

5VCC Cutting Condition

• RPM : rev./min • Feed : mm/min

Material	Structural steels / Carbon Steels / Gray cast irons SS/SC/FC				Tool steels / Mold steels SCM/HPM				Titanium alloy steels Ti6A				Heat Resistance Alloys				Stainless Steels SUS304 / SUS316			
	~30HRC				30 ~ 40HRC				-				-				-			
mm Outside Diameter	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	RPM	FEED	Ap Axial Depth	AE Radial Depth
Ø6	12,000	3,025	9.0	0.3	8,000	2,020	9.0	3.0	5,180	525	6.00	1.80	1,890	186	6.00	1.20	5,930	1,600	9.0	2.10
Ø8	9,000	3,300	12.0	0.4	5,900	2,300	12.0	4.0	3,800	670	8.00	2.40	1,430	186	8.00	1.60	4,480	1,820	12.0	2.80
Ø10	7,200	4,290	15.0	0.5	5,100	2,700	15.0	5.0	3,240	800	10.00	3.00	1,145	209	10.00	2.00	3,560	1,940	15.0	3.50
Ø12	6,000	4,400	18.0	0.6	4,300	2,700	18.0	6.0	2,590	840	12.00	3.60	945	230	12.00	2.40	2,970	2,000	18.0	4.20
Ø14	8,300	4,150	21.0	0.7	3,840	2,700	21.0	7.0	2,300	790	14.00	4.20	820	220	14.00	2.80	2,540	1,780	21.0	4.90
Ø16	4,500	3,850	24.0	0.8	3,250	2,700	24.0	8.0	1,900	735	16.00	4.80	715	210	16.00	3.20	2,240	1,520	24.0	5.60
Ø18	3,950	3,850	27.0	0.9	2,860	2,560	27.0	9.0	1,750	700	18.00	5.40	630	195	18.00	3.60	2,010	1,350	27.0	6.30
Ø20	3,480	3,850	30.0	1.0	2,500	2,430	30.0	10.0	1,620	670	20.00	6.00	570	185	20.00	4.00	1,800	1,220	30.0	7.00

Depth of Cut	Side Milling • Ap : Axial Depth • Ae : Radial Depth				Side Milling • Ap : Axial Depth • Ae : Radial Depth				Side Milling • Ap : Axial Depth • Ae : Radial Depth			

- 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.
- Set ae figure considering Corner C figure of diameter.
- 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.
- Use a machine with low vibration and good rigidity (1 or less, the vibration tolerance management should be within 5µm)
- Air blow or mist coolants are recommended and note for chip emission, heat, or ignition.

4SLE Cutting Condition

• RPM : rev./min • Feed : mm/min

Material	Alloy Steels / Pre-hardened Steels NAK80 / KP4M 40~45HRC				Stainless Steels / Titanium alloy steels SUS304 / SUS316 / Ti6A				Heat Resistance Alloys			
	40 ~ 45HRC				-				-			
Outside Diameter	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 3	13,270	740	2.4	3.0	5,840	260	2.4	3.0	3,185	115	2.4	3.0
Ø 4	9,950	710	3.2	4.0	4,380	245	3.2	4.0	2,390	115	3.2	4.0
Ø 6	6,630	720	4.8	6.0	2,920	245	4.8	6.0	1,590	115	4.8	6.0
Ø 8	4,970	800	6.4	8.0	2,190	245	6.4	8.0	1,190	115	6.4	8.0
Ø 10	3,980	800	8.0	10.0	1,750	245	8.0	10.0	955	115	8.0	10.0
Ø 12	3,320	800	9.6	12.0	1,460	245	9.6	12.0	796	115	9.6	12.0
Ø 16	2,490	800	12.8	16.0	1,095	245	12.8	16.0	597	115	12.8	16.0
Ø 20	1,990	800	16.0	20.0	880	245	16.0	20.0	480	115	16.0	20.0

Depth of Cut	
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- 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.