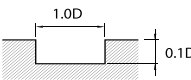
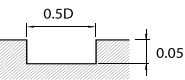
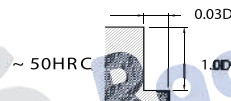
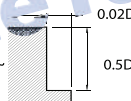


2WLE/4WLE			Cutting Conditions					
Slotting								
Material	Tool Steels / Mould Steels SCM / HPM		Alloy Steels / Pre-hardened Steels NAK80 / KP4M		Hardened Steels STAVAX / SKD11		Heat-treated Steels Hardened Steels SKD11 / SKD61	
Hardness	30 ~ 40HRc		40 ~ 45HRc		45 ~ 55HRc		55 ~ 62HRc	
Outside Dia	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
Ø1	40,000	293	40,000	264	40,000	237	40,000	71
Ø1.5	35,000	320	35,000	288	35,000	259	32,000	78
Ø2	32,000	330	24,000	297	15,000	267	17,500	80
Ø3	21,000	340	17,000	306	10,500	275	13,000	83
Ø4	17,000	460	13,500	414	8,500	373	8,000	112
Ø5	14,500	520	11,500	468	7,500	421	6,750	126
Ø6	12,500	550	10,000	495	6,500	446	5,500	134
Ø8	9,500	630	7,500	567	5,000	510	4,500	153
Ø10	8,000	829	6,500	721	4,000	577	3,550	173
Ø12	6,500	761	5,500	662	3,350	529	3,000	159
Ø16	5,000	761	4,100	662	2,500	529	2,250	159
Ø20	4,000	702	3,250	611	2,000	489	1,800	147
Ø25	3,250	630	2,600	548	1,600	438	1,400	132
Depth of cut	~ 50HRC  50HRC ~ 							

Side Cutting								
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		55 ~ 62HRC	
Outside Dia	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
Ø1	40,000	337	40,000	286	40,000	229	40,000	195
Ø1.5	35,000	368	35,000	313	35,000	250	35,000	213
Ø2	32,000	380	24,000	323	15,000	258	17,500	219
Ø3	21,000	391	17,000	332	10,500	266	13,000	226
Ø4	17,000	529	13,500	450	8,500	360	8,000	306
Ø5	14,500	598	11,500	508	7,500	407	6,750	346
Ø6	12,500	633	10,000	538	6,500	430	5,500	366
Ø8	9,500	725	7,500	616	5,000	493	4,500	419
Ø10	8,000	765	6,500	650	4,000	520	3,550	442
Ø12	6,500	638	5,500	542	3,350	434	3,000	368
Ø16	5,000	638	4,100	542	2,500	434	2,250	368
Ø20	4,000	606	3,250	515	2,000	412	1,800	350
Ø25	3,250	570	2,600	485	1,600	388	1,400	329
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 2 flutes. For using 4 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.