MACHINING CONDITIONS

GCTX 3003 NN LT 1000

T0002826

Material Group		Lamina Group	Material Example	Hardness	Feed		Vc		Advised Feed	Advised Vc
					min[mm/t]	max [mm/t]	min [m/min]	max [m/min]	[mm/t]	[m/min]
Steel	Non Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.05	0.17	130	220	0.11	175
				190 HB	0.05	0.17	130	220	0.11	175
				250 HB	0.05	0.17	130	200	0.11	165
	Low Alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	230 HB	0.05	0.15	90	200	0.1	145
				280 HB	0.05	0.15	90	170	0.1	130
				180 HB	0.05	0.15	90	200	0.1	145
				350 HB	0.05	0.15	90	150	0.1	120
	High Alloyed	3	X40CrM0V5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.05	0.14	60	170	0.1	115
				280 HB	0.05	0.14	60	150	0.1	105
				320 HB	0.05	0.13	60	130	0.09	95
				350 HB	0.05	0.12	60	100	0.09	80
Stainless Steel	Austentic	4	304, 316, X5CrNi18-9	180 HB	0.05	0.1	90	150	0.07	120
				240 HB	0.05	0.1	70	140	0.07	105
	Duplex	5	X2CrNiN23-4, S31500	290 HB	0.05	0.09	60	100	0.07	80
				310 HB	0.05	0.09	60	100	0.07	80
	Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.05	0.09	60	130	0.07	95
				42 HRc	0.05	0.08	50	90	0.07	70
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, N030B	150 HB	0.05	0.16	130	190	0.1	160
				200 HB	0.05	0.16	130	190	0.1	160
				250 HB	0.05	0.16	130	190	0.1	160
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.05	0.14	90	150	0.1	120
				200 HB	0.05	0.14	90	150	0.1	120
				250 HB	0.05	0.14	90	150	0.1	120
NiTi Alloy	Fe, Ni & Co Based	9	Incoloy 800	240 HB	0.05	0.08	30	40	0.07	30
			Inconel 700	250 HB	0.05	0.08	30	40	0.07	30
			Stellite 21	350 HB	0.05	0.08	30	40	0.07	30
	Ti Based	10	T40	-	0.05	0.08	30	40	0.07	35
			TiAl6V4	-	0.05	0.08	40	60	0.07	45
Hardened Materials	Steel Chilled Cast Iron White Cast Iron	11	G-X300CrMo15	55 HRc	0.05	0.08	30	50	0.07	40
			Ni-Hard 2	400 HB	0.05	0.08	40	60	0.07	50
			X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.05	0.11	50	90	0.08	70
				50 HRc	0.05	0.1	40	70	0.08	55
				55 HRc	0.05	0.09	30	60	0.07	45
Aluminium	Al (>8%Si)	12	AlSi12	130 HB	0.05	0.11	100	300	0.08	200