

MACHINING CONDITIONS

RDMT 1604 M0 – LT 3000

Catalog N°: M0003407

Material Group	Gr. N°	VDI Group	Material Examples	Hardness	DOC [mm]		Feed [mm/rev]		V _c [m/min]		Suggested Starting Parameters			
					min	max	min	max	min	max	DOC	Feed	V _c	
P	Non Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.5	4	0.25	1	190	330	2	0.34	250	
		2		190 HB	0.5	4	0.25	1	190	300	2	0.34	220	
		3		250 HB	0.5	4	0.25	1	190	250	2	0.34	200	
	Low Alloyed	2	4, 6 42CrMo4, S150, Ck60, 4140, 4340, 100Cr06	180 HB	0.5	4	0.21	0.78	150	210	2	0.3	180	
		5, 7		230 HB	0.5	4	0.21	0.69	130	190	2	0.27	150	
		6		280 HB	0.5	4	0.21	0.78	150	240	2	0.3	200	
		8		350 HB	0.5	4	0.21	0.69	130	170	2	0.27	140	
		10		220 HB	0.5	2.8	0.17	0.69	90	150	1.5	0.27	130	
	High Alloyed	3	10 X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	280 HB	0.5	2.8	0.17	0.69	90	130	1.5	0.27	120	
		11		320 HB	0.5	2.8	0.17	0.56	60	110	1.5	0.24	100	
		11		350 HB	0.5	2.8	0.17	0.56	60	90	1.5	0.24	80	
M	Austenitic	4	14 304, 316, X5CrNi18-9	180 HB	0.5	4	0.21	0.78	190	250	2	0.3	220	
		14		240 HB	0.5	4	0.17	0.69	160	210	2	0.3	190	
	Duplex	5	14 X2CrNiN23-4, S31500	290 HB	0.5	3.1	0.17	0.56	70	130	1.5	0.24	100	
		14		310 HB	0.5	3.1	0.17	0.56	70	120	1.5	0.24	90	
	Ferritic & Martensitic	6	12 410, X6Cr17, 17-4PH, 430	200 HB	0.5	4	0.21	0.78	150	210	2	0.3	190	
		13		42 HRc	0.5	3.1	0.21	0.63	90	150	1.5	0.24	130	
K	Grey	7	15 GG20, GG40, EN-GJL-250	150 HB	0.5	4	0.25	1	150	240	2	0.34	200	
		15		200 HB	0.5	4	0.25	1	150	220	2	0.34	180	
		16		250 HB	0.5	4	0.25	1	150	190	2	0.34	160	
	Malleable & Nodular	8	17, 19 GG20, GG70, 50005	150 HB	0.5	4	0.21	0.88	100	200	2	0.3	180	
		17, 19		200 HB	0.5	4	0.21	0.88	100	180	2	0.3	150	
		18, 20		250 HB	0.5	4	0.21	0.88	100	150	2	0.3	130	
		S	Fe, Ni & Co based	9	31, 32 Incoloy 800	240 HB	0.5	3.1	0.17	0.56	30	50	1.5	0.24
33				Inconel 700	250 HB	0.5	3.1	0.17	0.56	30	50	1.5	0.24	30
34				Stellite 21	350 HB	0.5	3.1	0.17	0.56	30	50	1.5	0.24	30
Ti based	10		36 TiAl6V4	-	0.5	3.1	0.17	0.56	30	60	1.5	0.24	40	
	37			T40	-	0.5	3.1	0.17	0.63	40	70	1.5	0.27	55
	H		11	38 X100 CrMo13, 440C,	45 HRc	0.4	1.4	0.14	0.56	40	80	1	0.21	60
			38		G-X260NiCr42	55 HRc	0.4	1	0.14	0.44	40	60	0.5	0.18
Chilled Cast Iron		12	40 Ni-Hard 2	400 HB	0.4	1.1	0.14	0.56	40	80	0.8	0.21	50	
NF	Aluminium	White Cast Iron	13	41 G-X300CrMo15	55 HRc	0.4	1	0.14	0.44	30	60	0.5	0.18	40
		14	25 AlSi12	130 HB	0.5	4	0.25	1	200	400	2	0.38	280	

