

DCMT 3(2.5)2 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	1 C35, Ck45, 1020,	125 HB	0.020	0.157	0.008	0.020	0.0025	590	1080	0.118	0.012	780
			2 1045, 1060,	190 HB		0.157		0.020	0.0025		910			720
			3 28Mn6	250 HB		0.157		0.018	0.0021		820			650
	Low alloyed	2	6 42CrMo4, St50,	180 HB	0.020	0.157	0.008	0.018	0.0017	390	910	0.118	0.011	650
			4,6 Ck60, 4140, 4340,	230 HB		0.126		0.018	0.0017		820			590
			5,7 100Cr6	280 HB		0.126		0.016	0.0017		680			490
			8	350 HB		0.110		0.016	0.0014		590			420
	High alloyed	3	10 X40CrMoV5,	220 HB	0.020	0.126	0.007	0.016	0.0017	220	620	0.098	0.011	450
			10 H13, M42, D3,	280 HB		0.126		0.016	0.0017		490		0.011	390
			11 S6-5-2, 12Ni19	320 HB		0.094		0.014	0.0011		420		0.010	320
			11	350 HB		0.094		0.014	0.0011		360		0.010	290
Stainless Steel	Austenitic	4	14 304, 316,	180 HB	0.020	0.157	0.008	0.016	0.0017	550	880	0.118	0.012	620
			14 X5CrNi18-9	240 HB		0.157		0.016	0.0014		720		0.011	550
	Duplex	5	14 X2CrNiN23-4,	290 HB	0.020	0.126	0.007	0.014	0.0011	260	490	0.098	0.010	320
			14 S31500	310 HB		0.126		0.014			450			290
	Ferritic & Martensitic	6	12 410, X6Cr17,	200 HB	0.020	0.157	0.009	0.016	0.0014	550	820	0.118	0.011	620
			13 17-4 PH, 430	42 HRc		0.126		0.016			390		0.098	420
Cast Iron	Grey	7	15 GG20, GG40,	150 HB	0.020	0.157	0.006	0.024	0.0028	550	820	0.118	0.012	650
			15 EN-GJL-250,	200 HB		0.157		0.024	0.0025		750			590
			16 No30B	250 HB		0.157		0.022	0.0025		490			520
	Malleable & Nodular	8	17,19 GGG40, GGG70,	150 HB	0.020	0.157	0.006	0.020	0.0021	390	820	0.118	0.011	590
			17,19 50005	200 HB		0.157		0.020	0.0018		750			520
			18,20	250 HB		0.157		0.020	0.0017		620			450
High Temp. Alloys	Fe, Ni & Co based	9	31,32 Incoloy 800	240 HB	0.020	0.094	0.008	0.014	0.0010	80	140	0.079	0.010	100
			33 Inconel 700	250 HB		0.094		0.014			80			90
			34 Stellite 21	350 HB		0.094		0.014			70			90
	Ti based	10	36 TiAl6V4	-	0.020	0.126	0.008	0.016	0.0011	140	210	0.079	0.012	180
			37 T40	-		0.094		0.014	0.0010		180		0.011	140
Hardened Mat.	Steel	11	38 X100CrMo13,	45 HRc	0.020	0.079	0.004	0.012	0.0008	160	320	0.079	0.009	260
			38 440C,	50 HRc		0.063		0.010	0.0006		290			220
			38 G-X260NiCr42	55 HRc		0.047		0.008	0.0004		260		0.039	190
	Chilled Cast Iron		40 Ni-Hard 2	400 HB	0.020	0.063	0.004	0.010	0.0006	130	190	0.059	0.006	160
	White Cast Iron		41 G-X300CrMo15	55 HRc	0.020	0.047	0.004	0.008	0.0004	90	160	0.039	0.005	130
NF	Al (>8%Si)	12	25 AlSi12	130 HB	0.020	0.189	0.008	0.024	0.0025	650	1310	0.118	0.014	910

