

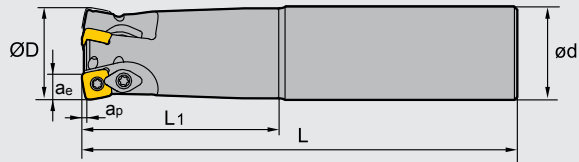


High feed milling cutters · Hochvorschubfräser

XMR01 P M K



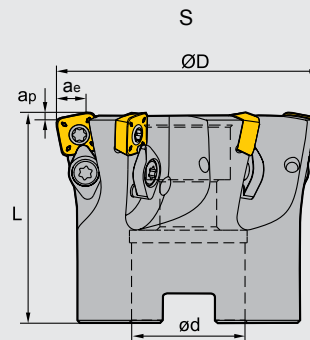
S type insert, straight shank
S Typ WSP, Zylinder Schaft



Specification of tools · Werkzeug-Beschreibung With Internal Cooling · Mit Innenkühlung

Type Typ	Stock Lager	Dimensions (mm) Abmessungen							No. of teeth Zähne	Weight Gewicht (kg)
		Ø D	ap	ae	L ₁	L	Ø d			
XMR01 -025-G25-SD09-02	●	25	1.4	8.8	60	140	25	2	0.5	
-025-G25-SD09-02C	●	25	1.4	8.8	60	140	25	2	0.5	
-032-G32-SD09-03	●	32	1.4	8.8	70	150	32	3	0.8	
-032-G32-SD09-03C	●	32	1.4	8.8	70	150	32	3	0.8	
-035-G32-SD09-03	○	35	1.4	8.8	70	150	32	3	0.8	
-035-G32-SD09-03C	○	35	1.4	8.8	70	150	32	3	0.8	
-032-G32-SD12-02	●	32	1.8	11.7	70	150	32	2	0.8	
-032-G32-SD12-02C	●	32	1.8	11.7	70	150	32	2	0.8	
-040-G40-SD12-03	●	40	1.8	11.7	70	150	40	3	1.3	
-040-G40-SD12-03C	●	40	1.8	11.7	70	150	40	3	1.3	

XMR01 P M K




Specification of tools · Werkzeug-Beschreibung With Internal Cooling · Mit Innenkühlung

Type Typ	Stock Lager	Dimensions (mm) Abmessungen						No. of teeth Zähne	Coupling Aufnahme	Weight Gewicht (kg)
		Ø D	ap	ae	L	Ø d				
XMR01 -050-A22-SD09-04	●	50	1.4	8.8	40	22	4	A	0.3	
-050-A22-SD09-04C	●	50	1.4	8.8	40	22	4	A	0.3	
-063-A22-SD09-06	●	63	1.4	8.8	40	22	6	A	0.5	
-063-A22-SD09-06C	●	63	1.4	8.8	40	22	6	A	0.5	
-063-A27-SD09-06	○	63	1.4	8.8	50	27	6	A	0.6	
-063-A27-SD09-06C	○	63	1.4	8.8	50	27	6	A	0.6	
-063-A22-SD12-05	●	63	1.8	11.7	40	22	5	A	0.5	
-063-A22-SD12-05C	●	63	1.8	11.7	40	22	5	A	0.5	
-063-A27-SD12-05	○	63	1.8	11.7	50	27	5	A	0.6	
-063-A27-SD12-05C	○	63	1.8	11.7	50	27	5	A	0.6	
-080-A27-SD12-05	●	80	1.8	11.7	63	27	5	A	0.9	
-080-A27-SD12-05C	●	80	1.8	11.7	63	27	5	A	0.9	
-100-B32-SD12-06	●	100	1.8	11.7	50	32	6	B	1.8	
-100-B32-SD12-06C	●	100	1.8	11.7	50	32	6	B	1.8	

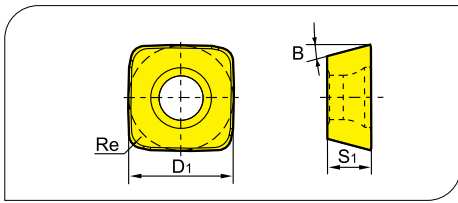
● Ex Stock / ab Lager ○ On demand / auf Anfrage

Spare parts · Ersatzteile

Tool Werkzeug	Insert Screw Schraube	Clamp Screw Schraube	Clamp Pratze	Wrench Schlüssel	
	XMR01**-SD09**	I60M3.5×08TT	I60M4×8.4	WD-204	WT10IP
XMR01**-SD12**	I60M4×8.4		WT15IP		



Applicable inserts · Wendschneidplatten



- Ideal Machining Condition
Gute Bearbeitungsbedingungen
- Normal Machining Condition
Normale Bearbeitungsbedingungen
- Unfavorable Machining Condition
Ungünstige Bearbeitungsbedingungen

