/N25	TNP 2255 P20/ M20/K15/S20/N15	SAFM P25/M20	S6 P40/M30	FG 20 P30/M25/ K20/S25/N25/H25	H20 M20/K20/ S25/N20/H20	H30 M30/K30/N30
	2 2,5	R/LMS-20/6 R/LMS-25/6	2,0 2,5	6°	0,20			■			■		■	■	□	■		
	3 4 5 6	R/LMS-3 R/LMS-4 R/LMS-5 R/LMS-6	3,2 4,1 5,1 6,1	5°	0,25	□ ■		■ ■ ■ ■	□ ■ □ □		■	■ ■ ■		■ ■ ■ ■	■ ■ ■ ■		■ ■ ■ ■	■ ■ ■ ■
	8 10	R/LMS-8 R/LMS-10	8,1 10,1	5°	0,35			■						■ ■	■ ■		□ □	

Ordering example:
Bestellbeispiel: **RMS-5 TNC 100 P45**
Beställningsexempel:

● Coated carbide grades ● Beschichtete Hartmetallsorten

● Belagda hårdmetallsorter.

 CVD
TiN/TiCN/
TiN

 CVD
TiN/TiCN/
Al₂O₃/TiN

 PVD
TiN

 PVD
TiAlN

CVD = Chemical Vapour Deposition
PVD = Physical Vapour Deposition

■ Stocked - Ab Lager - Lagerført □ Limited stocked - Begrenzt ab Lager - Begränsat lagerført

Selection of insert grade, page:
Wahl der Schneidsorte, Seite:
Val av skärsort, sida: **A124-A128**

Cutting data, page:
Schnittdaten, Seite:
Skärdata, sida: **A158-A169**

¹⁾ Page:
Seite:
Sida: **A128**

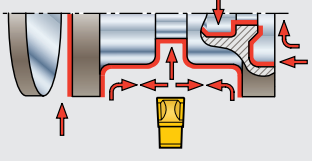
A

MZ

Recommendations
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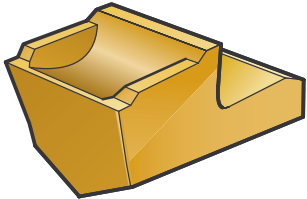
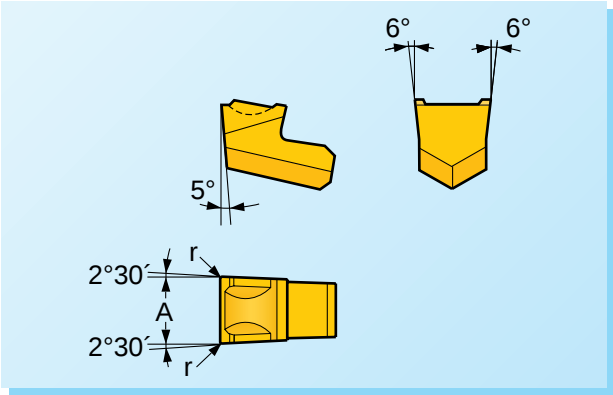
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Seite:
Sida:

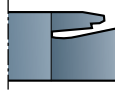
A44-A58



Application:
Gebrauch:
Tillämpning:

•	•	•	•	•	•	1)
•	•	•	•	•	•	



For holder types Für Haltertypen För hållartyper		151F, 151RF, 151S, 151G, 156C, 156S, HD56S, 155S, 152S, 152S-00, 153S, 153SD, 153CD, 158S, 159S, 157S-00, 157SA-00, 157S			A ^{+0,15} ₋₀	r	TNC 100 P40/M40	TNC 150 P35/M30	TNC 250 P25/M20/K25	TNP 175 P25/M25	TNP 2105 P30/ /M30/K25/S30/N25	SAFM P25/M20	S6 P40/M30	M4 P50/M40	FG 20 P30/M25/ K20/S25/N25/H25	H20 M20/K20/ S25/N20/H20
	2	MZ-20	2,0	0,25	0,2											
	2,5	MZ-25	2,5													
	3	MZ-3	3,2													
	4	MZ-4	4,1													
Page: Seite: Sida:	5	MZ-5	5,1	0,35	0,35											
	6	MZ-6	6,1													
	8	MZ-8	8,1													
		10	MZ-10	10,1												
		12	MZ-12	12,1												

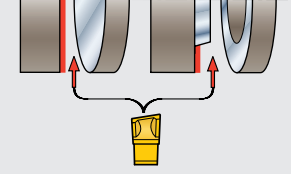
Ordering example:
Bestellbeispiel: **MZ-4 TNC 100 P45**
Beställningsexempel:

R/L MZ

Recommendations
Empfehlungen
Rekommendationer

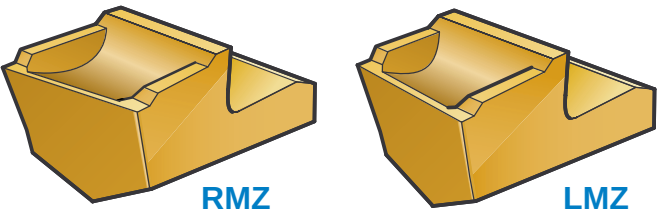
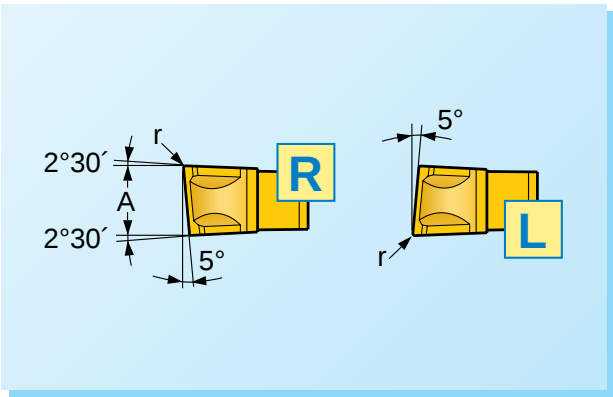
Page:
Seite:
Sida:

A44-A51



Application:
Gebrauch:
Tillämpning:

•	•	•	•	•	•	1)
•	•	•	•	•	•	



For holder types Für Haltertypen För hållartyper		151F, 151RF, 151S, 151G, 156C, 157S-00, 157SA-00, 157S			A ^{+0,15} ₋₀	r	TNC 100 P40/M40	TNC 150 P35/M30	TNP 175 P25/M25	TNP 2105 P30/ /M30/K25/S30/N25	SAFM P25/M20	M4 P50/M40	H20 M20/K20/ S25/N20/H20
	3	R/L MZ-3	3,2	0,25	0,25								
	4	R/L MZ-4	4,1										

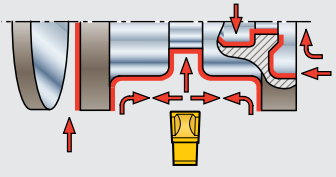
Ordering example:
Bestellbeispiel: **LMZ-3 SAFM P25**
Beställningsexempel:

MP

Recommendations
Empfehlungen
Rekommendationer

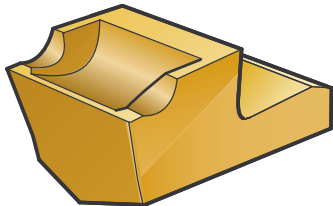
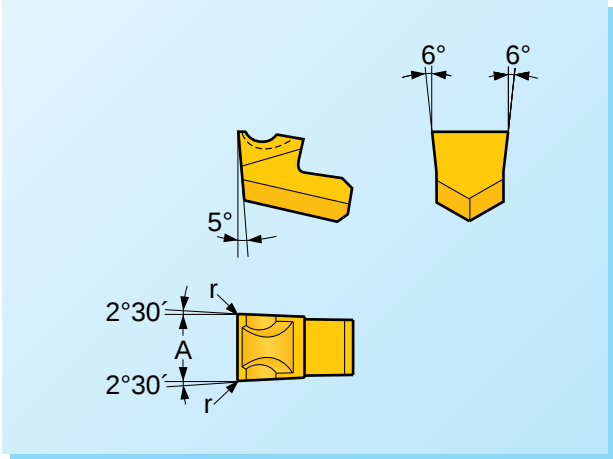
Page:
Seite:
Sida:

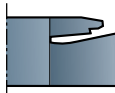
A44-A58



Application:
Gebrauch:
Tillämpning:

•	•	•	•	•	1)
•	•	•	•	•	
•	•	•	•	•	



For holder types Für Haltertypen För hållartyper	151F, 151FA, 151RF, 151S, 151G, 156C, 156S, HD56S, 155S, 152S, 152S-00, 153S, 153SD, 153CD, 158S, 159S, 157S-00, 157SA-00, 157TA-00, 157S			A ^{+0,15} ₋₀	r												
																	
 Page: Seite: Sida: A66-A120	2 2,5	MP-20 MP-25	2,0 2,5	0,2													
																	
																	
																	
																	
																	
																	
	8	MP-8	8,1	0,35													

Ordering example:
Bestellbeispiel: **MP-6 ALC 350 P15/K15**
Beställningsexempel:

MP- . . X
R/LMP- . . Z
Page:
Seite:
Sida:

A142-A143

● Coated carbide grades ● Beschichtete Hartmetallsorten

● Belagda hårdmetallsorter.

■ CVD
TiN/TiCN/
TiN

■ CVD
TiN/TiCN/
Al₂O₃/TiN

■ PVD
TiN

■ PVD
TiAlN

CVD = Chemical Vapour Deposition
PVD = Physical Vapour Deposition

■ Stocked - Ab Lager - Lagerfört

□ Limited stocked - Begrenzt ab Lager - Begränsat lagerfört

Selection of insert grade, page:
Wahl der Schneidsorte, Seite:
Val av skärsort, sida:

A124-A128

Cutting data, page:
Schnittdaten, Seite:
Skärdata, sida:

A158-A169

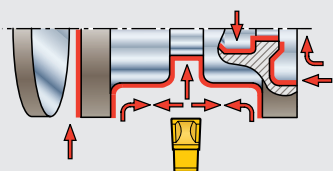
1) Page:
Seite:
Sida:

A128

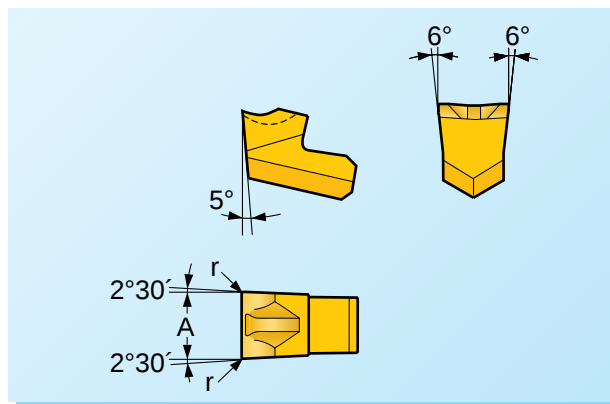
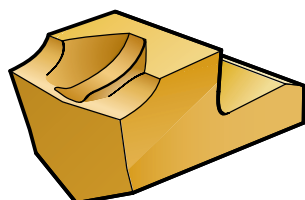
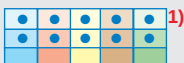
建德刀具

