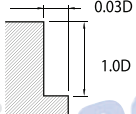
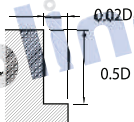


2WSE/2WPE				Cutting Conditions				
Slotting								
Material	Tool Steels / Mould Steels SCM / HPM		Alloy Steels / Pre-hadened Steels NAK80 / KP4M		Hardened Steels STAVAX / SKD11		Heat-treated Steels / Hardened Steels SKD11 / SKD61	
Hardness	30 ~ 40HRc		40 ~ 45HRc		45 ~ 55HRc		55 ~ 62HRc	
Outside Dia	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
Ø0.5	50,000	555	45,000	420	40,000	330	33,000	210
Ø0.6	50,000	705	45,000	540	40,000	428	30,000	240
Ø0.8	50,000	900	40,000	660	30,000	443	25,000	278
Ø0.9	49,000	983	39,000	780	27,800	495	22,700	308
Ø1	48,000	1,125	38,000	855	25,500	540	20,500	323
Ø2	33,300	1,275	26,000	1,020	17,500	630	14,500	390
Ø3	21,800	1,275	17,300	1,020	11,500	630	9,500	390
Ø4	16,700	1,320	13,200	1,050	8,800	660	7,200	405
Ø5	15,700	1,500	12,500	1,208	8,300	750	6,400	428
Ø6	13,100	1,425	10,350	1,155	6,900	720	5,300	420
Ø8	9,880	1,395	7,800	1,080	5,200	668	4,000	383
Ø10	7,800	1,275	6,150	1,020	4,100	623	3,200	360
Ø12	6,650	1,275	5,250	1,020	3,500	623	2,650	360
Ø16	5,540	1,170	4,340	915	2,600	540	1,840	270
Ø18	5,540	1,170	4,340	915	2,600	540	1,840	270
Ø20	4,640	1,080	4,340	855	2,100	450	1,460	270
Depth of cut	~ 55HRC 1.0D 0.1D 55HRC ~ 0.5D 0.05D							

2WSE/2WPE			Cutting Conditions					
Side Milling								
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	48,000	788	38,000	615	25,500	383	20,500	233
Ø2	33,300	900	26,000	728	17,500	450	14,500	278
Ø3	21,800	900	17,300	728	11,500	450	9,500	278
Ø4	16,700	938	13,200	750	8,800	469	7,200	289
Ø5	15,700	1088	12,500	863	8,300	533	6,400	308
Ø6	13,100	1013	10,350	825	6,900	518	5,300	300
Ø8	9,880	990	7,800	773	5,200	476	4,000	274
Ø10	7,800	900	6,150	728	4,100	443	3,200	255
Ø12	6,650	900	5,250	728	3,500	443	2,650	255
Ø16	5,540	750	4,340	660	2,600	398	1,840	255
Ø18	5,540	750	4,200	660	2,450	398	1,650	225
Ø20	4,640	713	3,650	600	2,100	375	1,460	221
Depth of cut	 ~ 55HRC  55HRC ~							

- 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.
- 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 is recommended for smooth chip emission and wet coolant milling is recommended for copper material.