

MACHINING CONDITIONS - MILLING - DEPTH OF CUT AND FEED

SPMT 09T308 TN

Material Group	Lamina Gr. N°	Material Examples	Hardness	DOC [mm]		Feed [mm/z]		Suggested Starting Parameters	
				min	max	min	max	DOC	Feed
Non Alloyed  P  Low Alloyed  High Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.50	9.00	0.07	0.17	2.40	0.15
			190 HB						0.13
			250 HB						
	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	180 HB	0.50	9.00	0.07	0.17	2.40	0.15
			230 HB						0.13
			280 HB						
	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.50	9.00	0.05	0.13	1.80	0.13
			280 HB						0.11
			320 HB						
4	304, 316, X5CrNi18-9	180 HB	0.50	9.00	0.07	0.12	2.40	0.10	
		240 HB						0.08	
5	X2CrNiN23-4, S31500	290 HB	0.50	9.00	0.05	0.10	1.80	0.08	
		310 HB						0.07	
6	410, X6Cr17, 17-4PH, 430	200 HB	0.50	9.00	0.05	0.08	2.40	0.07	
		42 HRc						1.80	
Grey  K  Malleable & Nodular	7	GG20, GG40, EN-GJL-250, N030B	150 HB	0.50	9.00	0.06	0.22	2.40	0.18
			200 HB						0.16
			250 HB						
	8	GGG40, GGG70, 50005	150 HB	0.50	9.00	0.06	0.22	2.40	0.18
			200 HB						0.16
			250 HB						
9	Incoloy 800	240 HB	0.50	9.00	0.04	0.12	1.80	0.10	
		Inconel 700							
		Stellite 21							
10	TiAl6V4	-	0.50	9.00	0.04	0.12	1.80	0.10	
	T40	-							
Steel  H  Chilled Cast Iron White Cast Iron	11	X100 CrMo13, 440C, G-X260NiCr42	45 HRc	0.50	9.00	0.04	0.12	1.20	0.10
			50 HRc						0.08
			55 HRc						0.06
		Ni-Hard 2	400 HB						0.09
			G-X300CrMo15						55 HRc
12	AISI12	130 HB		0.50	9.00	0.08	0.16	2.40	0.13

The depth of cut and feed rate tables are for the geometry and corner radius specified above the table. Refer to cutting speed tables on page 226 for recommended materials per grade.