

MACHINING CONDITIONS - MILLING - DEPTH OF CUT AND FEED

RDMT 1604 M0

Material Group	Lamina Gr. N°	Material Examples	Hardness	DOC [mm]		Feed [mm/z]		Suggested Starting Parameters		
				min	max	min	max	DOC	Feed	
P	Non Alloyed	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.50	4.00	0.25	1.00	2.00	0.34	
			190 HB							
			250 HB							
	Low Alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.50	4.00	0.21	0.78	2.00	0.30
				230 HB				0.69		0.27
				280 HB						
				350 HB						
	High Alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.50	2.80	0.17	0.69	1.50	0.27
				280 HB				0.56		0.24
				320 HB						
				350 HB						
	M	Austenitic	4	304, 316, X5CrNi18-9	0.50	4.00	0.21	0.78	2.00	0.30
240 HB				0.17						
Duplex		5	X2CrNiN23-4, S31500	290 HB	0.50	3.10	0.17	0.56	1.50	0.24
				310 HB						
Ferritic & Martensitic		6	410, X6Cr17, 17-4PH, 430	200 HB	0.50	4.00	0.21	0.78	2.00	0.30
				42 HRc		3.10		0.63		
K	Grey	7	GG20, GG40, EN-GJL-250, N030B	0.50	4.00	0.25	1.00	2.00	0.34	
			150 HB							
			200 HB							
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.50	4.00	0.21	0.88	2.00	0.30
				200 HB						
				250 HB						
S	Fe, Ni & Co based	9	Incoloy 800	0.50	3.10	0.17	0.56	1.50	0.24	
			240 HB							
			250 HB							
	Ti based	10	TiAl6V4	0.50	3.10	0.17	0.63	1.50	0.27	
			-				0.56		0.24	
			T40							
H	Steel Chilled Cast Iron White Cast Iron	11	X100 CrMo13, 440C, G-X260NiCr42	0.40	1.40	0.14	0.56	1.00	0.21	
			45 HRc				1.10	0.80	0.19	
			50 HRc				1.00	0.50	0.18	
			55 HRc				1.10	0.56	0.21	
			400 HB				1.00	0.44	0.18	
			55 HRc				1.10	0.56	0.21	
NF	Aluminium	12	AISI12	0.50	4.00	0.25	1.00	2.00	0.38	
			130 HB							

The depth of cut and feed rate tables are for the geometry and corner radius specified above the table. Refer to cutting speed tables on page 226 for recommended materials per grade.