



# MACHINING CONDITIONS

## SPKR 1203 EDTR LT 30

M0000048

Material Group	Lamina Group	Material Example	Hardness	D.O.C		Feed		Vc		Advised D.O.C [mm]	Advised Feed [mm/t]	Advised Vc [m/min]	
				min[mm]	max[mm]	min[mm/t]	max [mm/t]	min [m/min]	max [m/min]				
Non Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.5	7	0.18	0.38	190	330	3	0.26	250	
			190 HB	0.5	7	0.18	0.38	190	300	3	0.26	220	
			250 HB	0.5	7	0.18	0.38	190	250	3	0.26	200	
Steel	Low Alloyed	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	230 HB	0.5	7	0.15	0.3	150	210	3	0.23	180	
			280 HB	0.5	7	0.15	0.26	130	190	3	0.21	150	
			180 HB	0.5	7	0.15	0.3	150	240	3	0.23	200	
			350 HB	0.5	7	0.15	0.26	130	170	3	0.21	140	
Stainless Steel	High Allored	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	5	0.12	0.26	90	150	2.3	0.21	130	
			280 HB	0.5	5	0.12	0.26	90	130	2.3	0.21	120	
			320 HB	0.5	5	0.12	0.22	60	110	2.3	0.18	100	
			350 HB	0.5	5	0.12	0.22	60	90	2.3	0.18	80	
Austentic	4	304, 316, X5CrNi18-9	180 HB	0.5	7	0.15	0.26	190	250	3	0.21	220	
			240 HB	0.5	7	0.12	0.24	160	210	3	0.21	190	
Duplex	5	X2CrNiN23-4, S31500	290 HB	0.5	5	0.12	0.22	70	130	2.3	0.18	100	
			310 HB	0.5	5	0.12	0.22	70	120	2.3	0.18	90	
Ferritic & Martensitic	6	410, X6Cr17, 17-4 PH, 430	200 HB	0.5	7	0.15	0.26	150	210	3	0.21	190	
			42 HRc	0.5	5	0.15	0.22	90	150	2.3	0.18	130	
Cast Iron	Grey	GG20, GG40, EN-GJL-250, N030B	150 HB	0.5	7	0.18	0.38	150	240	3	0.26	200	
			200 HB	0.5	7	0.18	0.38	150	220	3	0.26	180	
			250 HB	0.5	7	0.18	0.38	150	190	3	0.26	160	
Malleable & Nodular	8	GGG40, GGG70, 50005	150 HB	0.5	7	0.15	0.34	100	200	3	0.23	180	
			200 HB	0.5	7	0.15	0.34	100	180	3	0.23	150	
			250 HB	0.5	7	0.15	0.34	100	150	3	0.23	130	
Niti Alloy	Fe, Ni & Co Based	Incoloy 800	240 HB	0.5	5	0.12	0.22	30	50	2.3	0.18	32	
		Inconel 700	250 HB	0.5	5	0.12	0.22	30	50	2.3	0.18	30	
		Stellite 21	350 HB	0.5	5	0.12	0.22	30	50	2.3	0.18	30	
Ti Based	10	T40	-	0.5	5	0.12	0.22	30	60	2.3	0.18	40	
		TiAl6V4	-	0.5	5	0.12	0.24	40	70	2.3	0.21	55	
Hardened Materials	Steel Chilled Cast Iron White Cast Iron	G-X300CrMo15	55 HRc	0.5	1.5	0.1	0.17	30	60	0.8	0.14	40	
		Ni-Hard 2	400 HB	0.5	2	0.1	0.22	40	80	1.1	0.16	50	
		X100CrMo13, 440C, G-X260NiCr42	45 HRc	0.5	2.5	0.1	0.22	40	80	1.5	0.16	60	
			50 HRc	0.5	1.8	0.1	0.19	40	70	1.1	0.15	55	
			55 HRc	0.5	1.5	0.1	0.17	40	60	0.8	0.14	50	
Aluminium	Al (>8%Si)	12	AISI12	130 HB	0.5	7	0.18	0.38	200	400	3	0.29	280