

Chipbreaker selection for FMA01 milling inserts

Classification	Function	For finishing	For semi-finishing	For roughing
P		-DF	-DM	-DR
M, S		-EF	-EM	
K		-CF	-CM	-CR
N		-LH		

Recommended cutting parameters

Workpiece material	Hardness HB	Insert grade	Cutting parameters				
			V _c (m/min)	f _z (mm/z)			
				-DF	-DM	-DR	
P	Low-carbon steel, Soft steel	YBM251 YBC301	270(220-350)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)	
		YBG205 YB9320	270(200-360)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)	
		YBG302 YBM253	230(170-350)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)	
	High-carbon steel, Alloy steel	180-280	YBM251 YBC302 YBC301	240 (200-320)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)
			YBG205 YB9320	240 (180-350)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)
			YBG302 YBM253	220 (150-330)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)
	Alloy tool steel	280-350	YBM251 YBM351 YBC301	220 (180-300)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)
			YBG205 YB9320	220 (170-340)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)
			YBG302 YBM253	190 (130-300)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)
M	Stainless steel	YBM251 YBG205 YB9320 YBG302	150 (120-240)	0.15(0.1-0.2)	-EF -EM 0.2 (0.1-0.3)		
			160 (110-270)	0.15(0.1-0.2)	0.2 (0.1-0.3)		
			140 (100-250)	0.15(0.1-0.2)	0.2 (0.1-0.3)		
K	Cast iron	YBG102 YBD152	210 (120-300)	0.15(0.1-0.2)	-CF -CM -CR 0.2 (0.1-0.3)	0.3(0.2-0.4)	
			240 (180-300)	0.15(0.1-0.2)	0.2 (0.1-0.3)	0.3(0.2-0.4)	
N	Al alloy steel	YD101 YD201	300-	-LH 0.25 (0.1-0.4)			
			300-	0.25 (0.1-0.4)			
S	High-temperature alloy	YBG102 YBS303	50(20-60)	-EF -EM 0.1 (0.1-0.2)	0.15 (0.1-0.3)		
			100(60-120)	0.1 (0.1-0.2)	0.15 (0.1-0.25)		

Indexable milling tools
Face milling tools