MIRCONA

A135

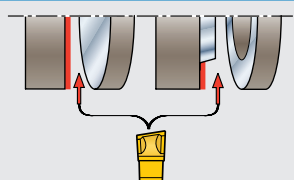
Page:
Seite:
Sida: **A44-A58**

Application:
Gebrauch:
Tillämpning:

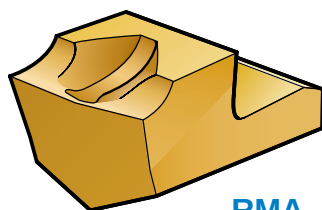


For holder types Für Haltertypen För hållartyper	151F, 151FA, 151RF, 151S, 151G, 156C, 152S, 152S-00, 153S, 153SD, 153CD, 158S, 159S, 157S-00, 157SA-00, 157TA-00, 157S			$A^{+0,15}_{-0}$	r	TNC 150 P35/M30	ALC 355 P1 M15/K15/S1	TNP 175 P25/M25	TNP 2255 P M20/K15/S2	SAFM P25/M20	S6 P40/M30	FG 20 P30/M K20/S25/M2
						■		■	■	■		■
	Page: Seite: Sida:	A66–A120	2	MA-20	2,0	0,2	■		■	■		■
			2.5	MA-25	2,5		■		■	■		■
			3	MA-30	3,0		■	■	■	■	■	■
			4	MA-40	4,0		■	■	■	■	■	■
			5	MA-50	5,0	0,25	■		■	■	■	■

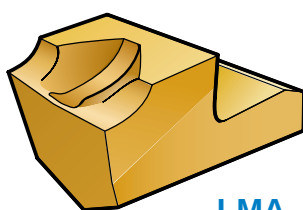
Beställningsexempel:

Page: **A44-A51**
Seite:
Sida:

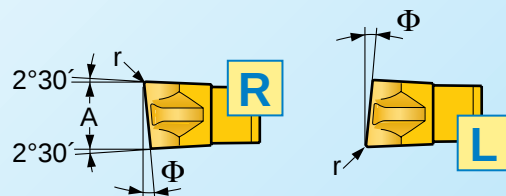
Application:
Gebrauch:
Tillämpning:



RMA



LMA

[illegible]

Beställningsexempel:

MB

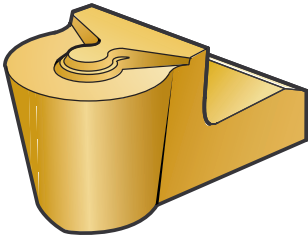
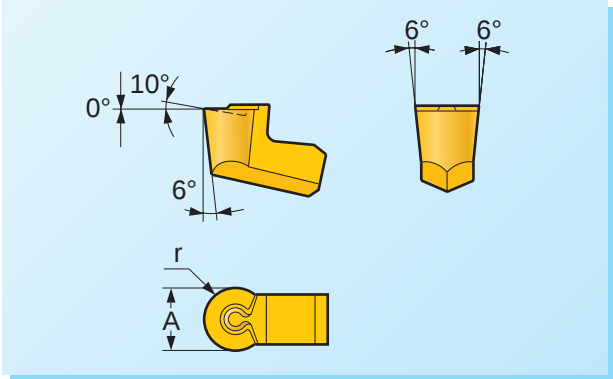
Recommendations
Empfehlungen
Rekomendationer

Page:
Seite:
Sida:

A44-A58

Application:
Gebrauch:
Tillämpning:

1)



Ordering example:
Bestellbeispiel:
Beställningsexempel:

MB-5F TNC 250 P25/K25

For holder types Für Haltertypen För hållartyper	151F, 151RF, 151S, 151G, 156C, 152S ¹⁾ , 152S-00 ¹⁾ , 153S ¹⁾ , 153SD, 153CD ¹⁾ , 158S ¹⁾ , 159S ¹⁾ , 157S-00, 157SA-00, 157S			A ± 0,075	r	TNC 150 P35/M30	TNC 250 P25/M20/K25	TNP 175 P25/M25	TNP 2105 P30/ /M30/K25/S30/N25	SAFM P25/M20	H20 M20/K20/ S25/N20/H20
	Page: Seite: Sida:	A66-A120	3 ^{x)} 4 ^{x)} 5 ^{x)}	MB-3F MB-4F MB-5F	3,0 4,0 5,0	1,5 2,0 2,5					

- X)** To achieve best possible machining conditions, preferably the tool holder blade should be modified in accordance with the insert radius.
- X)** Um die bestmöglichen Bearbeitungsverhältnisse zu erhalten, soll die Zunge des Werkzeughalters gemäß dem Radius der Schneide, modifiziert werden.
- X)** För att åstadkomma optimala bearbetningsförhållanden bör skärhållarens tunga modifieras i överensstämmelse med skärets radie.

1) Insert type MB in modified performance

For MIRCONA's range of face grooving tools types 152S, 152S-00, 153S, 153SD, 153CD, 158S and 159S designed for use within the diameter range $D_y = 20-50$ mm it is necessary that insert type MB in standard performance is modified, whereby the special cutting geometry of the insert on the swarf surface is eliminated.

Inserts modified will get an additional designation ZU, XU or U in accordance with the table below.

Inserts with additional designation "ZU" are made in left(L)- as well as right(R)-hand version whereby, left-hand inserts are used in left-hand holders and right-hand inserts in right-hand holders.

1) Schneiden MB in modifizierter Ausführung

MIRCONAS axiale Nutdrehwerkzeuge der Serie 152S, 152S-00, 153S, 153SD, 153CD, 158S und 159S, die geeignet sind innerhalb dem Durchmesserbereich $D_y = 20-50$ mm Verwendung zu finden, dürfen nur mit modifizierter MB Schneide verwendet werden, wobei die spezielle Schneidgeometrie der Schneide an der Spanoberfläche eliminiert wird.

Modifizierte Schneiden erhalten eine Zusatzbezeichnung ZU, XU oder U gemäß der untenstehenden Tabelle.

Schneiden mit der Zusatzbezeichnung „ZU“ werden sowohl in Links(L)- als auch in Rechts(R)-Ausführung hergestellt, wobei Linksschneiden in Linkshaltern und Rechtsschneiden in Rechtshaltern verwendet werden.

1) Skärtyper MB i specialutförande

För MIRCONAS program på axiella spårvarningsverktyg typ 152S, 152S-00, 153S, 153SD, 153CD, 158S och 159S avsedda att användas inom diameterområdet $D_y = 20-50$ mm, krävs att skärtyper MB i standardutförande modifieras, varvid skärets speciella skärgeometri på spånytan elimineras.

Modifierade skär erhåller en tilläggsbeteckning ZU, XU eller U i överensstämmelse med nedanstående tabell.

Skär med tilläggsbeteckning "ZU" görs i såväl vänster(L)- som höger (R)-utförande, varvid vänsterskär används i vänsterhållare och högerskär i högerhållare.

152S 152S-00 153S 153SD 153CD 158S 159S		MB- . . F	TNC 150 P35/M30	TNC 250 P25/M20/K25	TNP 175 P25/M25	TNP 2105 P30/ M30/K25/S30/ N25	SAFM P25/M20	H20 M20/K20/ S25/N20/H20
20-30	3	R/L MB-3FZU						
30-35	4 5	MB-4FXU MB-5FXU						
35-50	4 5	MB-4FU MB-5FU						
30-50	3	MB-3FU						

LMT-... , LMP-...
LMB-...

RMT-... , RMP-...
RMB-...

L152S

R152S

L159S
L158S
L153SD
L153CD
L153S

R153S
R153SD
R153CD
R158S
R159S

■ Stocked - Ab Lager - Lagerfört □ Limited stocked - Begrenzt ab Lager - Begränst lagerfört

Selection of insert grade, page:
Wahl der Schneisorte, Seite:
Val av skärsort, sida:

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Cutting data, page:
Schnittdaten, Seite:
Skärdata, sida:

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Seite:
Sida:

A140

- Coated carbide grades

Belagda hårdmetallsorter.
- CVD = Chemical Vapour Deposition

PVD = Physical Vapour Deposition

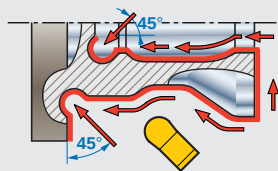
- CVD
TiN/TiCN/
TiN

CVD
TiN/TiCN/
Al₂O₃/TiN

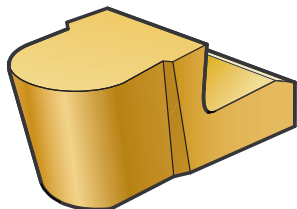
PVD
TiN

PVD
TiAlN

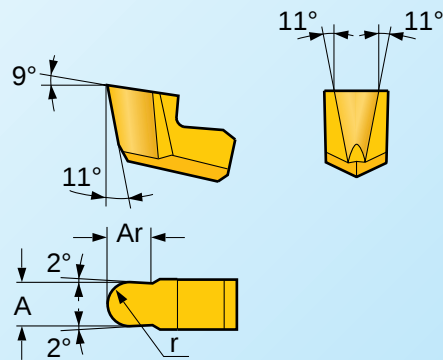
A

BRecommendations
Empfehlungen
RekomendationerPage:
Seite:
Sida: **A44-A47, A59**Application:
Gebrauch:
Tillämpning:

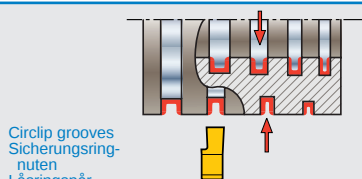
1)



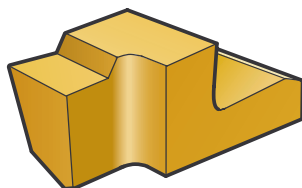
A	tol
2-6	±0,075
8	+0 -0,25



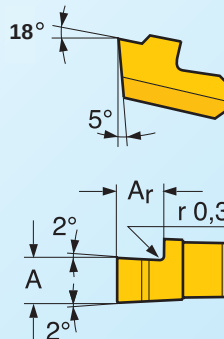
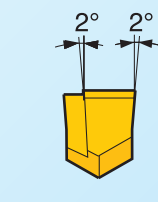
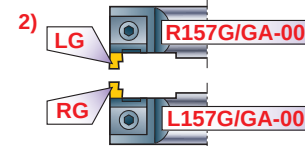
For holder types Für Haltertypen För hållartyper	151B 157B			A	r	Ar	TNC 150 P35/M30	ALC 350 P15/ M10/K10/S10	TNP 175 P25/M25	S1V P10	SAFM P25/M20	H20 M20/K20/ S25/N20/H20
	1-1,5 1-1,5 2-3 2-3 2-3 4	B-200r1 B-300r1.5 B-400r2 B-500r2.5 B-600r3 B-800r4	2,0 3,0 4,0 5,0 6,0 8,0	1,0 1,5 2,0 2,5 3,0 4,0	2,0 3,0 4,0 5,0 8,5 8,0							

