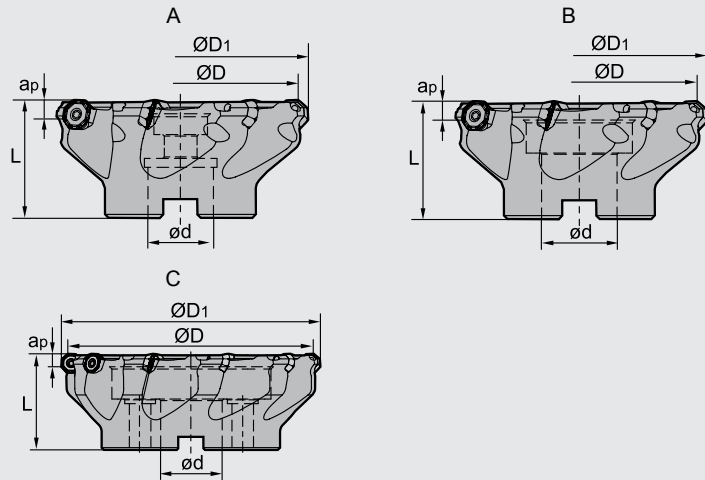


Face Milling Tools · Planfräser

Kr:45°



FMA04 P M K N



Specification of tools · Werkzeug Beschreibung

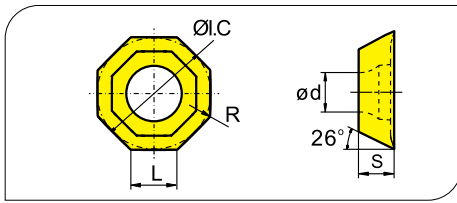
Type Typ	Stock Lager		Dimension (mm) Abmessung					No. of teeth Zähne	Coupling Aufnahme	Weight Gewicht (kg)
	R	L	Ø D	Ø D ₁	Ø d	L	ap _{max}			
FMA04										
-050-A22-OF05-04	●	○	50	56	22	40	3.5	4	A	0.3
-050-A22-OF05-04C	●	○	50	56	22	40	3.5	4	A	0.3
-050-A22-OF05-05	●	○	50	56	22	40	3.5	5	A	0.4
-050-A22-OF05-05C	●	○	50	56	22	40	3.5	5	A	0.4
-063-A22-OF05-05	●	○	63	69	22	40	3.5	5	A	0.5
-063-A22-OF05-05C	●	○	63	69	22	40	3.5	5	A	0.5
-080-A27-OF05-06	●	○	80	86	27	50	3.5	6	A	0.8
-080-A27-OF05-06C	●	○	80	86	27	50	3.5	6	A	0.8
-100-B32-OF05-07	●	○	100	106	32	50	3.5	7	B	1.2
-100-B32-OF05-07C	●	○	100	106	32	50	3.5	7	B	1.2
-125-B40-OF05-08	●	○	125	130	40	63	3.5	8	B	2.7
-125-B40-OF05-08C	●	○	125	130	40	63	3.5	8	B	2.7
-160-B40-OF05-10	●	○	160	165	40	63	3.5	10	B	5.1

Spare Parts · Ersatzteile

Diameter Durchmesser Ø D	Screw Schraube	Wrench Schlüssel	
Ø50 - Ø63	I60M4×8.4	WT15IS	
Ø80 - Ø160	I60M4×10		

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

Applicable inserts · Wendeschneidplatten



- 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-ferrous material / Ne Metalle	●	●	●	●	●
Heat-resistant steel / Warmfester Stahl	●	●	●	●	●

Insert shape / Plattenform	Type / Typ	Dimension (mm) / Abmessung					CVD Coating / CVD Beschicht.						PVD Coating / PVD Beschicht.				Cermets / Cermet		Carbide uncoat. / unbe. Hartmetall							
		L	I.C	S	d	R	YBC301	YBC302	YBC401	YBM251	YBM253	YBM351	YBD152	YBD252	YBG102	YBG202	YBG205	YBG302	YBG152	YBG252	YNG151	YNG151C	YC30S	YD101	YD201	
	OFKT05T3-DF	5.26	12.7	3.97	4.4	0.5				○					●	●		○								
	OFKT05T3-DM	5.26	12.7	3.97	4.4	0.5			●			●		●	●		●									
	OFKT05T3-LH	5.26	12.7	3.97	4.4	0.5																		●		

