

RDMT 0602 M0 LT 30

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/tooth]		V _c [m/min]		Optimal cutting conditions			
					min	max	min	max	min	max	D.O.C.	Feed	V _c	
Steel	Non-alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.5	1.5	0.18	0.48	190	330	0.8	0.29	250	
		190 HB		220										
		250 HB		200										
	Low alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.5	1.5	0.15	0.38	150	240	0.8	0.25	200	
				230 HB									180	
				280 HB									150	
				350 HB									140	
	High alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	1.1	0.12	0.33	90	150	0.6	0.23	130	
				280 HB									120	
				320 HB									100	
				350 HB									80	
Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.5	1.5	0.15	0.38	190	250	0.8	0.25	220	
				240 HB									190	
	Duplex	5	X2CrNiN23-4, S31500	290 HB	0.5	1.2	0.12	0.27	70	130	0.6	0.20	100	
				310 HB									90	
	Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.5	1.5	0.15	0.38	150	210	0.8	0.25	190	
				42 HRC									130	
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.5	1.5	0.18	0.48	150	240	0.8	0.29	200	
				200 HB									180	
				250 HB									160	
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.5	1.5	0.15	0.42	100	180	0.8	0.25	180	
				200 HB									150	
				250 HB									130	
High Temp. Alloys	Fe, Ni & Co based	9	31,32 Incoloy 800	0.5	1.2	0.12	0.27	25	45	0.6	0.20	32		
			33 Inconel 700									30		
			34 Stellite 21									30		
	Ti based	10	TiAl6V4	0.5	1.2	0.12	0.30	40	65	0.6	0.23	55		
37 T40	40													
Hardened Mat.	Steel	11	X100CrMo13, 440C,	45 HRC	0.3	0.6	0.10	0.27	40	80	0.4	0.18	60	
			G-X260NiCr42	50 HRC									55	
				55 HRC									50	
	Chilled Cast Iron		40 Ni-Hard 2	400 HB	0.3	0.4	0.10	0.27	40	80	0.3	0.18	50	
	White Cast Iron		41 G-X300CrMo15	55 HRC	0.3	0.4	0.10	0.21	30	60	0.3	0.15	40	
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.5	1.5	0.18	0.48	200	400	0.8	0.31	280