TNMG 432 NN/NX 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, 1045, 1060, 28Mn6	125 HB	0.020	0.276	0.008	0.020	0.0028	590	1080	0.118	0.014	780
			2		190 HB		0.276		0.020	0.0028		910			720
			3		250 HB		0.276		0.018	0.0023		820			650
	Low alloyed	2	6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.020	0.276	0.008	0.018	0.0019	390	910	0.118	0.013	650
			4,6		230 HB		0.220	0.008	0.018	0.0019		820		0.013	590
			5,7		280 HB		0.220	0.007	0.016	0.0019		680		0.012	490
			8		350 HB		0.193	0.007	0.016	0.0016		590		0.012	420
	High alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.020	0.220	0.007	0.016	0.0019	220	620	0.098	0.012	450
			10		280 HB		0.220		0.016	0.0019		490		0.012	390
			11		320 HB		0.165		0.014	0.0012		420		0.011	320
			11		350 HB		0.165		0.014	0.0012		360		0.011	290
Stainless Steel	Austenitic	4	14	304, 316, X5CrNi18-9	180 HB	0.020	0.276	0.008	0.016	0.0019	550	880	0.118	0.014	620
			14		240 HB		0.276		0.016	0.0016	520	720		0.013	550
	Duplex	5	14	X2CrNiN23-4, S31500	290 HB	0.020	0.220	0.007	0.014	0.0012	260	490	0.098	0.011	320
			14		310 HB		0.220		0.014		220	450			290
	Ferritic & Martensitic	6	12	410, X6Cr17, 17-4 PH, 430	200 HB	0.020	0.276	0.009	0.016	0.0016	550	820	0.118	0.013	620
			13		42 HRc		0.220		0.016		390	620	0.098		420
Cast Iron	Grey	7	15	GG20, GG40, EN-GJL-250, No30B	150 HB	0.020	0.276	0.006	0.024	0.0031	550	820	0.118	0.014	650
			15		200 HB		0.276		0.024	0.0028	520	750			590
			16		250 HB		0.276		0.022	0.0028	490	680			520
	Malleable & Nodular	8	17,19	GGG40, GGG70, 50005	150 HB	0.020	0.276	0.006	0.020	0.0023	390	820	0.118	0.012	590
			17,19		200 HB		0.276		0.020	0.0020		750			520
			18,20		250 HB		0.276		0.020	0.0019		620			450
High Temp.Alloys	Fe, Ni & Co based	9	31,32	Incoloy 800	240 HB	0.020	0.165	0.008	0.014	0.0011	80	140	0.079	0.011	100
			33	Inconel 700	250 HB		0.165		0.014		80	140			90
			34	Stellite 21	350 HB		0.165		0.014		70	130			90
	Ti based	10	36	TiAl6V4	-	0.020	0.220	0.008	0.016	0.0012	140	210	0.079	0.013	180
			37	T40	-		0.165		0.014	0.0011	110	180		0.012	140
Hardened Mat.	Steel	11	38	X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.020	0.138	0.004	0.012	0.0009	160	320	0.079	0.010	260
			38		50 HRc		0.110		0.010	0.0006	130	290	0.059	0.008	220
			38		55 HRc		0.083		0.008	0.0005	130	260	0.039	0.007	190
	Chilled Cast Iron		40	Ni-Hard 2	400 HB	0.020	0.110	0.004	0.010	0.0006	130	190	0.059	0.007	160
	White Cast Iron		41	G-X300CrMo15	55 HRc	0.020	0.083	0.004	0.008	0.0005	90	160	0.039	0.006	130
NF	Al (>8%Si)	12	25	AlSi12	130 HB	0.020	0.331	0.008	0.024	0.0028	650	1310	0.118	0.016	910