MACHINING CONDITIONS

APKT 100332 PDTR **– LT 3000**

Catalog N°: M0003394

	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	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.5	9	0.13	0.32	190	330	1	0.23	250
			2		190 HB	0.5	9	0.13	0.32	190	300	1	0.23	220
			3		250 HB	0.5	9	0.13	0.32	190	250	1	0.23	200
	Low Alloyed	2	4, 6	42CrMo4, St50, Ck60, 4140, 4340, 100Cr06	180 HB	0.5	9	0.1	0.25	150	210	1	0.2	180
			5, 7		230 HB	0.5	9	0.1	0.22	130	190	1	0.18	150
			6		280 HB	0.5	9	0.1	0.25	150	240	1	0.2	200
			8		350 HB	0.5	9	0.1	0.22	130	170	1	0.18	140
	High Alloyed	3	10	X40CrMoV5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.5	6.4	0.08	0.22	90	150	1	0.18	130
			10		280 HB	0.5	6.4	0.08	0.22	90	130	1	0.18	120
			11		320 HB	0.5	6.4	0.08	0.18	60	110	1	0.16	100
			11		350 HB	0.5	6.4	0.08	0.18	60	90	1	0.16	80
M	Austenitic	4	14	304, 316, X5CrNi18-9	180 HB	0.5	9	0.1	0.25	190	250	1	0.2	220
			14		240 HB	0.5	9	0.08	0.22	160	210	1	0.2	190
	Duplex	5	14	X2CrNiN23-4, S31500	290 HB	0.5	6.4	0.08	0.18	70	130	1	0.16	100
			14		310 HB	0.5	6.4	0.08	0.18	70	120	1	0.16	90
	Ferritic & Martensitic	6	12	410, X6Cr17, 17-4PH, 430	200 HB	0.5	9	0.1	0.25	150	210	1	0.2	190
			13		42 HRc	0.5	6.4	0.1	0.2	90	150	1	0.16	130
K	Grey	7	15	GG20, GG40, EN-GJL-250	150 HB	0.5	9	0.13	0.32	150	240	1	0.23	200
			15		200 HB	0.5	9	0.13	0.32	150	220	1	0.23	180
			16		250 HB	0.5	9	0.13	0.32	150	190	1	0.23	160
	Malleable & Nodular	8	17, 19	GG20, GG70, 50005	150 HB	0.5	9	0.1	0.28	100	200	1	0.2	180
			17, 19		200 HB	0.5	9	0.1	0.28	100	180	1	0.2	150
			18, 20		250 HB	0.5	9	0.1	0.28	100	150	1	0.2	130
S	Fe, Ni & Co based	9	31, 32	Incoloy 800	240 HB	0.5	6.4	0.08	0.18	30	50	1	0.16	32
			33	Inconel 700	250 HB	0.5	6.4	0.08	0.18	30	50	1	0.16	30
			34	Stellite 21	350 HB	0.5	6.4	0.08	0.18	30	50	1	0.16	30
	Ti based	10	36	TiAl6V4	-	0.5	6.4	0.08	0.18	30	60	1	0.16	40
			37	T40	-	0.5	6.4	0.08	0.2	40	70	1	0.18	55
H	Steel	11	38	X100 CrMo13, 440C, G-X260NiCr42	45 HRc	0.4	3.2	0.07	0.18	40	80	0.7	0.14	60
			38		50 HRc	0.4	1.9	0.07	0.16	40	70	0.7	0.13	55
			38		55 HRc	0.4	1	0.07	0.14	40	60	0.7	0.12	50
	Chilled Cast Iron	12	40	Ni-Hard 2	400 HB	0.4	2.6	0.07	0.18	40	80	0.7	0.14	50
	White Cast Iron	13	41	G-X300CrMo15	55 HRc	0.4	1	0.07	0.14	30	60	0.7	0.12	40
NF	Aluminium	14	25	AlSi12	130 HB	0.5	9	0.13	0.32	200	400	1	0.25	280