Page:
Seite:
Sida: **A121, A123**Ordering example:
Bestellbeispiel:
Beställningsexempel:
B-400r2 TNC150 P35**G**Recommendations
Empfehlungen
RekomendationerPage:
Seite:
Sida: **A44-A47, A50-A53**Circlip grooves
Sicherungsring-
nuten
LåsringsspårApplication:
Gebrauch:
Tillämpning:

1)

Ordering example:
Bestellbeispiel:
Beställningsexempel:
RG-110b ALC 350 P15/K15

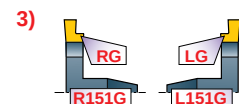
For holder types Für Haltertypen För hållartyper	151G ²⁾ 157G-00 ²⁾ , 157GA-00 ²⁾			A +0,14 +0,05	Ar	TNC 150 P35/M30	ALC 350 P15/ M10/K10/S10	TNP 175 P25/M25	S1V P10	SAFM P25/M20	H20 M20/K20/ S25/N20/H20
	0,50 - 1,85	R/L G-050b R/L G-060b R/L G-070b R/L G-080b R/L G-090b R/L G-105b R/L G-110b R/L G-125b R/L G-130b R/L G-155b R/L G-160b R/L G-185b	0,50 0,60 0,70 0,80 0,90 1,05 1,10 1,25 1,30 1,55 1,60 1,85	1,3 1,3 1,3 1,6 1,6 2,1 2,1 2,3 2,3 2,6 2,6 2,9							
	2,15 - 3,15	R/L G-215b R/L G-265b R/L G-315b	2,15 2,65 3,15	3,2 3,7 3,7							

Page:
Seite:
Sida: **A72-A73,
A116-A118**The drawing shows right-hand version.
Left-hand version reversed.Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.Ritningen visar högerutförande.
Vänsterutförande spegelvänt.

2) Left-hand inserts (LG) are used in right-hand holders and right-hand inserts (RG) are used in left-hand holders.

2) Linksschneiden (LG) werden in Rechtshaltern und Rechtsschneiden (RG) in Linkshaltern verwendet.

2) Vänsterskär (LG) används i högerhållare och högerskär (RG) i vänsterhållare.



3) Right-hand inserts (RG) are used in right-hand holders and left-hand inserts (LG) are used in left-hand holders.

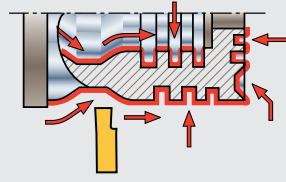
3) Rechtsschneiden (RG) werden in Rechtshaltern und Linksschneiden (LG) in Linkshaltern verwendet.

3) Högerskär (RG) används i högerhållare och vänsterskär (LG) i vänsterhållare.

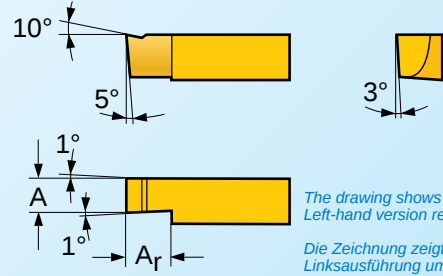
E

Recommendations
Empfehlungen
Rekommendationer

Page: **A45-A47, A50-A57**
Seite:
Sida:



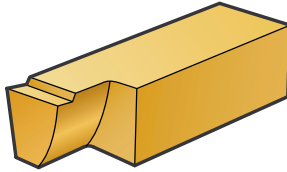
Application:
Gebrauch:
Tillämpning:



The drawing shows right-hand version.
Left-hand version reversed.

Die Zeichnung zeigt Rechtsausführung.
Linksausführung umgekehrt.

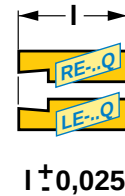
Ritningen visar högerutförande.
Vänsterutförande spegelvänt.



For holder types Für Haltertypen För hållartyper	153E 158E			A +0,15 - 0	Ar	TNC 150 P35/M30	ALC 350 P15/ M10/K10/S10	S1V P10	SAFM P25/M20	H20 M20/K20/ S25/N20/H20	H30 M30/K30/N30
Page: Seite: Sida:	A83-A84	2 - 5	R/L E-2b R/L E-2.5b R/L E-3b R/L E-4b R/L E-5b	2,0 2,5 3,0 4,0 5,0	3,0 3,0 3,0 6,5 6,5	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■

Precision ground performance (= Q) Präzisionsgeschliffene Ausführung (= Q) Precisionsslipat utförande (=Q)

For holder types Für Haltertypen För hållartyper	153E 158E			A +0,05 - 0	Ar	TNC 150 P35/M30	ALC 350 P15/ M10/K10/S10	S1V P10	SAFM P25/M20	H20 M20/K20/ S25/N20/H20	H30 M30/K30/N30
Page: Seite: Sida:	A83-A84	2 - 5	R/L E-2bQ R/L E-2.5bQ R/L E-3bQ R/L E-4bQ R/L E-5bQ	2,0 2,5 3,0 4,0 5,0	3,0 3,0 3,0 6,5 6,5	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■

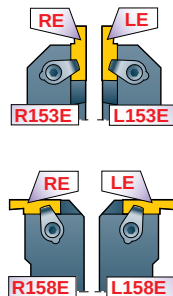


Ordering example:

Bestellbeispiel:

Beställningsexempel:

RE-3b ALC 350 P15/K15



Right-hand inserts (RE) are used in right-hand holders and left-hand inserts (LE) are used in left-hand holders.

Rechtsschneiden (RE) werden in Rechtshaltern und Linksschneiden (LE) in Linkshaltern verwendet.

Högerskär (RE) används i högerhållare och vänsterhållare (LE) i vänsterhållare.

■ Stocked - Ab Lager - Lagerfört

□ Limited stocked - Begrenzt ab Lager - Begränsat lagerfört

Selection of insert grade, page:
Wahl der Schneidsorte, Seite:
Val av skärsort, sida:

A124-A128

Cutting data, page:
Schnittdaten, Seite:
Skärdata, sida:

A158-A169

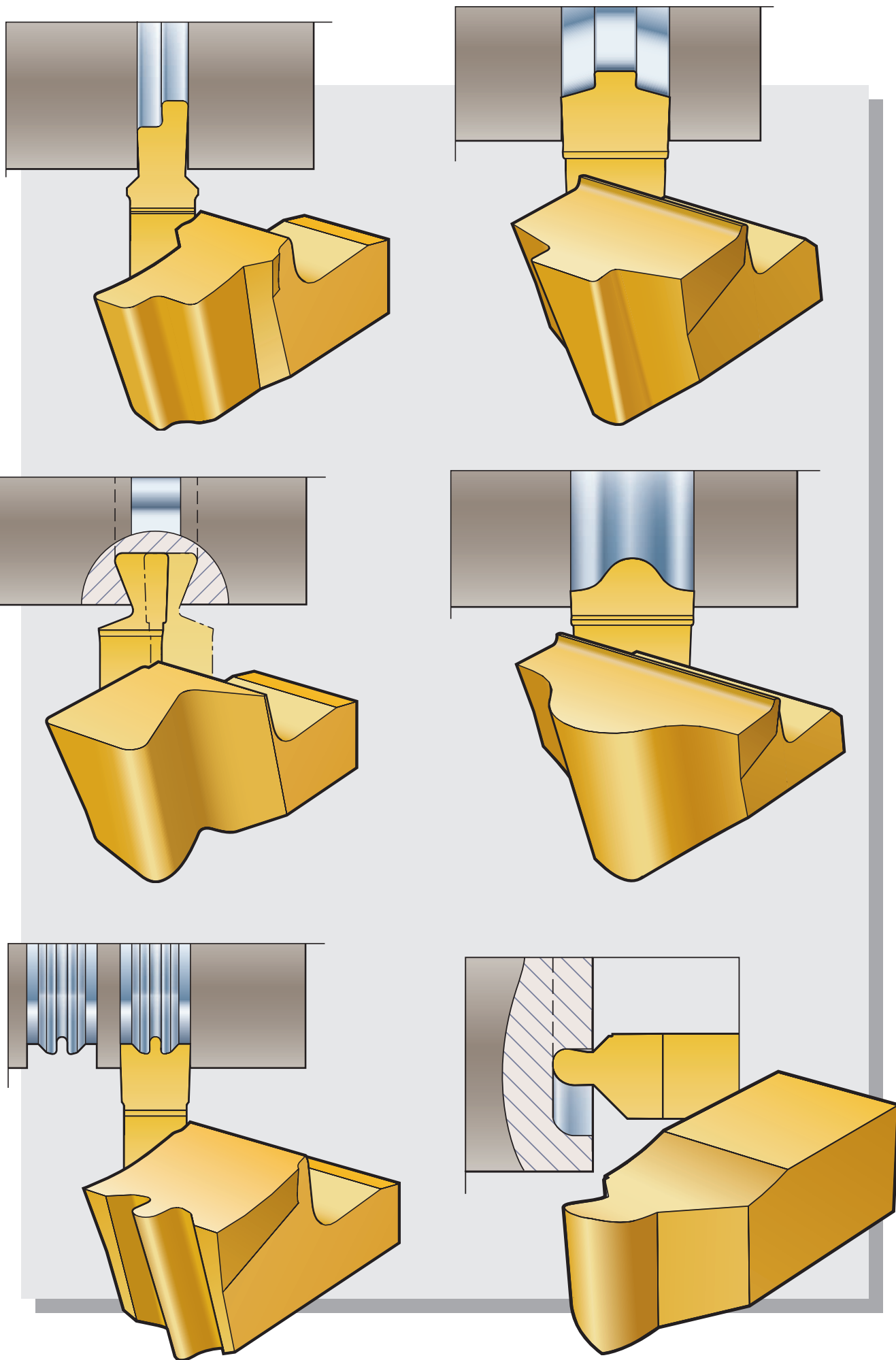
Page:
Seite:
Sida:

A140

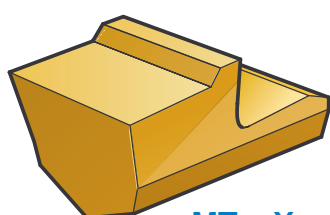
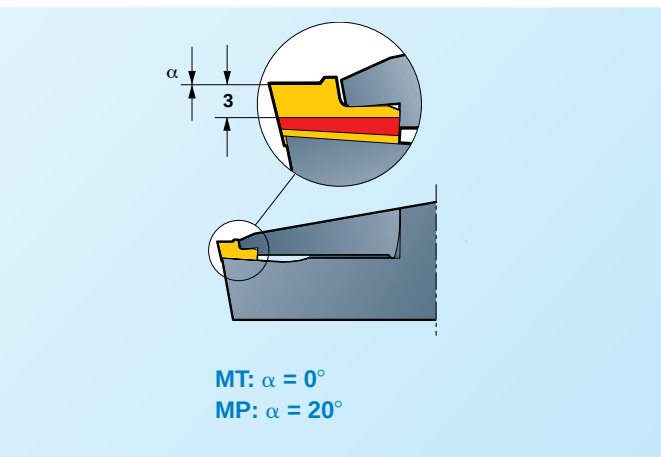
● Coated carbide grades ● Beschichtete Hartmetallsorten
● Belagda hårdmetallsorter.