Chipbreaker Selection FMA04 · Spanbrecher Auswahl FMA04

Application / Anwendung	Finishing / Schichten	Semi-Finishing / Mittlere Bearbeitung
P		
M	-DF	-DM
K		
AL	-LH	

Applicable tool / Werkzeug: **B11-B18**

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

Grade selection guide / Sortenauswahl: **B19-B23**

Technical data / Technische Daten: **B215-B220**

Milling · Fräsen

Indexable Milling Tools · Wendeplattenfräser

Recommended cutting data · Empfohlene Schnittdaten

	Workpiece material Werkstückstoff	Hardness HB Härte	Grade Sorte	Cutting data Schnittdaten		
				V (m/min)	f (mm/z)	
					-DF	-DM
P	Low-carbon steel Soft steel Niedriglegierter Kohlenstoffstahl Baustahl	≤180	YBM251	270 (220-350)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
			YBG202 YBG205	270 (200-360)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
			YBM351	220 (180-300)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
			YBG302	230 (170-350)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
	High-carbon steel Alloy steel Hochleg. Kohlenstoffstahl	180-280	YBM251	240 (200-320)	0.15 (0.1-0.3)	0.2 (0.1-0.4)
			YBG202 YBG205	240 (180-350)	0.15 (0.1-0.3)	0.2 (0.1-0.4)
			YBM351	200 (160-280)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
			YBG302	220 (150-330)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
	Alloy tool steel Leg. Werkzeugstahl	280-350	YBM251	220 (180-300)	0.15 (0.1-0.3)	0.2 (0.1-0.4)
			YBG202 YBG205	220 (170-340)	0.15 (0.1-0.3)	0.2 (0.1-0.4)
			YBM351	180 (150-250)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
			YBG302	190 (130-300)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
M	Stainless steel Rostfreier Stahl	≤270	YBG202 YBG205	160 (110-270)	0.15 (0.1-0.3)	0.2 (0.1-0.4)
			YBG302	140 (100-250)	0.15 (0.1-0.3)	0.2 (0.1-0.4)
			YBM251	150 (120-250)	0.15 (0.1-0.3)	0.2 (0.1-0.4)
K	Cast iron Gusseisen	180-250	YBG102	210 (120-300)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
			YBD152	240 (180-300)	0.2 (0.1-0.3)	0.25 (0.1-0.4)
					-LH	
N	Al alloy Leg. Alu	-	YD101	300-	0.15 (0.05-0.3)	

B

Milling Tools
Fräser

Case study for FMA04 Bearbeitungsbeispiel für FMA04

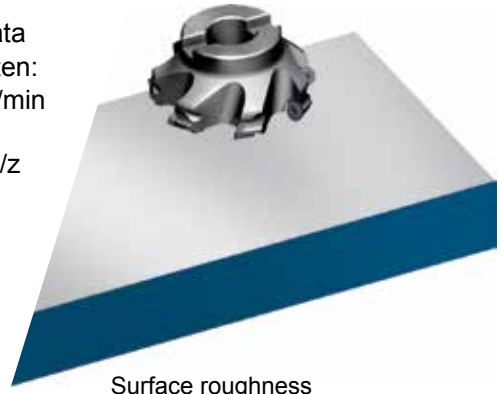


- Tool · Werkzeug : FMA04-100-B32-OF05-07
- Inserts · WSP : OFKT05T3-DM/YBG202

Workpiece material
Werkstückstoff: 42CrMo (HB200)
Cooling system: dry cutting
Kühlsystem: trocken

Machine: vertical machining center
Maschine: vertikales Maschinen-Center

Cutting data
Schnittdaten:
Vc=180m/min
ap=1mm
fz=0.2mm/z
ae=60mm



Surface roughness
Rauhtiefe
ZCC-CT: Ra1.2
Wettbewerbsprodukt: **R1.6**

Wear comparison of insert Verschleißvergleich der WSP

