

4WHE/6&8WHE									Cutting Conditions							
Material	Tool Steels / Mould Steels SCM / HPM				Alloy Steels / Pre-hardened Steels NAK80 / KP4M				Hardened Steels STAVAX / SKD11				Heat-treated Steels Hardened Steels SKD11 / SKD61			
Hardness	30~ 40HRC				40~ 45HRC				45 ~ 55HRC				50~ 62HRC			
Outside Dia	RPM	FEED	Ap Axial Depth	Ae Radial Depth	RPM	FEED	Ap Axial Depth	Ae Radial Depth	RPM	FEED	Ap Axial Depth	Ae Radial Depth	RPM	FEED	Ap Axial Depth	Ae Radial Depth
Ø 1	24,000	149	1.5	0.05	9,600	33	0.5	0.03	19,200	111	1.5	0.05	9,300	28	0.5	0.03
Ø 1.5	24,000	186	2.25	0.075	9,600	42	0.75	0.045	19,200	139	2.25	0.075	9,000	36	0.75	0.045
Ø 2	24,000	248	3	0.1	9,600	56	1	0.06	19,200	186	3	0.1	8,200	47	1	0.06
Ø 3	23,040	564	4.5	0.15	9,216	127	1.5	0.09	18,432	423	4.5	0.15	7,373	108	1.5	0.09
Ø 4	17,280	653	6	0.2	8,812	147	2	0.12	13,824	490	6	0.2	5,530	125	2	0.12
Ø 5	8,640	743	7.5	0.25	3,456	167	2.5	0.15	6,912	557	7.5	0.25	2,765	142	2.5	0.15
Ø 6	5,480	861	9	0.3	2,592	194	3	0.18	5,184	646	9	0.3	2,074	165	3	0.18
Ø 8	5,184	861	12	0.4	2,074	194	4	0.24	4,147	646	12	0.4	1,659	165	4	0.24
Ø 10	4,320	861	15	0.5	1,728	194	5	0.3	3,456	646	15	0.5	1,382	165	5	0.30
Ø 12	3,240	713	18	0.6	1,296	160	6	0.36	2,592	535	18	0.6	1,037	136	6	0.36
Ø 16	2,592	535	24	0.8	1,037	120	8	0.48	2,074	401	24	0.8	829	102	8	0.48
Ø 20	2,318	431	30	1	927	97	10	0.6	1,854	323	30	1	742	82	10	0.60
Ø 25	3,090	386	37.5	1.25	1,236	87	12.5	0.75	2,472	290	37.5	1.25	989	74	12.5	0.75
Depth of cut																

- The edge of the flute precisely grinded. If you want to measure the tool and to avoid damaging on the flutes, use non-contact measuring method.
- The parameters on the table is based on 4 flutes. For using 6 & 8 flutes, use the same RPM and raise up the feed up to 50% in stable milling condition.
- When milling workpiece, HRC over 60 Hardened steel, reduce 20% of the RPM and feed compared to the same diameter.
- Use this table for your reference. Adjust the parameters depending on your machining geometry, machining purpose and CNC.
- Use a machine with low vibration and good rigidity (Ø1 or less, the vibration tolerance management should be within 5µm).
- Air blow or oil mist coolants are recommended and note for chip emission, heat or ignition.