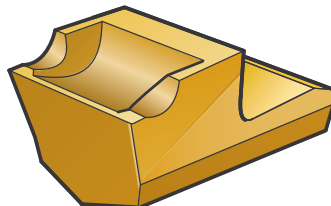
CVD = Chemical Vapour Deposition
PVD = Physical Vapour Deposition



MT...X MP...X Recommendations Empfehlungen Rekommendationer Page: Seite: Sida: A44-A58	
Application: Gebrauch: Tillämpning: MT...X	



MT...X



MP...X

Insert type MT...X and MP...X

For **MIRCONA** face grooving tools types **152S**, **152S-00**, **153S**, **158S** and **159S** designed for use within the diameter range **Dy = 30–35 mm**, it is necessary that the standard insert type **MT** and **MP**, in cutting widths 4 and 5 mm, is modified.

Modified inserts will get an additional designation "**X**" following the standard designation (e.g. **MT-4X**).

The insert type **MT...X** or **MP...X** is ground from standard **MT**'s and **MP**'s respectively. The inserts will always be supplied with chamfers on both sides. This means that the "**MT...X**" and "**MP...X**" can be used both in right- and left-hand holders.

Schneiden MT...X und MP...X

MIRCONAs Stirnstechwerkzeuge in Schneidbreiten 4 und 5 mm der Serie **152S**, **152S-00**, **153S**, **158S** und **159S** die geeignet sind innerhalb dem Durchmesserbereich **Dy = 30–35 mm** Verwendung zu finden, dürfen nur mit modifizierten **MT** oder **MP** Schneiden verwendet werden.

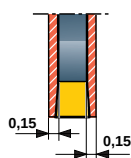
Schneiden, die modifiziert sind, erhalten eine Zusatzbezeichnung „X“ nach der Standardbezeichnung (Beispiel **MT-4X**). Der Schneidentyp **MT...X** oder **MP...X** wird von der Standardausführung **MT** respektive **MP** geschliffen, wobei die Schneide immer mit Fasen auf beiden Seiten versehen wird. Das bedeutet, daß die **MT...X** und **MP...X** Ausführung sowohl in Links- als auch in Rechthaltern verwendet werden kann.

Skärtyp MT...X och MP...X

För **MIRCONA**s axiella spårsvärningsverktyg typ **152S**, **152S-00**, **153S**, **158S** och **159S** avsedda för diameterområdet **Dy = 30–35 mm**, krävs att skärtyp **MT** eller **MP**, i skärbredder 4 och 5 mm, modifieras.

Skär modifierade enligt ovanstående erhåller en tilläggsbeteckning "**X**" efter standardbeteckningen (ex **MT-4X**).

Skärtyp **MT...X** eller **MP...X** slipas från standardutförande **MT** respektive **MP**, varvid skären alltid förses med faser på bägge sidor. Detta innebär att "**MT...X**"- och "**MP...X**"-utförandet går att använda i såväl vänster- som högerhållare.



1) Clamp and tool must be ground 0.15 mm on both sides.

1) Der Spannhaken und die Werkzeugzunge müssen auf beiden Seiten 0,15 mm geschliffen werden.

1) Spännhake och verktygstunga måste slipas 0,15 mm på båda sidor.

Ordering example:
Bestellbeispiel:
Beställningsexempel:

MT-4X TNC 150 P35

For holder types Für Haltertypen För hållartyper	152S/30–35 152S-00/30–35 153S/30–35 158S/30–35 159S/30–35			A	r	TNC 150 P35/M30	TNC 250 P25/M20/K25	SAFM P25/M20	FG 20 P30/M25/ K20/S25/N25/H25	H20 M20/K20/ S25/N20/H20	H30 M30/K30/N30	
		4 5	MT-4X MT-5X	4,1 +0,15 5,1 –0	0,25	■	□	■		■	■	Other grades are ground on request. See page A130 and A135.
	A89, A90, A96, A101, A102, A110, A111, A115	4 4 5	MT-3.7r1X MT-4r1X MT-5r1X	3,9 +0 4,2 –0,15 5,1	1	■		■		■		Andere Sorten werden auf Wunsch geschliffen. Siehe Seite A130 und A135.
		4 4 5	MP-40X MP-4X MP-5X	4,0 +0,15 4,1 –0 5,1	0,25	■		■	■	■		Andra sorter slipas på begäran. Se sid A130 och A135.

■ Stocked - Ab Lager - Lagerfört

□ Limited stocked - Begrenzt ab Lager - Begränsat lagerfört

Selection of insert grade, page:
Wahl der Schneidsorte, Seite:
Val av skärsort, sida:

A124–A128

Cutting data, page:
Schnittdaten, Seite:
Skärdata, sida:

A158–A169

Page:
Seite:
Sida:

A140

MT-..Z

MP-..Z

Recommendations

Empfehlungen

Rekommendationer

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Seite:

Sida:

A44-A58

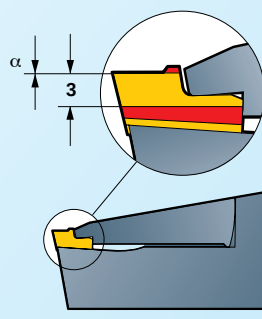
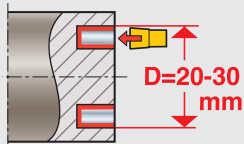
Application:

Grbrauch:

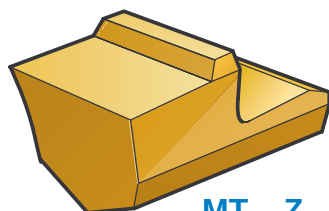
Tillämpning:

MT-..Z

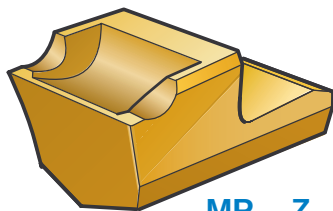
MP-..Z



MT: $\alpha = 0^\circ$
MP: $\alpha = 20^\circ$



MT-..Z



MP-..Z

Insert type MT-..Z and MP-..Z

For **MIRCONA** face grooving tools types **152S**, **152S-00**, **153S**, **158S** and **159S** designed for use within the diameter range **Dy = 20–30 mm**, it is necessary that the standard insert type **MT** and **MP**, is modified.

Inserts modified in accordance with the above will get an additional designation **“Z”** and are made in left(L)- as well as right(R)-hand version, whereby left-hand inserts are used in left-hand holders and right-hand inserts are used in right-hand holders (e.g. **RMT-3Z**).

Schneiden MT-..Z und MP-..Z

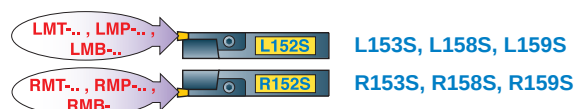
MIRCONAs Stirnstechwerkzeuge in Schneidbreiten der Serie **152S**, **152S-00**, **153S**, **158S** und **159S** die geeignet sind innerhalb dem Durchmesserbereich **Dy = 20–30 mm** Verwendung zu finden, dürfen nur mit modifizierten **MT** und **MP** Schneiden verwendet werden.

Schneiden, die in solcher Art modifiziert sind, erhalten eine Zusatzbezeichnung **„Z“** und werden sowohl in Links(L)- als auch Rechts(R)-Ausführung hergestellt, wobei Linksschneiden in Linkshaltern und Rechtsschneiden in Rechtshaltern verwendet werden (z.B. **RMT-3Z**).

Skärtyp MT-..Z och MP-..Z

För **MIRCONA**s axiella spårsvärningsverktyg typ **152S**, **152S-00**, **153S**, **158S** och **159S** avsedda för diameterområdet **Dy = 20–30 mm**, krävs att skärtyp **MT** eller **MP** i standardutförande modifieras.

Skär modifierade enligt ovanstående erhåller en tillägsbeteckning **“Z”** och görs såväl i vänster(L)- som höger(R)-utförande, varvid vänsterskär används i vänsterhållare och högerskär används i högerhållare (ex. **RMT-3Z**).



For holder types Für Haltertypen För hållartyper	152S/20–30 152S-00/20–30 153S/20–30 158S/20–30 159S/20–30		A	r	TNC 150 P35/M30	TNP 175 P25/M25	TNP 2105 P30/ M30/K25/S30/N25	TNP 2255 P20/ M20/K15/S20/N15	SAFM P25/M20	S6 P40/M30	FG 20 P30/M25/ K20/S25/N25/H25	H20 M20/K20/ S25/N20/H20	
	2 2,5 3	R/LMT-20Z R/LMT-25Z R/LMT-3Z	2,0 2,5 3,2	+0,15 –0	0,25	■	■	■	■	■	■	■	Other grades are ground on request. See page A130 and A135.
	2,5 3	R/LMT-2.3r0.5Z R/LMT-3.1r0.5Z	2,5 3,3	+0 –0,15	0,50	■	■	■	■	■	■	■	Andere Sorten werden auf Wunsch geschliffen. Siehe Seite A130 und A135.
	2 2,5 3 3	R/LMP-20Z R/LMP-25Z R/LMP-3Z R/LMP-30Z	2,0 2,5 3,2 3,0	+0,15 –0	0,25	■	■	■	■	■	■	■	Andra sorter slipas på begäran. Se sid A130 och A135.

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- Coated carbide grades ● Beschichtete Hartmetallsorten
- Belagda hårdmetallsorter.

