

CNMG 120408 NM 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	1	C35, Ck45, 1020,	125 HB	0.5	5.0	0.21	0.65	2.7	180	330	4.0	0.50	210							
		2	1045, 1060,	190 HB	5.0											0.65	2.7	230	200			
		3	28Mn6	250 HB																5.0	0.59	2.3
	Low alloyed	2	6	42CrMo4, S150, Ck60, 4140, 4340, 100Cr6	180 HB	0.5	5.0	0.21	0.59	1.8	120	280	4.0	0.44	160							
			4,6		230 HB											4.0	0.21	0.59	1.8	250	0.44	150
			5,7		280 HB											4.0	0.18	0.52	1.8	210	0.38	140
			8		350 HB											3.5	0.18	0.52	1.6	180	0.38	130
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	4.0	0.18	0.52	1.8	70	190	3.3	0.38	120							
			10		280 HB											4.0	0.52	1.8	150	0.38	110	
			11		320 HB											3.0	0.46	1.2	130	0.35	100	
			11		350 HB											3.0	0.46	1.2	110	0.35	90	
Stainless Steel	Ferritic & Martensitic	6	12	410, X6Cr17,	200 HB	0.5	5.0	0.22	0.52	1.6	170	250	4.0	0.38	190							
		13	17-4 PH, 430	42 HRc	4.0											0.52	1.6	120	190	3.5	130	
Cast Iron	Grey	7	15	GG20, GG40,	150 HB	0.5	5.0	0.15	0.78	3.0	170	250	4.0	0.44	170							
			15	EN-GJL-250, No30B	200 HB											5.0	0.78	2.7	160	230	160	
			16	250 HB	5.0											0.72	2.7	150	210	150		
	Malleable & Nodular	8	17,19	GGG40, GGG70, 50005	150 HB	0.5	5.0	0.15	0.65	2.3	120	250	4.0	0.38	140							
			17,19		200 HB											5.0	0.65	2.0	230	130		
			18,20		250 HB											5.0	0.65	1.8	190	130		
Hardened Mat.	Steel	11	38	X100CrMo13, 440C,	45 HRc	0.5	2.5	0.11	0.39	0.9	50	100	2.7	0.31	80							
			38	50 HRc	2.0											0.33	0.6	40	90	2.0	0.25	70
			38	G-X260NiCr42	55 HRc											1.5	0.26	0.5	40	80	1.5	0.23
	Chilled Cast Iron White Cast Iron	41	G-X300CrMo15	400 HB	0.5	2.0	0.11	0.33	0.6	40	60	2.0	0.23	50								
				55 HRc	0.5	1.5	0.11	0.26	0.5	30	50	1.5	0.19	40								