

CPMT 2(1.5)1 NN 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	0.008	0.083	0.003	0.008	0.0006	590	1080	0.039	0.007	980
			2 1045, 1060,	190 HB		0.069		0.007	0.0005		910			850
			3 28Mn6	250 HB		0.069		0.007	0.0005		820			780
	Low alloyed	2	6 42CrMo4, St50,	180 HB	0.008	0.069	0.003	0.007	0.0005	390	910	0.039	0.006	850
			4,6 Ck60, 4140, 4340,	230 HB		0.069		0.007	0.0005		820			780
			5,7 100Cr6	280 HB		0.055		0.006	0.0004		680			650
			8	350 HB		0.055		0.006	0.0003		590			590
	High alloyed	3	10 X40CrMoV5,	220 HB	0.008	0.069	0.003	0.006	0.0004	220	620	0.039	0.005	590
			10 H13, M42, D3,	280 HB		0.069		0.005	0.0004		490			450
			11 S6-5-2, 12Ni19	320 HB		0.055		0.005	0.0003		420			390
			11	350 HB		0.055		0.005	0.0002		360			360
Stainless Steel	Austenitic	4	14 304, 316,	180 HB	0.008	0.069	0.003	0.006	0.0003	550	880	0.039	0.005	850
			14 X5CrNi18-9	240 HB		0.069		0.006	0.0002		720			680
	Duplex	5	14 X2CrNiN23-4,	290 HB	0.008	0.055	0.003	0.005	0.0002	260	490	0.039	0.005	450
			14 S31500	310 HB		0.055		0.005			450			450
	Ferritic & Martensitic	6	12 410, X6Cr17,	200 HB	0.008	0.069	0.003	0.006	0.0003	550	820	0.039	0.006	780
			13 17-4 PH, 430	42 HRC		0.055		0.005	0.0002		390			590
Cast Iron	Grey	7	15 GG20, GG40,	150 HB	0.008	0.083	0.002	0.007	0.0006	550	820	0.039	0.007	780
			15 EN-GJL-250,	200 HB		0.083		0.007			750			720
			16 No30B	250 HB		0.083		0.007			680			650
	Malleable & Nodular	8	17,19 GGG40, GGG70,	150 HB	0.008	0.069	0.002	0.006	0.0005	390	820	0.039	0.006	780
			17,19 50005	200 HB		0.069		0.006	0.0004		750			720
			18,20	250 HB		0.069		0.006	0.0004		620			590
High Temp. Alloys	Fe, Ni & Co based	9	31,32 Incoloy 800	240 HB	0.008	0.055	0.003	0.005	0.0002	80	160	0.039	0.005	130
			33 Inconel 700	250 HB		0.055		0.005			160			130
			34 Stellite 21	350 HB		0.055		0.005			140			110
	Ti based	10	36 TiAl6V4	-	0.008	0.055	0.003	0.005	0.0003	140	210	0.039	0.006	190
			37 T40	-		0.055		0.005	0.0002		190			160
Hardened Mat.	Steel	11	38 X100CrMo13,	45 HRC	0.008	0.050	0.001	0.004	0.0002	160	320	0.030	0.004	290
			38 440C,	50 HRC		0.041		0.003	0.0002		290			260
			38 G-X260NiCr42	55 HRC		0.039		0.003	0.0001		260			220
	Chilled Cast Iron		40 Ni-Hard 2	400 HB	0.008	0.044	0.001	0.004	0.0002	130	190	0.024	0.004	160
	White Cast Iron		41 G-X300CrMo15	55 HRC	0.008	0.039	0.001	0.003	0.0001	90	160	0.020	0.003	130
NF	Al (>8%Si)	12	25 AlSi12	130 HB	0.008	0.110	0.003	0.010	0.0007	650	1310	0.039	0.008	1140