CVD
TiN/TiCN/
TiN

PVD
TiN

CVD = Chemical Vapour Deposition
PVD = Physical Vapour Deposition

Ordering example:
Bestellbeispiel:
Beställningsexempel:

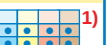
LMP-3Z TNC 150 P35

Cutting data for parting-off, radial and axial grooving, profiling and turning
Schnittdaten für das Abstechen, axiales und radiales Nutdrehen, Profilieren und Drehen
Skärdata för avstickning av rör, axiell och radiell spårvarvning, profilvarvning och svarvning

A

ISO P

All types of steels, cast steels and long chipping cast irons except austenitic/duplex stainless steels
 Stähle, Stahlguss und langspanender Guss aller arten ohne austenitische/duplexe rostfreie Stähle
 Alla typer av stål, gjutstål och långspånande gjutjärn utom austenitiska/duplexa rostfria stål

MIRCONA no.-Nr.-nr	Material	Werkstoff	Material	Brinell hardness Brinell Härte Hårdhet Brinell	Specific cutting force Spez. Schnittkraft Specifik skärkraft K _C 0,4 N/mm ²	 ALC 355 P15/M15/K15/S15	 TNP 2255 P20/M20/K15/S20 /N15	 TNP 2105 P30/M30/K25/S30 /N25	 TNC 150 P30/M30	 TNC 100 P40/M40			
						 ALC 350 P15/M10/K10/S10	f _n mm/rev						
							0,05 - 0,3	0,05 - 0,3	0,05 - 0,3	0,05 - 0,3		0,05 - 0,3	
							V _C m/min					–	
1.1 1.2 1.3	Carbon steel	0,2 %C 0,45 %C 0,83 %C	Un- legierter Stahl	0,2 %C 0,45 %C 0,83 %C	Kolstål	0,2 %C 0,45 %C 0,83 %C	000–150 000–190 000–250	2060 2160 2260	250 - 200 230 - 180 220 - 170	230 - 190 210 - 170 200 - 150	210 - 170 180 - 145 165 - 125	175 - 140 155 - 120 130 - 105	145 - 120 130 - 100 110 - 80
1.4 1.5 1.6 1.7 1.8	Alloy steel		Legierter Stahl		Legerat stål		000–200 200–250 250–325 325–375 375–425	2060 2450 2700 2850 2940	245 - 195 215 - 165 185 - 140 145 - 125 70 - 60	230 - 180 195 - 150 170 - 130 130 - 110 60 - 40	165 - 125 155 - 120 120 - 95 105 - 85 60 - 50	125 - 105 120 - 90 95 - 80 80 - 65 60 - 55	110 - 80 95 - 70 95 - 75 55 - 40 50 - 45
1.9 1.10 1.11 1.12	Stain- less steel	Ferritic Martensitic	Rost- bestän- diger Stahl	Ferr. Mart.	Ferritiskt Martensitiskt stål		135–175 175–225 275–325 375–425	2260 2700 2940	220 - 180 215 - 165 160 - 140 –	200 - 150 200 - 150 145 - 130 70 - 50	190 - 150 180 - 140 130 - 110 50 - 40	170 - 140 165 - 130 120 - 105 55 - 45	145 - 120 135 - 110 105 - 75 45 - 40
1.13 1.14 1.15 1.16	Cast steel	Carbon Alloyed	Unlegiert Legiert		Kol- stål Legerat		000–150 150–200 200–250 250–300	1770 1960 2160 2350	195 - 150 155 - 120 125 - 100 100 - 70	175 - 140 140 - 105 105 - 85 90 - 60	180 - 150 140 - 115 120 - 95 80 - 60	150 - 120 115 - 75 100 - 70 75 - 60	130 - 100 100 - 70 90 - 60 50 - 40

ISO M

All types of austenitic/duplex stainless steels
 Austenitische/duplexe rostfreie Stähle aller Arten
 Alla typer av austenitiskt/duplext rostfritt stål

MIRCONA no- Nr. nr	Material	Werkstoff	Material	Brinell hardness Brinell Härte Hårdhet Brinell	Specific cutting force Spez. Schnittkraft Specifik skårkraft K _C 0,4 N/mm ²	 ¹⁾	 ¹⁾	 ¹⁾	 ¹⁾	 ¹⁾		
						ALC 355 P15/M15/K15/S15	TNC 250 P25/M20/K25	TNC 150 P30/M30	TNC 100 P40/M40			
						ALC 350 P15/M10/K10/S10	TNP 2255 P20/M20/K15/S20 /N15	TNP 2105 P30/M30/K25/S30 /N25				
						f _n mm/rev				—		
						0,05 - 0,3				0,05 - 0,3		
V _C m/min				—								
2.1	Stainess steel:	Rostbeständiger Stahl:	Rostfritt stål:	135-200	2550	175 - 135	160 - 130	160 - 140	140 - 120	130 - 100		
2.2	Austenitic Aust. hardened	Austenitisch Aust. gehärtet	Austenitiskt Aust. hårdat	300-330	3550	90 - 60	80 - 50	80 - 50	70 - 55	60 - 50		
2.3	Duplex aust./ferr.	Duplex aust./ferr.	Duplex aust./ferr.	230-270	2800	120 - 90	110 - 90	110 - 90	105 - 85	90 - 70		

● Coated carbide grades ● Beschichtete Hartmetallsorten
● Belagda hårdmetallsorter.

 CVD
TiN/TiCN/
TiN
 CVD
TiN/TiCN/
Al₂O₃/TiN
CVD = Chemical Vapour Deposition
PVD = Physical Vapour Deposition

 PVD
TiN

 PVD
TiAlN

 Uncoated grades
● Unbeschichtete Sorten
● Obelagda sorter

 Cermet

● Ceramic grades ● Keramiksor-
● Keramiska sorter.

 Al₂O₃

 Si₃N₄ + TiN

 Al₂O₃ + TiC

f_n = Feed, mm/rev
 f_n = Vorschub, mm/U
 f_n = Matning, mm/varv

V_c = Cutting speed, m/min
 V_c = Geschwindigkeit, m/Min
 V_c = Skärhastighet, m/min

Page:
1) Seite:
Sida:

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	 S1V P10	 S6 P40/M30	 M4 P50/M40	 CER 500 ²⁾ P15/M15	 CEW 100 (P05/K05)	 CEB 250 P10/K10/S10 /H10
f_n mm/U				–		f_n mm/varv
	0,05 - 0,2	0,05 - 0,3	0,05 - 0,3	0,05 - 0,3	0,05 - 0,15	0,05 - 0,15
V_c m/Min				–		V_c m/min
	225 - 200 190 - 160 180 - 155	110 - 90 90 - 70 85 - 65	80 - 65 60 - 45 55 - 40	250 - 225 240 - 210 230 - 200	1000 - 650 800 - 500 600 - 350	900 - 600 700 - 400 500 - 300
	180 - 155 170 - 140 135 - 110 115 - 100 70 - 60	85 - 65 70 - 55 65 - 55 45 - 40 –	55 - 40 45 - 30 35 - 30 25 - 20 20 - 15	250 - 225 225 - 190 200 - 160 150 - 115 80 - 65	800 - 450 700 - 350 600 - 300 – –	700 - 350 600 - 300 500 - 200 300 - 150 200 - 100
	190 - 165 110 - 90 80 - 65 70 - 60	110 - 90 100 - 80 80 - 75 –	– – 60 - 50 –	– 220 - 195 170 - 145 –	– – – –	– – – –
	110 - 90 90 - 65 80 - 70 60 - 45	105 - 80 80 - 65 65 - 55 40 - 35	65 - 55 55 - 45 45 - 35 40 - 35	200 - 180 160 - 140 130 - 110 –	450 - 350 400 - 300 300 - 250 250 - 150	400 - 300 350 - 280 270 - 220 220 - 130

Selection of cutting geometry
and feed, page:

Wahl der Schneidengeometrie
und Vorschub, Seite:

Val av skärgeometri
och matning, sid:

A44-A58

Selection of carbide grade, page:
Wahl der Hartmetallsorte, Seite:

Val av hårdmetallsort, sid:

A124-A128

Selection of ceramic grade:
Wahl der Keramiksorte:
Val av keramiksor:

A126-A128, A144

Recommendations, page:
Empfehlungen, Seite:
Rekommendationer, sid:

A158-A163



Contd. cutting data for parting-off, radial and axial grooving, profiling and turning
Forts. Schnittdaten für das Abstechen, axiales und radiales Nutendrehen, Profilieren und Drehen
Forts.skärdata för avstickning av rör, axiell och radiell spårvarvning, profilvarvning och svarvning

A

ISO K All types of short-chipping cast iron Kurzspanender Guss aller arten Alla typer av kortspånande gjutjärn								
MIRCONA no- Nr- nr	Material	Werkstoff	Material	Brinell hardness Brinell Härte Hårdhet Brinell	Specific cutting force Spez. Schnittkraft Specifik skärkraft	 ALC 355 P15/M15/K15/S15  ALC 350 P15/M10/K10/S10 f_n mm/rev 0,05 - 0,3 V_c m/min		
3.1 3.2	Malleable iron short-chipping (ferr.) long-chipping (perl.)	Temperguß kurzspanend (ferr.) langspanend (perl.)	Aducergods kortspånande (ferr.) långspånande (perl.)	110-145 200-250	1080 980	220 - 1720 235 - 200		
3.3	Cast iron, low tensile, grey	Niedrig leg, Grauguß	Låghållfast grått gjutjärn	180	1080	270 - 210		
3.4	Cast iron, high tensile, grey, alloy	Leg. Grauguß, hohe Fest.	Höghållfast legerat grått gjutjärn	250	1470	195 - 170		
3.5 3.6	Nodular SG iron ferritic perlitic	Kugelgraphitguß ferritisch perlitisch	Nodulärt gjutjärn, segjärn ferritiskt perlitiskt	160 250	1080 1770	150 - 120 145 - 125		

ISO N All types of non-ferrous metals and non-metallic materials NE-Metalle aller Arten und nicht metallische Materialien Alla typer av icke-järnmetaller och icke metalliska material								
MIRCONA no- Nr- nr	Material	Werkstoff	Material	Brinell hardness Brinell Härte Hårdhet Brinell	Specific cutting force Spez. Schnittkraft Specifik skärkraft	 TNP 2255 P20/M20/K15/S20 /N15 f_n mm/rev 0,05 - 0,3 V_c m/min		
5.1 5.2	Magnesium	Magnesium	Magnesium	40-60 HRb 60-90 HRb	— —	600 - 480 500 - 380		
5.3 5.4	Elektrolytic copper Free cutting copper Pb > 1%	Elektrolytkupfer Automatkupfer Pb > 1%	Elektrolytisk koppar Friskärande koppar Pb > 1%	50-85 90	1080 700	360 - 250 700 - 300		
5.5 5.6 5.7 5.8	Bronze-brass-alloys: lead alloy brass, red brass phosphor-bronze	Bronze-Messing-Legierungen: Bleileg. Automatenqualität Messing, Rotguss Phosphorbronze	Brons/Mässinglegeringar: blylegeringar mässing, rödgods fosforbrons	120-200 80-150 60-110 85-110	— 690 740 1720	280 - 180 480 - 340 410 - 280 200 - 130		
5.9 5.10 5.11	Aluminium alloys: non-heat-treatable heat-treatable	Aluminiumlegierungen: nicht wärmebehandlungsfähig wärmebehandlungsfähig	Aluminiumlegeringar: icke wärmebehandlingsbara värmebehandlingsbara	150-200 30-80 80-120	— 490 690	460 - 360 2600 - 1900 1100 - 750		
5.12 5.13	Aluminium alloys (cast): non-heat-treatable heat-treatable	Aluminiumgusslegierungen: nicht wärmebehandlungsfähig wärmebehandlungsfähig	Gjutna aluminiumlegeringar: icke wärmebehandlingsbara värmebehandlingsbara	100 125	740 880	950 - 650 360 - 230		
5.14 5.15 5.16 5.17 5.18 5.19	Hard rubber, ebonite Polyamid (nylon) Polyacetal (delrin) Teflon PVC Akrylglass (plexiglas)	Hartgummi, Ebonite Polyamid (Nylon) Polyacetal (Delrin) Teflon PVC Akrylglass (Plexiglas)	Hårt gummi, ebonit Polyamid (nylon) Polyacetal (delrin) Teflon PVC Akrylglass (plexiglas)			— — — — — —		

● Coated carbide grades ● Beschichtete Hartmetallsorten

● Belagda hårdmetallsorter



- Uncoated grades
- Unbeschichtete Sorten
- Obelagda sorter



Cermet

CVD = Chemical Vapour Deposition
PVD = Physical Vapour Deposition

● Ceramic grades ● Keramiksor

● Keramiska sorter.



