MACHINING CONDITIONS

SNKX 1205-45 LT 30

M0003221

Material Group		Lamina Group	Material Example	Hardness	D.O.C		Feed		Vc		Advised D.O.C	Advised Feed	Advised Vc
					min[mm]	max[mm]	min[mm/t]	max [mm/t]	min [m/min]	max [m/min]	[mm]	[mm/t]	[m/min]
Steel	Non Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.5	5	0.16	0.34	190	330	3	0.3	250
				190 HB	0.5	5	0.16	0.34	190	300	3	0.3	220
				250 HB	0.5	5	0.16	0.34	190	250	3	0.3	200
	Low Alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	230 HB	0.5	5	0.14	0.28	150	210	3	0.26	180
				280 HB	0.5	5	0.14	0.26	130	190	3	0.24	150
				180 HB	0.5	5	0.14	0.28	150	240	3	0.26	200
				350 HB	0.5	5	0.14	0.26	130	170	3	0.24	140
	High Alloyed	3	X40CrM0V5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	5	0.11	0.28	90	150	3	0.26	130
				280 HB	0.5	5	0.11	0.28	90	130	3	0.26	120
				320 HB	0.5	5	0.11	0.24	60	110	3	0.22	100
				350 HB	0.5	5	0.11	0.24	60	90	3	0.22	80
Stainless Steel	Austentic	4	304, 316, X5CrNi18-9	180 HB	0.5	5	0.14	0.3	190	250	3	0.26	220
				240 HB	0.5	5	0.11	0.3	160	210	3	0.26	190
	Duplex	5	X2CrNiN23-4, S31500	290 HB	0.5	4	0.11	0.25	70	130	2.5	0.22	100
				310 HB	0.5	4	0.11	0.25	70	120	2.5	0.22	90
	Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.5	5	0.14	0.3	150	210	3	0.26	190
				42 HRc	0.5	4	0.14	0.25	90	150	3	0.22	130
Cast Iron	Grey	7	GG20, GG40, EN-GJL-250, N030B	150 HB	0.5	5	0.17	0.34	150	240	3	0.3	200
				200 HB	0.5	5	0.17	0.34	150	220	3	0.3	180
				250 HB	0.5	5	0.17	0.34	150	190	3	0.3	160
	Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.5	5	0.14	0.3	100	200	3	0.27	180
				200 HB	0.5	5	0.14	0.3	100	180	3	0.27	150
				250 HB	0.5	5	0.14	0.3	100	150	3	0.27	130
NiTi Alloy	Fe, Ni & Co Based	9	Incoloy 800	240 HB	0.5	4	0.11	0.2	30	50	2.5	0.18	32
			Inconel 700	250 HB	0.5	4	0.11	0.2	30	50	2.5	0.18	30
			Stellite 21	350 HB	0.5	4	0.11	0.2	30	50	2.5	0.18	30
	Ti Based	10	T40	-	0.5	4	0.11	0.23	30	60	2.5	0.2	40
			TiAl6V4	-	0.5	4	0.11	0.25	40	70	2.5	0.23	55
Hardened Materials	Steel Chilled Cast Iron White Cast Iron	11	G-X300CrMo15	55 HRc	0.4	1	0.1	0.2	30	60	1	0.17	40
			Ni-Hard 2	400 HB	0.4	2	0.1	0.22	40	80	1.3	0.19	50
			X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.4	2	0.1	0.22	40	80	1.3	0.18	60
				50 HRc	0.4	2	0.1	0.2	40	70	1.3	0.16	55
				55 HRc	0.4	1	0.1	0.18	40	60	1	0.15	50
Aluminium	Al (>8%Si)	12	AlSi12	130 HB	0.5	5	0.17	0.36	200	400	3	0.3	280