

## CNMG 120408 NX LT 1000

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [mm]		Feed [mm/rev]		Amax [mm²]	V <sub>c</sub> [m/min]		Optimal cutting conditions		
					min	max	min	max		min	max	D.O.C.	Feed	V <sub>c</sub>
Steel	Non-alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.5	5.0	0.21	0.50	1.80	180	330	3.0	0.35	240
		190 HB		220										
		250 HB		200										
	Low alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.5	5.0	0.21	0.45	1.20	120	280	3.0	0.32	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	4.0	0.18	0.40	1.20	70	190	2.5	0.30	140
		280 HB		120										
		320 HB		100										
		350 HB		90										
Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.5	5.0	0.20	0.40	1.20	170	270	3.0	0.25	190
		240 HB		170										
	Duplex	5	X2CrNiN23-4, S31500	290 HB	0.5	4.0	0.18	0.35	0.80	80	150	2.5	0.28	100
		310 HB		90										
	Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.5	5.0	0.22	0.40	1.00	170	250	3.0	0.32	190
		42 HRC		130										
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.5	5.0	0.15	0.60	2.00	170	250	3.0	0.35	200
		200 HB		180										
		250 HB		160										
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.5	5.0	0.15	0.50	1.50	120	230	3.0	0.30	160
		200 HB		140										
High Temp. Alloys	Fe, Ni & Co based	9	Incoloy 800, Inconel 700, Stellite 21	240 HB	0.5	3.0	0.20	0.35	0.70	25	45	2.0	0.28	32
		250 HB		30										
		350 HB		28										
	Ti based	10	TiAl6V4, T40	-	0.5	4.0	0.20	0.40	0.80	45	65	2.0	0.33	55
		-		45										
	Hardened Mat.	Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRC	0.5	2.5	0.11	0.30	0.60	50	100	2.0	0.25
50 HRC			70											
55 HRC			60											
Chilled Cast Iron		41	Ni-Hard 2	400 HB	0.5	2.0	0.11	0.25	0.40	40	60	1.5	0.18	50
White Cast Iron		40	G-X300CrMo15	55 HRC	0.5	1.5	0.11	0.20	0.30	30	50	1.0	0.15	40
NF	AI (>8%Si)	12	AISI12	130 HB	0.5	6.0	0.20	0.60	1.80	200	400	3.0	0.40	280