● Diamond, boron nitride

● Diamant, Bornitrid

● Diamant, bornitrid



	 TNP 2255 P20/M20/K15/S20/N15	 TNP 2105 P30/M30/K25/S30/N25	 TNC 250 P25/M20/K25	 H10 K10/N10	 FG 20 P30/M25/K20/S25/N25/H25	 H20 M20/K20/S25/N20/H20	 H30 M30/K30/N30	 CEB 250 P10/K10/S10/H10
	 CEW 100 (P05/K05)	 CES 060 K10/S15/H15	 BNE 800*) K10/H10					
	f_n mm/U				f_n mm/varv			
	0,05 - 0,3	0,05 - 0,3	0,05 - 0,3	0,05 - 0,3	0,05 - 0,3	0,05 - 0,15	0,05 - 0,15	0,1 - 0,25
	V_c m/Min				V_c m/min			
	190 - 150 210 - 170	150 - 120 180 - 160	95 - 60 100 - 65	100 - 70 70 - 40	80 - 60 55 - 35	750 - 500 700 - 450	650 - 450 600 - 400	— 900 - 350
	240 - 190	170 - 125	110 - 80	90 - 40	70 - 30	800 - 500	700 - 450	900 - 350
	170 - 130	115 - 100	90 - 60	70 - 50	55 - 25	750 - 400	650 - 350	900 - 350
	140 - 120 130 - 110	135 - 105 115 - 100	100 - 65 90 - 60	70 - 50 55 - 40	50 - 40 40 - 30	600 - 250 450 - 250	600 - 250 550 - 350	— 900 - 350

*) Perlitic nodular cast iron, rupture strength ≥ 600 N/mm².

Perlitic cast iron, free ferrite < 5-10%.

Perlitischer Kugelgraphitguß, Bruchfestigkeit ≥ 600 N/mm².

Perlitischer Guß, freiem Ferrit < 5-10%.

Perlitiskt nodulärt gjutjärn, brottgräns ≥ 600 N/mm².

Perlitiskt gjutjärn, fri ferrit < 5-10 %.

	 TNP 2105 P30/M30/K25/S30/N25	 H10 K10/N10	 FG 20 P30/M25/K20/S25/N25/H25	 H20 M20/K20/S25/N20/H20	 H30 M30/K30/N30	 PDE 1000 N05
	f_n mm/U		f_n mm/varv			
	0,05 - 0,3	0,05 - 0,3	0,05 - 0,3	0,05 - 0,3	0,05 - 0,15	
	V_c m/Min		V_c m/min			
	550 - 460 450 - 360	— —	360 - 280 310 - 250	250 - 180 200 - 150	1000 - 2500 1000 - 2500	
	320 - 250 600 - 300	150 - 125 300 - 150	135 - 115 270 - 100	100 - 60 200 - 80	400 - 200 800 - 300	
	235 - 215 430 - 290 360 - 210 175 - 140	180 - 90 380 - 300 330 - 210 140 - 100	150 - 70 350 - 250 300 - 160 110 - 80	120 - 40 250 - 150 250 - 100 80 - 50	300 - 200 700 - 500 400 - 200 300 - 100	
	430 - 340 2400 - 1500 1000 - 650	400 - 340 2200 - 1350 800 - 450	320 - 220 1100 - 850 350 - 280	250 - 150 800 - 600 300 - 220	1000 - 150 2500 - 150 2500 - 150	
	850 - 500 300 - 210	770 - 450 230 - 140	350 - 300 120 - 90	300 - 250 70 - 50	2500 - 150 2500 - 150	
	— — — — — —	180 - 145 160 - 120 125 - 90 120 - 90 200 - 160 130 - 100	160 - 130 140 - 110 110 - 90 100 - 90 180 - 150 110 - 100	120 - 80 110 - 60 70 - 40 50 - 30 140 - 100 70 - 40	700 - 200 700 - 200 700 - 200 700 - 200 700 - 200 700 - 200	

f_n = Feed, mm/rev
 f_n = Vorschub, mm/U
 f_n = Matning, mm/varv

V_c = Cutting speed, m/min
 V_c = Geschwindigkeit, m/Min
 V_c = Skärhastighet, m/min

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Selection of cutting geometry and feed, page:

Wahl der Schneidengeometrie und Vorschub, Seite:

Val av skärgeometri och matning, sid:

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Selection of carbide grade, page: Wahl der Hartmetallsorte, Seite: Val av hårdmetallsort, sid:

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Selection of ceramic grade, page: Wahl der Keramiksor

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Selection of diamond and boron nitride grade, page: Wahl der Diamant- und Bornitridsorte, Seite: Val av diamant- och bornitridsort, sid:

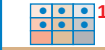
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Contd. cutting data for parting-off, radial and axial grooving, profiling and turning
Forts. Schnittdaten für das Abstechen, axiales und radiales Nutdrehen, Profilieren und Drehen
Forts.skärdata för avstickning av rör, axiell och radiell spårvarvning, profilvarvning och svarvning

A

ISO S		All types of heat-resistant Ni-, Co-, Fe-, and Ti-alloys Warmfeste Ni-, Co-, Fe-, und Ti-Legierungen aller Arten Alla typer av varmhållfasta Ni-, Co-, Fe-, och Ti-legeringar								
MIRCONA no. Nr. nr	Material – Werkstoff Material	Brinell hardness	 ALC 355 P15/M15/K15/S15	 TNP 2255 P20/M20/K15/S20 /N15	 TNP 2105 P30/M30/K25/S30 /N25	 FG 20 P30/M25/K20/S25 N25/H25	 H20 M20/K20/S25/N20/ H20	 CEB 250 P10/K10/S10 /H10	 CES 060 K10/S15/H15	
	Commercial designation Handelsübliche Bezeichnung Kommersiell beteckning	Brinell Härte Hårdhet Brinell	f_n mm/rev			f_n mm/U			f_n mm/varv	
			0,1 - 0,2	0,1 - 0,2	0,1 - 0,2	0,1 - 0,2	0,1 - 0,2	0,1 - 0,2	0,1 - 0,15	
			V_c m/min	V_c m/Min			V_c m/min			
4.1	Fe leg:									
4.1	V 57, A 286	S 140	150 - 130	140 - 120	120 - 100	95 - 80	60 - 50	–	–	
4.1	Incoloy 800, 801	S & A 245-315	175 - 160	150 - 130	130 - 110	110 - 90	70 - 60	–	–	
4.1	17-4 PH	S 265-325	180 - 165	170 - 150	150 - 130	115 - 105	–	–	–	
	17-7 PH	S & A 330-370	110 - 95	105 - 90	100 - 80	80 - 65	–	–	–	
4.1	Maraging steels - Künst- lich gealterte Stähle - Maråldrande stål 120, 180, 200, 250, 300, 350	N 255-315	180 - 150	160 - 140	140 - 120	105 - 95	–	–	–	
	120, 180	M 350-425	100 - 85	90 - 80	80 - 65	60 - 50	–	–	–	
	200, 250, 300, 350	M 490-525	–	75 - 60	50 - 45	40 - 30	30 - 25	–	–	
4.2	Ni leg:		f_n mm/rev	f_n mm/U			f_n mm/varv			
			0,1 - 0,15	0,1 - 0,15	0,1 - 0,15	0,1 - 0,15	0,1 - 0,15	0,1 - 0,15	0,05 - 0,15	
			V_c m/min	V_c m/Min			V_c m/min			
4.2	Hastolloy B, C, X	N 170-235	90 - 75	70 - 60	60 - 50	50 - 40	25 - 20	300 - 200	200 - 100	
4.2	Astroloy, Rene 41	S 220-280	65 - 55	55 - 45	40 - 35	30 - 25	25 - 20	300 - 200	200 - 100	
4.2	Inconel W, X, 702, 718	S 220-280	65 - 55	50 - 45	40 - 35	30 - 20	25 - 20	300 - 200	200 - 100	
4.2	TD 2	T 280	140 - 120	120 - 100	100 - 80	70 - 55	65 - 60	300 - 200	200 - 100	
4.2	Inconel 600	C 240-315	80 - 70	60 - 50	40 - 35	35 - 30	25 - 20	300 - 200	200 - 100	
4.2	Udimet 500, 700	S & A 300-345	70 - 60	55 - 45	40 - 35	30 - 25	20 - 15	300 - 200	200 - 100	
4.2	M 252 Waspalloy	S & A 370-390	70 - 60	55 - 45	40 - 35	30 - 25	20 - 15	300 - 200	200 - 100	
4.3	Co-leg:									
4.3	L 605	S 165-205 S & A 270-315	70 - 60 65 - 55	55 - 45 50 - 40	40 - 35 35 - 30	30 - 25 25 - 20	25 - 20 20 - 15	300 - 200 300 - 200	– –	
4.3	HS 21, HS 31, HS 36	G 220-280	65 - 55	50 - 40	35 - 30	25 - 20	15 - 10	300 - 200	–	
4.3	Stellite-6	360-405	55 - 45	40 - 35	25 - 20	20 - 15	15 - 10	300 - 200	–	

f_n = Feed, mm/rev
 f_n = Vorschub, mm/U
 f_n = Matning, mm/varv

V_c = Cutting speed, m/min
 V_c = Geschwindigkeit, m/Min
 V_c = Skärhastighet, m/min

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● Coated carbide grades ● Beschichtete Hartmetallsorten

● Belagda hårdmetallsorter



● Uncoated grades
● Unbeschichtete Sorten
● Obelagda sorter



CVD = Chemical Vapour Deposition
PVD = Physical Vapour Deposition

● Ceramic grades ● Keramiksor

● Keramiska sorter.



