

DNMG 441 NN LT 10 & LT 1000

Speeds & Feeds

Material Group	Gr. N°	VDI Group	Material Examples*	Hardness	D.O.C. [inch]		Feed [inch/rev]		Amax	V _c [sfm]		Suggested Starting Parameters		
					min	max	min	max		min	max	D.O.C.	Feed	V _c
Steel	Non-alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.008	0.118	0.004	0.009	0.0009	590	1080	0.079	0.007	980
				190 HB		0.098		0.009	0.0008		910			850
				250 HB		0.098		0.008	0.0007		820			780
	Low alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.008	0.098	0.004	0.008	0.0008	390	910	0.079	0.006	850
				230 HB		0.098		0.008	0.0007		820			780
				280 HB		0.079		0.007	0.0006		680			650
				350 HB		0.079		0.007	0.0006		590			590
	High alloyed	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.008	0.098	0.004	0.007	0.0006	220	620	0.079	0.005	590
				280 HB		0.098		0.006	0.0006		490			450
				320 HB		0.079		0.006	0.0005		420			390
				350 HB		0.079		0.006	0.0004		360			360
Stainless Steel	Austenitic	4	304, 316, X5CrNi18-9	180 HB	0.008	0.098	0.004	0.007	0.0005	550	880	0.079	0.005	850
				240 HB		0.098		0.007	0.0004		720			680
	Duplex	5	X2CrNiN23-4, S31500	290 HB	0.008	0.079	0.004	0.006	0.0003	260	490	0.079	0.005	450
				310 HB		0.079		0.006	0.0003		450			450
	Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.008	0.098	0.004	0.007	0.0005	550	820	0.079	0.006	780
				42 HRc		0.079		0.006	0.0004		620			590
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, No30B	150 HB	0.008	0.118	0.003	0.008	0.0010	550	820	0.079	0.007	780
				200 HB		0.118		0.008	0.0009		750			720
				250 HB		0.118		0.008	0.0009		680			650
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.008	0.098	0.003	0.007	0.0007	390	820	0.079	0.006	780
				200 HB		0.098		0.007	0.0006		750			720
				250 HB		0.098		0.007	0.0006		620			590
High Temp. Alloys	Fe, Ni & Co based	9	31,32 Incoloy 800	240 HB	0.008	0.079	0.004	0.006	0.0004	80	160	0.079	0.005	130
			33 Inconel 700	250 HB		0.079		0.006	0.0004		160			130
			34 Stellite 21	350 HB		0.079		0.006	0.0004		70			110
	Ti based	10	36 TiAl6V4	-	0.008	0.079	0.004	0.006	0.0005	140	210	0.079	0.006	190
			37 T40	-		0.079		0.006	0.0004		110			160
Hardened Mat.	Steel	11	X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.008	0.000	0.002	0.005	0.0003	160	320	0.059	0.004	290
				50 HRc		0.000		0.004	0.0003		290			260
				55 HRc		0.000		0.004	0.0002		260			220
	Chilled Cast Iron	40	Ni-Hard 2	400 HB	0.008	0.063	0.002	0.005	0.0003	130	190	0.047	0.004	160
	White Cast Iron	41	G-X300CrMo15	55 HRc	0.008	0.055	0.002	0.004	0.0002	90	160	0.039	0.003	130
NF	Al (>8%Si)	12	AlSi12	130 HB	0.008	0.157	0.004	0.012	0.0011	650	1310	0.079	0.008	1140

