

RCMT 0803 M0 LT 10 & LT 1000

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/rev]		Amax [mm ²]	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	2.4	0.15	0.40	0.77	180	330	1.2	0.35	240	
				190 HB									0.35	220	
				250 HB									0.30	200	
	Low alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.5	2.4	0.15	0.35	0.67	120	280	1.2	0.30	0.30	200
				230 HB										0.35	180
				280 HB										0.35	150
				350 HB										0.35	130
	High alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	2.4	0.13	0.35	0.58	70	190	1.2	0.30	0.30	140
				280 HB										0.30	120
				320 HB										0.30	100
				350 HB										0.30	90
Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.5	2.4	0.14	0.35	0.38	170	270	1.2	0.32	220	
				240 HB										0.32	190
	Duplex	5	X2CrNiN23-4, S31500	290 HB	0.5	1.8	0.13	0.30	0.36	80	150	1.2	0.28	100	
				310 HB										0.30	90
	Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.5	2.4	0.15	0.35	0.38	170	250	1.2	0.32	210	
				42 HRC										0.30	140
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.5	2.4	0.11	0.45	0.84	170	250	1.2	0.35	200	
				200 HB										0.45	180
				250 HB										0.45	160
	Malleable & Nodular	8	17,19, 18,20	GGG40, GGG70, 50005	150 HB	0.5	2.4	0.11	0.35	0.72	150	210	1.2	0.30	180
					200 HB										0.35
250 HB	0.35	140													
High Temp. Alloys	Fe, Ni & Co based	9	Incoloy 800, Inconel 700, Stellite 21	240 HB	0.5	1.8	0.13	0.30	0.36	25	50	1.2	0.28	33	
				250 HB										0.30	30
				350 HB										0.30	28
	Ti based	10	36, 37	TiAl6V4, T40	-	0.5	1.8	0.13	0.32	0.38	45	65	1.2	0.30	55
-					0.30										45
Hardened Mat.	Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRC	0.5	1.4	0.05	0.22	0.24	50	100	1.1	0.18	80	
				50 HRC										0.18	70
				55 HRC										0.14	60
	Chilled Cast Iron	40	Ni-Hard 2	400 HB	0.5	1.4	0.05	0.22	0.20	40	60	1.1	0.18	50	
				55 HRC										0.12	40
White Cast Iron	41	G-X300CrMo15	55 HRC	0.3	1.0	0.05	0.14	0.12	30	50	0.7	0.12	40		
NF	Al (>8%Si)	12	25	AISI12	130 HB	0.5	2.4	0.15	0.40	0.84	200	400	1.2	0.35	280