● Boron nitride
● Bornitrid
● Bornitrid



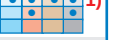
A

ISO S		All types of heat-resistant Ni-, Co-, Fe-, and Ti-alloys Warmfeste Ni-, Co-, Fe-, und Ti-Legierungen aller Arten Alla typer av varmhållfasta Ni-, Co-, Fe-, och Ti-legeringar				
MIRCONA no- nr- nr	Material – Werkstoff Material	Brinell hardness	f _n mm/rev		f _n mm/U	
	Commercial designation Handelsstübliche Bezeichnung Kommersiell beteckning	Brinell Härte	0,05 - 0,15		0,05 - 0,15	
		Hårdhet Brinell	V _c m/min		V _c m/Min	
			–		–	
4.4	Ti-leg:					
4.4	Ti 55A, Ti 75A	N 110-175	280 - 240	260 - 220	230 - 190	190 - 160
4.4	Ti 140A	N 280-330	120 - 100	100 - 80	80 - 60	65 - 55
4.4	Ti 5Al - 2,5 Sn Ti 6 - 2 - 4 - 2	N 300-350	130 - 110	110 - 90	90 - 70	70 - 60
4.4	Ti 6Al - 4V	N 300-350 S & A 350-395	120 - 100 110 - 90	100 - 80 80 - 60	85 - 65 70 - 55	65 - 55 50 - 40
4.4	Ti 6Al - 6V - 2Sn Ti 7Al - 4Mo Ti 8Al - 1Mo - 1V	N 320-350 S & A 370-415	110 - 90 100 - 80	90 - 70 80 - 60	80 - 65 60 - 50	60 - 50 45 - 35

S = Solutioned
S&A = Solutioned and aged
N = Annealed
Q&T = Quenched and tempered
M = Maraged
T = Stress relieved
C = Cold drawn
G = Cast

S = Lösungsgeglüht
S&A = Lösungsgeglüht und
gealtert
N = Angelassen
Q&T = Abgeschreckt und
angelassen
M = Künstlich gealtert
T = Spannungsentlastet
C = Kaltgezogen
G = Gegossen

S = Upplösningsbehandlat
S&A = Upplösningsbehandlat
och åldrat
N = Anlöst
Q&T = Släckhårdat och anlöst
M = Maråldrat
T = Avspänningssglöddat
C = Kalldraget
G = Gjutet

ISO H		Hard materials; all types of hardened steels and cast iron Harte Materialien; Gehärtete Stähle und guss aller Arten Hårda material; alla typer av härdade stål och gjutjärn									
MIRCONA no- Nr- nr	Material	Werkstoff	Material	Brinell hardness Brinell Härte Hårdhet Brinell	Specific cutting force Spez. Schnittkraft Specifik skärkraft K _C 0,4 N/mm ²						
						FG 20 P30/M25/K20/S25 N25/H25	H20 M20/K20/S25/N20/ H20	CEB 250 P10/K10/S10 /H10	CES 060 K10/S15/H15	BNE 500 K05/H05	BNE 800 K10/H10
						f _n mm/rev	–	f _n mm/U	–	f _n mm/varv	
						0,1 - 0,15	0,1 - 0,15	0,05 - 0,1	0,05 - 0,1	0,02 - 0,05	0,02 - 0,05
						V _C m/min	–	V _C m/Min	–	V _C m/min	
6.1	Chilled cast iron	Kokillen- hartguss	Kokillhär- dat gjutjärn	400–600 HRC	3000	20 - 15	15- 10	100 - 70	70 - 40	–	80 - 50
6.2				50–62	4000	–	10	70 - 40	40 -20	–	60 - 40
6.3	Hardened steel	Gehärtete Stahl	Härdat stål	HRC 45	3500	40 - 20	30 - 10	140 - 100	–	150 - 70	120 - 50
6.4				60	4700	–	10	80 - 40	–	150 - 70	120 - 50

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Wahl der Hartmetallsorte, Seite:
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Selection of ceramic grade, page:
Wahl der Keramiksor

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Selection of diamond and boron
nitride grade, page:
Wahl der Diamant- und
Bornitridsorte, Seite:
Val av diamant- och bornitrid-
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MIRCONA

... insert grades for parting-off and grooving
... Schneidsorten für das Abstechen und Nutdrehen
... skärsorter för avstickning och spårvarvning

ISO

		MIRCONA coated carbide Beschichtete Hartmetall belagd hårdmetall	MIRCONA uncoated carbide Beschichtete Hartmetall obelagd hårdmetall	MIRCONA ceramics Keramik keramik	MIRCONA PCD, CBN PCD, CBN PCD, CBN
– All types of steels except aust/duplex stainless steels. – Aller Arten von Stähle ohne aust/duplex rostfreie Stähle. – Alla typer av stål utom aust/duplexa rostfria stål.	01		S1V CER 500 CERMET		
	10				
	20		SAFM	CEW 075 CEB 250	
	30	ALC 350 ALC 355 TNC 250 TNP 175 TNP 2105 TNC 150 TNC 100	FG 20 S6		
	40		M4		
– All types of aust/duplex stainless steels. – Aller Arten von aust/duplex rostfreie Stähle. – Alla typer av aust/duplexa rostfria stål.	10		CER 500 CERMET		
	20		H 20 FG 20 S6 H30		
	30	ALC 350 ALC 355 TNC 250 TNP 175 TNP 2105 TNC 150 TNC 100	SAFM		
	40		M4		
– Short-chipping material – cast iron. – Kurzspanende Materialien – Guß. – Kortspånande material – gjutjärn.	01		H 10		
	10		H 20 FG 20		
	20	ALC 350 ALC 355 TNP 2105 TNC 250	H30	CEW 075 CEB 250 CES 060	BNE 500 BNE 800
	30	TNP 2255			
– All types of heat-resistant Ni-, Co-, Fe-, and Ti-alloys. – Aller Arten von warmfeste Ni-, Co-, Fe-, und Ti-Leg. – Alla typer av varmhållfasta Ni-, Co-, Fe-, och Ti-leg.	10		H 20		
	20	ALC 350 ALC 355 TNP 2255 TNP 2105	FG 20	CEB 250 CES 060	
	30				
	40				
– All types of non-ferrous metals and non metallic materials. – Aller Arten von NE-Metalle und nicht metallische Materialien. – Alla typer av icke-järnmetaller och icke metalliska material.	10	TNP 2255	H 10 H 20		
	20	TNP 2105	FG 20 H30		PDE 1000
	30				
	40				
– Hard materials; all types of hardened steels and cast iron. – Harte Materialien; aller Arten von gehärtete Stähle und Guss. – Hårda material; alla typer av stål och gjutjärn.	10		H 20		
	20		FG 20	CEB 250 CES 060	BNE 500 BNE 800
	30				
	40				

Hardness – Härte – Hårdhet

Toughness – Zähigkeit – Seghet

CVD TiN/Ti(CN)/Al₂O₃/TiN
CVD TiC/Ti(CN)/TiN

PVD TiN PVD TiAlN

Ceramics
Keramik
Keramik

Al₂O₃ Al₂O₃ + TiC Si₃N₄ Si₃N₄ + TiN

PCD CBN

A Special tools

Special tools manufactured in accordance with your requirements and instructions – **MIRCONA** can offer you specially adapted tool holders and inserts for most machining applications.

To save time and cost the extensive **MIRCONA** range on standard cutting tools is utilized, which with as few modifications as possible are converted into exactly the special purpose tools required by you, to solve your machining problems.

Sonderwerkzeuge

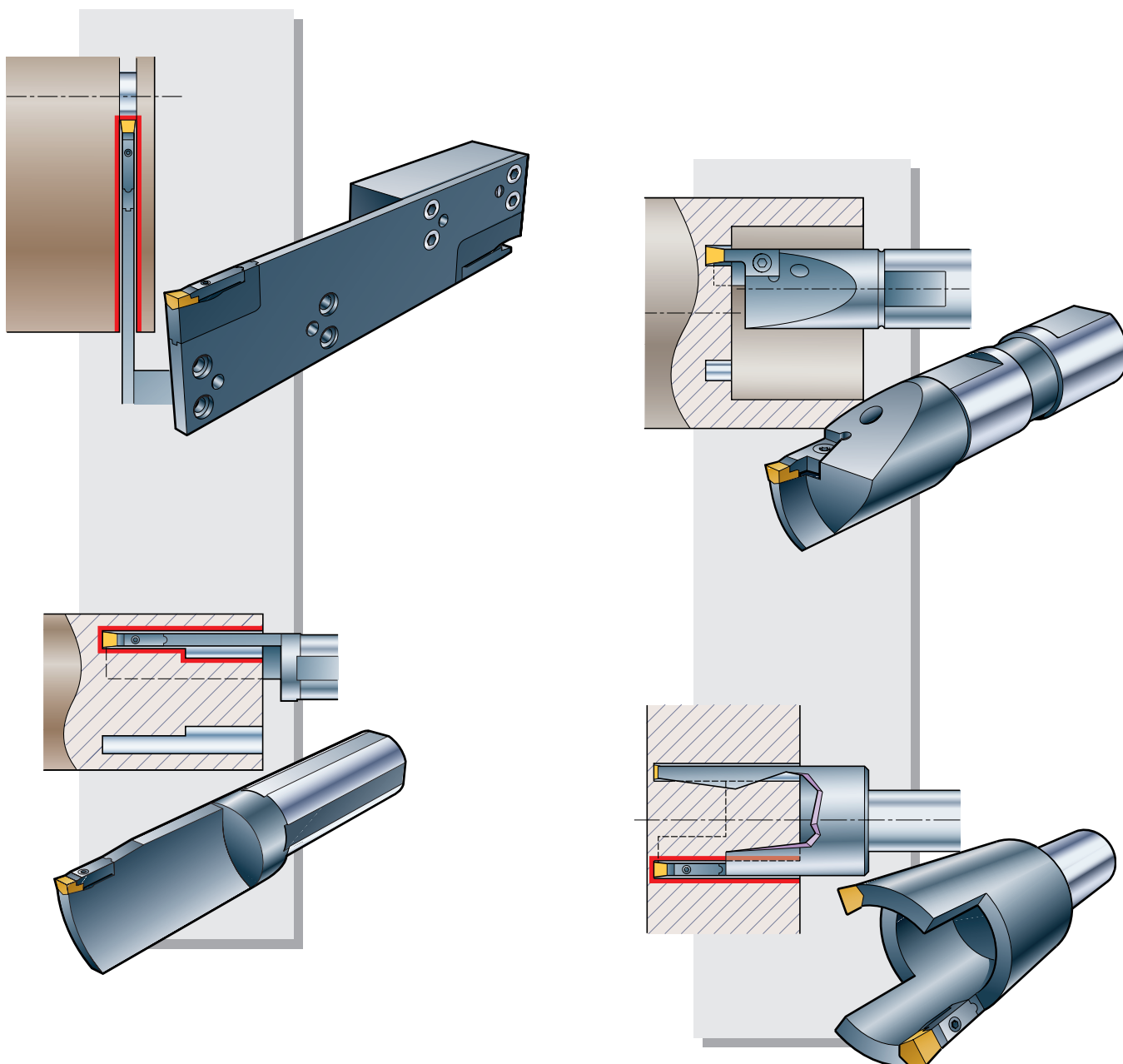
Sonderwerkzeuge, hergestellt im Einklang mit Ihren Anforderungen und Anweisungen – **MIRCONA** bietet speziell angepaßte Werkzeughalter und Schneiden für die meisten Maschinenbearbeitungsvorgänge.

