



MACHINING CONDITIONS

SDKW 0904-HF LT 3130

M0004482

Material Group	SAPPHIRE CUTTING TOOLS Group	Material Example	Hardness	D.O.C		Feed		Vc		Advised D.O.C	Advised Feed	Advised Vc
				min[mm]	max[mm]	min[mm/t]	max [mm/t]	min [m/min]	max [m/min]	[mm]	[mm/t]	[m/min]
Non Alloyed	1	C35, Ck45, 1020, 1045, 1060, 28Mn6	125 HB	0.3	1.5	0.3	1.5	190	350	1.1	1.3	265
			190 HB	0.3	1.5	0.3	1.5	190	320	1	1.3	240
			250 HB	0.3	1.5	0.3	1.5	190	280	1	1.3	215
Low Alloyed	2	42CrMo4, St50, Ck60, 4140, 4340, 100Cr6	230 HB	0.3	1.3	0.3	1.36	150	230	0.8	1.1	200
			280 HB	0.3	1.3	0.3	1.36	130	210	0.8	1	165
			180 HB	0.3	1.3	0.3	1.36	150	270	0.8	1.1	215
			350 HB	0.3	1.3	0.3	1.36	130	190	0.8	1	155
High Alloyed	3	X40CrM0V5, H13, M42, D3, S6-5-2, 12Ni19	220 HB	0.3	1.3	0.3	1.2	90	170	0.7	0.9	140
			280 HB	0.3	1.2	0.3	1.2	90	150	0.7	0.9	130
			320 HB	0.3	1.1	0.3	1.2	60	120	0.7	0.7	110
			350 HB	0.3	1.1	0.3	1.2	60	100	0.7	0.7	90