

TCMT 110208 NN 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	0.2	2.1	0.08	0.20	0.37	180	330	1.0	0.25	300	
				190 HB										260	
				250 HB										240	
	Low alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.2	1.8	0.08	0.17	0.31	120	280	1.0	0.21	260	
				230 HB										240	
				280 HB										200	
				350 HB										180	
	High alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.2	1.8	0.07	0.15	0.25	70	190	1.0	0.17	180	
				280 HB										140	
				320 HB										120	
				350 HB										110	
Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.2	1.8	0.08	0.15	0.20	170	270	1.0	0.17	260	
				240 HB										210	
	Duplex	5	X2CrNiN23-4, S31500	290 HB	0.2	1.4	0.07	0.12	0.12	80	150	1.0	0.17	140	
				310 HB										140	
	Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.2	1.8	0.08	0.15	0.20	170	250	1.0	0.21	240	
				42 HRC										180	
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.2	2.1	0.06	0.17	0.40	170	250	1.0	0.25	240	
				200 HB										220	
				250 HB										200	
	Malleable & Nodular	8	17,19, 18,20	GGG40, GGG70, 50005	150 HB	0.2	1.8	0.06	0.15	0.30	120	230	1.0	0.21	240
					200 HB										220
250 HB	180														
High Temp. Alloys	Fe, Ni & Co based	9	Incoloy 800, Inconel 700, Stellite 21	240 HB	0.2	1.4	0.08	0.13	0.16	25	50	1.0	0.17	40	
				250 HB										40	
				350 HB										35	
	Ti based	10	36, 37	TiAl6V4, T40	-	0.2	1.4	0.08	0.14	0.20	45	65	1.0	0.20	
-					0.17										
Hardened Mat.	Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRC	0.2	1.3	0.04	0.10	0.12	50	100	0.8	0.15	90	
				50 HRC										80	
				55 HRC										70	
	Chilled Cast Iron	40	0.2	1.1	0.04	0.10	0.11	40	60	0.6	0.15	50			
White Cast Iron	41	0.2	1.0	0.04	0.08	0.08	30	50	0.5	0.10	40				
NI	Al (>8%Si)	12	25	AISI12	130 HB	0.2	2.8	0.08	0.26	0.43	200	400	1.0	0.28	350