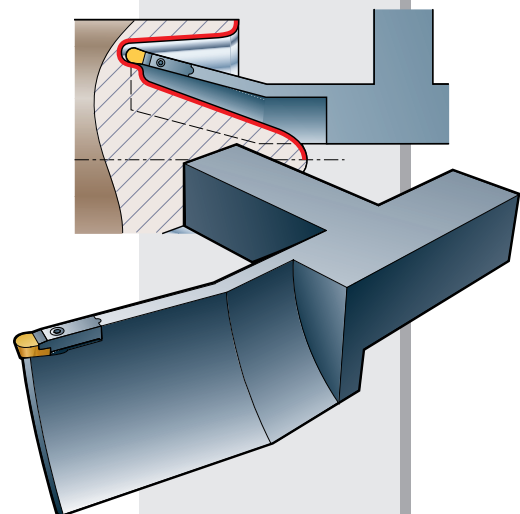
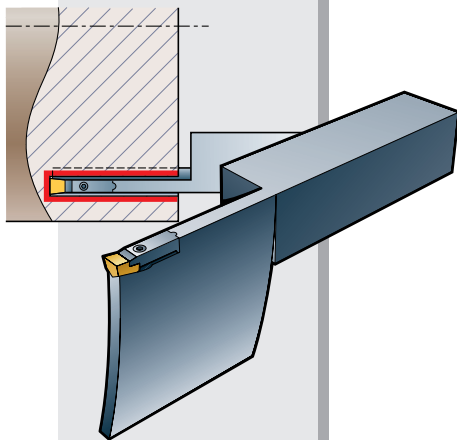
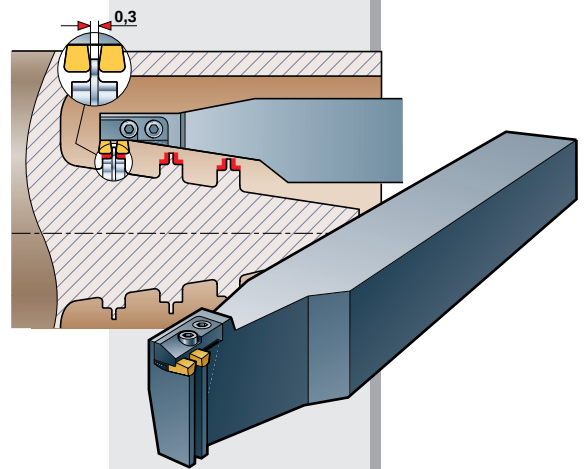
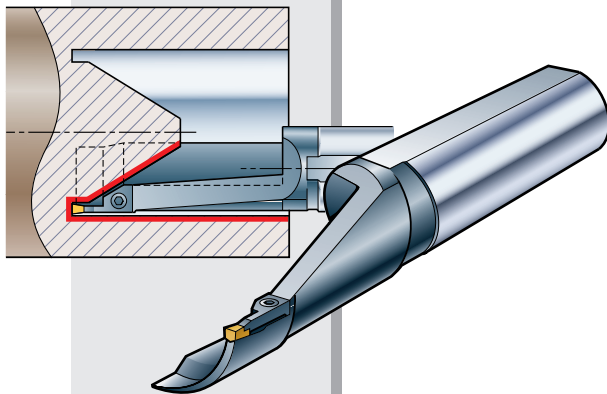
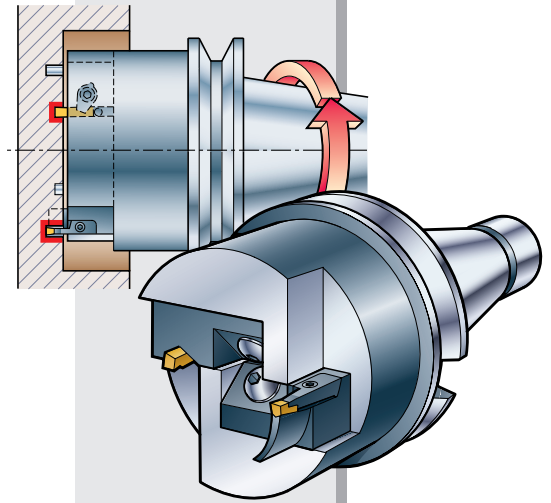
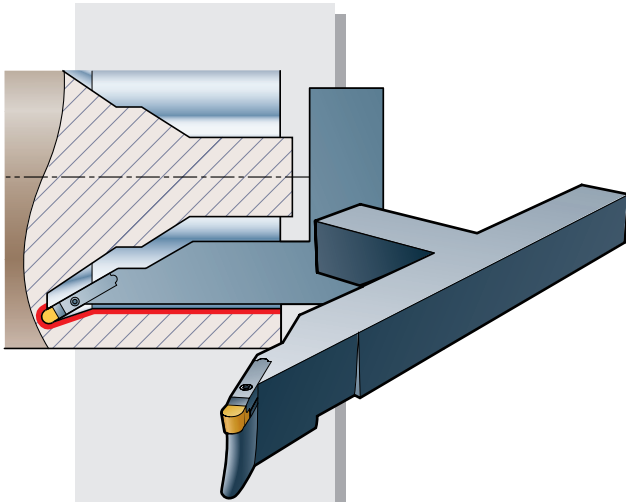
Um Zeit und Kosten zu sparen, finden Werkzeuge aus dem großen **MIRCONA** Programm von Standardzerspanungswerkzeugen Verwendung. Diese können oft mit geringfügigen Änderungen in genau das Spezialwerkzeug, das Sie benötigen, umgearbeitet werden, um Ihre Bearbeitungsprobleme zu lösen.

Specialverktyg

Specialverktyg tillverkade efter Era önskemål och instruktioner – **MIRCONA** kan erbjuda Er specialanpassade verktygshållare och vändskär för de flesta bearbetningstillämpningar.

Av tids- och kostnadsskäl utnyttjas **MIRCONA**s breda sortiment på standardverktyg som med så få modifikationer som möjligt förvandlas till just de specialverktyg som krävs för att lösa Era bearbetningsproblem.



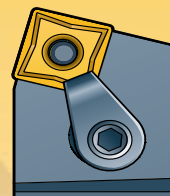




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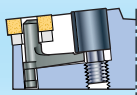
MIRCONA

Turning Tools to ISO
Drehwerkzeuge nach ISO
Svarvverktyg enligt ISO

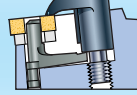




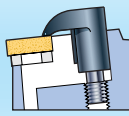
P



M



C



B

									Page Seite Sida	EB
		1616	2020	2525	3225	3232	4025	4040		
	PDHN R/L MDHN R/L CDHN R/L	11	11	11					B46	
	PCLN R/L MCLN R/L CCLN R/L	12	12	12	12	12		19	B47	EB
	PWLN R/L MWLN R/L		06 08	06 08	06 08	06 08			B48	EB
	PDJN R/L MDJN R/L CDJN R/L	11	11 15	11 15	15	15	15	15	B49	EB
	PCGN R/L MCGN R/L CCGN R/L			12		16			B49	
	PCFN R/L MCFN R/L CCFN R/L			12		16			B50	
	PTGN R/L MTGN R/L CTGN R/L	16	16	16 22	16 22	22 27		27	B50	EB
	PTFN R/L MTFN R/L CTFN R/L	16	16	16 22	22	22 27		27	B51	
	PCRN R/L MCRN R/L CCRN R/L		12	12 16	16		19		B52	
	PCBN R/L MCBN R/L CCBN R/L		12	12 16	16	16 19		19	B53	
	PCKN R/L MCKN R/L CCKN R/L		12	12	12 16	16			B53	
	PSBN R/L MSBN R/L CSBN R/L	09	09 12	12 15	12 15	15 19		19	B54	

Please note:

Holders in M-style **must** be used in combination with throw-away inserts which have an **insert height** according to ISO standard at the contact surface between the top of the clamp and the insert. If that would not be the case, as for example when using special cutting geometries with a pronounced positive rake angle, the top of the clamp will not touch the upper side of the insert and thereby the function of the M-clamping set will be negated.

Bitte beachten:

Halter in M-Ausführung dürfen **nur in Kombination** mit Wendeschneidplatten eingesetzt werden, deren **Höhe** zwischen Auflage und Spannfläche ISO-Standard entspricht.

Wenn dies nicht gegeben ist, wie z.B. bei einigen speziellen Schneidengeometrien mit betont positivem Spanwinkel, berührt die Spannhakenase die Oberseite der Schneidplatte nicht. Dadurch wird die Funktion des M-Spannsatzes vereitelt.

Observera:

Hållare i M-utförande **måste** användas i kombination med vändskär som har en **skärhöjd** enligt ISO-standard vid spännhaksnosens anliggningsyta. Om så ej är fallet, som t.ex. vid användande av speciella skärgeometrier med uttalat positiv spånvinkel, kommer spännhakens nos ej i kontakt med skärets översida och därmed omintetgörs M-spännsatsens funktion.

										Page Seite Sida	
		1616	2020	2525	3225	3232	4025	4040	5032		
		09	09 12	12 15	12 15	15 19		19		B55	
		09	09 12	12 15	12 15	15 19		19		B56	
		11	11 15	11 15	15					B57	
			15	15	15		15		15	B57	
					06		08			B58	
		16	16	16 22	22					B58	
			06	06 08	08	08				B59	
			12	12	12					B59	
				22	22					B60	
		09	09 12	12 15	12 15	15 19		19		B60	
		09	12	12	12 19	19				B61	
			09 12	12	15	19				B62	

Holders with **P**- and **M**-clamping are stocked in accordance with the range shown in the catalogue.

Holders with **C**-clamping in the **PMC**-range are not stocked. The **C**-holder is obtained in the following way:

- From the **P**-holder:
Remove the locking pin (LP) and change the clamping set (PS) for the clamping set MS in accordance with the sketch on page B16. The spare part designation on the clamping set (MS) is obtained from the table on corresponding holder size in **M**-version.

- From the **M**-holder:
Remove the locking pin (LP) in accordance with sketch on page B16.

The **MIRCONA PMC** system is patented and patent pending in many countries.

Halter mit **P**- und **M**-Spannsystem werden am Lager gehalten entsprechend der Aufstellung, die im Katalog gezeigt wird.

Halter mit **C**-Spannsystem werden in der **PMC**-Produktpalette nicht am Lager gehalten. Die **C**-Ausführung erhält man wie folgt:

- Aus dem **P**-Halter:
Entfernen Sie den Spann-
stift (LP) und wechseln Sie
den Spannsatz (PS) gegen
den Spannsatz (MS)
entsprechend der Skizze
auf Seite B16. Die
Ersatzteilbeschreibung des
Spannfingers (MS) erhalten
Sie aus der Tabelle für die
entsprechende Hal-
tergrösse in **M**-Ausführung.

- Aus dem **M**-Halter:
Entfernen Sie den Spann-
stift (LP) entsprechend der
Skizze auf Seite B16.

Das **MIRCONA PMC**-
system ist in mehreren
Ländern patentiert und
zum Patent angemeldet.

Hållare med **P**- och **M**-fast-
spänning lagerföres i över-
ensstämmelse med sorti-
mentet i katalogen.

Hållare med **C**-fastspän-
ning i **PMC**-sortimentet
lagerföres ej. **C**-utförandet
erhålls på följande sätt:

Ifrån **P**-hållaren:
Ta bort låsspinnen (LP) och
byt spannsats (PS) mot
spannsats (MS) enl skiss på
sid B16. Reservdelsbeteck-
ningen på spannsats (MS)
erhålls ifrån tabellen på
motsvarande hållarstorlek i
M-utförande.

Ifrån **M**-hållaren:
Ta bort låsspinnen (LP) enl
skiss på sid B16.

MIRCONA PMC-system är
patenterat och patentsökt
i ett flertal länder.