

RCMT 1204 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	3.2	0.15	0.40	1.54	180	330	2.0	0.42	240			
				190 HB									0.42	220			
				250 HB									0.36	200			
	Low alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.5	3.2	0.15	0.35	1.34	120	280	2.0	0.36	200			
				230 HB										180			
				280 HB										150			
				350 HB										130			
	High alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	3.2	0.13	0.35	1.15	70	190	2.0	0.36	140			
				280 HB										120			
				320 HB										100			
				350 HB										90			
Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.5	3.2	0.14	0.35	0.77	170	270	2.0	0.38	220			
				240 HB						160				220			
	Duplex	5	X2CrNiN23-4, S31500	290 HB	0.5	2.4	0.13	0.30	0.60	80	150	1.5	0.34	100			
				310 HB						70				140			
	Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.5	3.2	0.15	0.35	0.77	170	250	2.0	0.38	210			
				42 HRC						120				190	0.32	140	
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.5	3.2	0.11	0.45	1.68	170	250	2.0	0.42	200			
				200 HB						160				230			
				250 HB						150				210			
	Malleable & Nodular	8	17,19, 18,20	GGG40, GGG70, 50005	150 HB	0.5	3.2	0.11	0.35	1.44	120	230	2.0	0.36	160		
					200 HB						190				140		
High Temp. Alloys	Fe, Ni & Co based	9	Incoloy 800, Inconel 700, Stellite 21	240 HB	0.5	2.4	0.13	0.30	0.60	25	50	1.5	0.34	33			
				250 HB						25				50			
				350 HB						23				45			
	Ti based	10	36, 37	TiAl6V4, T40	-	0.5	2.4	0.13	0.32	0.60	45	65	1.5	0.36	55		
					-						35				60	0.34	45
Hardened Mat.	Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRC	0.5	1.9	0.05	0.22	0.48	50	100	1.8	0.22	80			
				50 HRC						40				90	1.4	0.19	70
				55 HRC						40				80	1.2	0.14	60
	Chilled Cast Iron	40	Ni-Hard 2	400 HB	0.5	1.9	0.05	0.22	0.41	40	60	1.8	0.22	50			
White Cast Iron	41	G-X300CrMo15	55 HRC	0.5	1.3	0.05	0.14	0.24	30	50	1.2	0.14	40				
NF	Al (>8%Si)	12	25	AISI12	130 HB	0.5	3.2	0.15	0.40	1.68	200	400	2.0	0.42	280		