

MACHINING CONDITIONS - TURNING - DEPTH OF CUT AND FEED

CCMT 060204 NN
 CPMT 060204 NN
 DCMT 070204 NN

TCMT 110204 NN
 VBMT 110304 NN

Material Group	Lamina Gr. N°	Material Examples	Hardness	DOC [mm]		Feed [mm/rev]		Amax [mm ²]	Suggested Starting Parameters					
				min	max	min	max		DOC	Feed				
P Non Alloyed Low Alloyed High Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.3	2.1	0.08	0.20	0.32	1.0	0.14				
			190 HB											
			250 HB											
	2	42CrMo4, S150, Ck60, 4140, 4340, 100Cr6	180 HB	0.3	1.8	0.08	0.17	0.30	1.0	0.11				
			230 HB											
			280 HB											
			350 HB											
	3	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.3	1.8	0.07	0.15	0.25	0.9	0.08				
			280 HB											
			320 HB											
			350 HB											
	M Austenitic Duplex Ferritic & Martensitic	4	304, 316, X5CrNi18-9	180 HB	0.3	1.8	0.06	0.15	0.20	1.0	0.07			
240 HB														
5		X2CrNiN23-4, S31500	290 HB	0.3	1.4	0.06	0.12	0.12	0.85	0.06				
			310 HB											
6		410, X6Cr17, 17-4PH, 430	200 HB	0.3	1.8	0.06	0.15	0.20	0.9	0.08				
			42 HRc		1.4						0.14	0.16		
K Grey Malleable & Nodular	7	GG20, GG40, EN-GJL-250, N030B	150 HB	0.3	2.1	0.06	0.17	0.40	1.0	0.16				
			200 HB											
			250 HB											
8	GGG40, GGG70, 50005	150 HB	0.3	1.8	0.06	0.15	0.30	1.0	0.14					
		200 HB												
		250 HB												
S Fe, Ni & Co based Ti based	9	Incoloy 800	0.3	1.4	0.08	0.13	0.16	0.7	0.08					
		Inconel 700												
		Stellite 21												
	10	T40	0.3	1.4	0.07	0.12	0.16	0.7	0.08					
		TiAl6V4								-	0.14	0.2		
H Steel Chilled Cast Iron White Cast Iron	11	X100 CrMo13, 440C, G-X260NiCr42	45 HRc	0.3	1.3	0.04	0.1	0.12	0.7	0.08				
			50 HRc											
			55 HRc											
			400 HB	0.3	1.1						0.08	0.08	0.5	0.05
			55 HRc											
NF Aluminium	12	AISI12	130 HB	0.3	2.8	0.08	0.26	0.44	1.0	0.18				

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 pages 186 and 187 for recommended materials per grade.