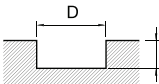
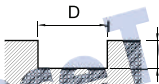
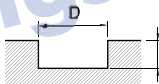
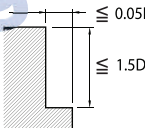
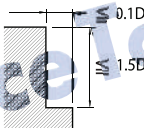
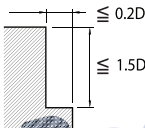


4SEM/4SCR/4SVE					Cutting Condition							
Slotting												
Material	Alloy Steels / Pre-hardened Steels NAK80/KP4M				Stainless Steels / Titanium alloy Steels SUS304/SUS316/Ti6A				Heat Resistance Alloys			
	40 ~ 45HRC											
Outside Dia.	RPM	FEED	Ap Axial Depth	Ae Radial Depth	RPM	FEED	Ap Axial Depth	Ae Radial Depth	RPM	FEED	Ap Axial Depth	Ae Radial Depth
Ø 2	10,000	400	2.0	2.0	9,600	310	1.0	2.0	3,200	80	0.4	2.0
Ø 3	6,900	410	3.0	3.0	7,400	380	1.5	3.0	2,700	110	0.6	3.0
Ø 4	5,600	490	4.0	4.0	5,600	400	2.0	4.0	2,000	120	0.8	4.0
Ø 5	4,500	630	5.0	5.0	4,500	410	2.5	5.0	1,600	130	1.0	5.0
Ø 6	3,700	740	6.0	6.0	3,700	440	3.0	6.0	1,300	160	1.2	6.0
Ø 7	3,200	700	7.0	7.0	3,200	410	3.5	7.0	1,100	140	1.4	7.0
Ø 8	2,800	670	8.0	8.0	2,800	390	4.0	8.0	1,000	130	1.6	8.0
Ø 9	2,500	600	9.0	9.0	2,500	350	4.5	9.0	900	130	1.8	9.0
Ø 10	2,200	530	10.0	10.0	2,200	350	5.0	10.0	800	130	2.0	10.0
Ø 11	2,000	530	11.0	11.0	2,000	320	5.5	11.0	720	120	2.2	11.0
Ø 12	1,900	530	12.0	12.0	1,900	300	6.0	12.0	660	110	2.4	12.0
Ø 16	1,400	390	16.0	16.0	1,400	280	8.0	16.0	500	80	3.2	16.0
Ø 20	1,100	350	20.0	20.0	1,100	260	10.0	20.0	400	60	4.0	20.0
Depth of Cut	 ≤ 1D (MAX. 12mm)  ≤ 0.5D  ≤ 0.2D											

4SEM/4SCR/4SVE					Cutting Condition							
Side Cutting												
Material	Alloy Steels / Pre-hardened Steels NAK80/KP4M				Stainless Steels / Titanium alloy Steels SUS304/SUS316/Ti6A				Heat Resistance Alloys			
	40 ~ 45HRC											
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
Ø 2	21,000	825	3.0	0.4	14,000	420	3.0	0.2	4,800	130	3.0	0.10
Ø 3	15,000	938	4.5	0.6	10,600	638	4.5	0.3	4,200	200	4.5	0.15
Ø 4	11,000	1,050	6.0	0.8	8,000	720	6.0	0.4	3,200	220	6.0	0.20
Ø 5	9,600	1,425	7.5	1.0	6,400	750	7.5	0.5	2,500	250	7.5	0.25
Ø 6	8,000	1,650	9.0	1.2	5,300	750	9.0	0.6	2,100	250	9.0	0.30
Ø 7	6,800	1,425	10.5	1.4	4,500	750	10.5	0.7	1,800	260	10.5	0.35
Ø 8	6,000	1,200	12.0	1.6	4,000	720	12.0	0.8	1,600	260	12.0	0.40
Ø 9	5,300	1,110	13.5	1.8	3,500	630	13.5	0.9	1,400	220	13.5	0.45
Ø 10	4,800	1,080	15.0	2.0	3,200	578	15.0	1.0	1,300	210	15.0	0.50
Ø 11	4,400	1,013	16.5	2.2	2,900	570	16.5	1.1	1,200	190	16.5	0.55
Ø 12	4,000	938	18.0	2.4	2,700	570	18.0	1.2	1,100	180	18.0	0.60
Ø 16	3,000	855	24.0	3.2	2,000	420	24.0	1.6	800	130	24.0	0.80
Ø 20	2,400	645	30.0	4.0	1,600	383	30.0	2.0	600	100	30.0	1.00
Depth of Cut												

- If the effective length is long, reduce the RPM and feed in the same proportion.
- When entering the tool to the workpiece, enter the tool from outside to the workpiece.
- If the diameter or effective length of your tool are not on the table, adjust it compared similarity value on the table
- 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
- Use this table for your reference. Adjust the parameters depending on your machining geometry, machining purpose and CNC.
- If the table over the maximum RPM and feed of your machine or found red heat on the material, adjust RPM and feed in the same proportion.
- Air blow or mist coolants are recommended and note for chip emission, heat or ignition.