Workpiece Material Werkstoffe	P	M	K	N	S	Steel Stahl	Stainless Steel Rostfreier Stahl	Cast iron Gusseisen	Non-ferrite material Ne Metalle	Heat-resistant steel Warmfester Stahl
P	●	●	●	●	●	●	●	●	●	●
M	●	●	●	●	●	●	●	●	●	●
K	●	●	●	●	●	●	●	●	●	●
N	●	●	●	●	●	●	●	●	●	●
S	●	●	●	●	●	●	●	●	●	●

Insert WSP	Type Typ	Dimensions (mm) Abmessungen				CVD Coating CVD Beschicht.				PVD Coating PVD Beschicht.				Cermet Cermet	Carbide uncoat. unbe. Hartmetall										
		B	Re	S1	D1	YBC301	YBC302	YBC401	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YBG302	YBG152	YBG252	YNG151	YNG151C	YC30S	YD101	YD201	
	SDMT09T312-DM	15°	1.2	3.97	9.525	●				●		○		●		●									
	SDMT120412-DM	15°	2.0	4.76	12.7					●		○		●		●									
	SDMT09T312-PM	15°	1.2	3.97	9.525	○				●				●	○										
	SDMT120412-PM	15°	2.0	4.76	12.7	○				●				●	○										

Applicable tool
Werkzeug **B11-B18**

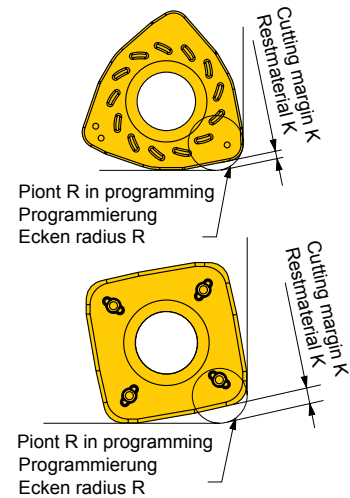
Tools code key
Werkzeug ISO **B26-B27**

Grade selection guide
Sortenauswahl **B19-B23**

Technical data
Technische Daten **B215-B220**

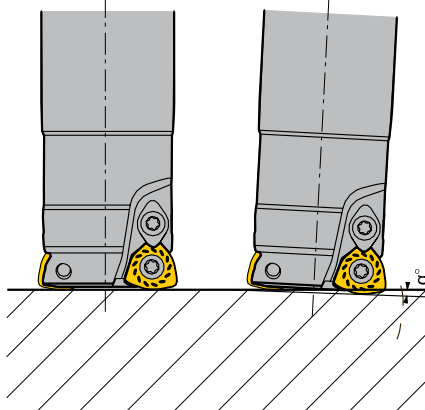
Approximate R in machining program Ungefährer Programmerradius

Insert WSP	approx. ca. R(mm)	Cutting margin Cutting margin K(mm)
WPGT050315ZSR	2	0.5
WPGT060415ZSR	2.5	0.7
WPGT080615ZSR	2.0	0.7
WPGT090725ZSR	4.0	1.2
SDMT09T312-DM	2.5	0.87
SDMT120412-DM	4.0	0.93

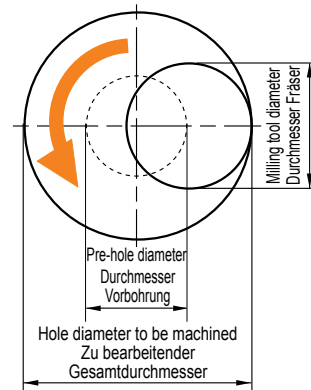


Different machining styles Different machining styles

■ Ramp machining Tauchfräsen



■ Helical interpolation milling Zirkularfräsen



- Reduce the feed rate in ramp and helical machining operations.
- Set the axial feed rate below 0.2mm/rev in drilling operation.
- Be careful ! Long chippings may fly out in drilling operation.
- The cutting depth of each rotation can't exceed the maximum cutting depth (a_p)
- The S type insert not only is applied in the machining operations mentioned above, but also able to be used for plunge milling.

- Beim Tauch- und Zirkularfräsen den Vorschub reduzieren.
- Vorschub bei Bohroperationen (achsial) unter 0,2 mm einstellen.
- "Vorsicht" – Beim Bohren können lange Späne entstehen.
- Die Schnitttiefe pro Rotation kann die maximale Schnitttiefe a_p nicht erreichen.
- Die S-Type Wendschneidplatten können auch für andere Bearbeitungsoperationen eingesetzt werden.

XMR01-Serie XMR01-Serie

XMR01 series tools (install SD**inserts) possess perfect edge strength and excellent economical efficiency, have more advantages in face milling.

XMR01 series tools (install WP**inserts) possess good capability of chip removal, have more advantages in cavity milling.

Werkzeuge mit Schneidplatten (SD**) besitzen ausgezeichnete Schneidkantenstabilität. Sie haben besondere Vorteile beim Planfräsen mit hoher Wirtschaftlichkeit.

Werkzeuge mit Schneidplatten (WP..) haben besondere Vorteile bei der Spanabfuhr und werden Löschen beim Auskoffern eingesetzt.

Milling · Fräsen

Indexable Milling Tools · Wendeplattenfräser

B

Milling Tools
Fräser

Recommended Cutting data · Schnittdaten

Workpiece material Werkstückstoff	Hardness HB Härte	Grade Sorte	Cutting speed Schnitt- geschw. (m/min)	Ø25		Ø30/32/35		
				Axial cutting depth Axial cutting depth	Feed rate per tooth Feed rate per tooth	Axial cutting depth Axial cutting depth	Feed rate per tooth Feed rate per tooth	
P carbon steel Soft steel legierter Kohlenstoffstahl Baustahl	≤HB180 HB180- 280	YBG202	170(120-220)	0.6~1.0	0.8~1.2	0.8~1.2	1.0~1.4	
		YBM351	150(100-200)					
	Alloy steel Leg. Stahl Alloy tool steel Leg. Werkzeugstahl	HB280-350 ≤HB350	YBG202	150(100-200)	0.4~0.8	0.8~1.2	0.6~1.0	1.0~1.4
			YBM351	130(80-180)				
	hardened steel gehärteter Stahl	≤HRC35	YBG202	150(100-200)	0.4~0.8	0.6~1.0	0.6~1.0	0.8~1.2
			YBM351	120(80-160)				
M Stainless steel Rostfreier Stahl	≤HB270	YBG202	150(100-200)	0.6~1.0	0.6~1.0	0.8~1.2	0.8~1.2	
		YBM351	120(80-160)					
K cast Iron Gusseisen	Tensile strength Tensile strength ≤350MPa	YBG202	170(120-220)	0.6~1.0	1.0~1.4	0.8~1.2	1.2~1.6	
		YBM351	150(100-200)					
	Nodular Cast iron Kugelgrafitguss Temperguss	Tensile strength Tensile strength ≤800MPa	YBG202	150(100-200)	0.4~0.8	0.8~1.2	0.6~1.0	1.0~1.4
			YBM351	120(80-160)				

Recommended Cutting data · Schnittdaten

Workpiece material Werkstückstoff	Hardness HB Härte	Grade Sorte	Cutting speed Schnitt- geschw. (m/min)	Ø40		Ø50/63		Ø80/100		
				Axial cutting depth Axial cutting depth	Feed rate per tooth Feed rate per tooth	Axial cutting depth Axial cutting depth	Feed rate per tooth Feed rate per tooth	Axial cutting depth Axial cutting depth	Feed rate per tooth Feed rate per tooth	
P carbon steel Soft steel legierter Kohlenstoffstahl Baustahl	≤HB180 HB180- 280	YBG202	170(120-220)	0.8~1.2	1.0~1.4	1.1~1.5	1.1~1.5	1.0~1.5	1.0~1.5	
		YBM351	150(100-200)							
	Alloy steel Leg. Stahl Alloy tool steel Leg. Werkzeugstahl	HB280-350 ≤HB350	YBG202	150(100-200)	0.6~1.0	1.0~1.4	0.9~1.3	1.1~1.5	0.8~1.3	1.0~1.5
			YBM351	130(80-180)						
	hardened steel gehärteter Stahl	≤HRC35	YBG202	150(100-200)	0.6~1.0	0.8~1.2	0.9~1.3	0.9~1.3	0.8~1.3	0.8~1.3
			YBM351	120(80-160)						
M Stainless steel Rostfreier Stahl	≤HB270	YBG202	150(100-200)	0.8~1.2	0.8~1.2	1.1~1.5	0.9~1.3	1.0~1.5	0.8~1.3	
		YBM351	120(80-160)							
K cast Iron Gusseisen	Tensile strength Tensile strength ≤350MPa	YBG202	170(120-220)	0.8~1.2	1.2~1.6	1.1~1.5	1.3~1.7	1.0~1.5	1.2~1.7	
		YBM351	150(100-200)							
	Nodular Cast iron Kugelgrafitguss Temperguss	Tensile strength Tensile strength ≤800MPa	YBG202	150(100-200)	0.6~1.0	1.0~1.4	0.9~1.3	1.1~1.5	0.8~1.3	1.0~1.5
			YBM351	120(80-160)						

● Ex Stock / ab Lager ○ On demand / auf Anfrage