





- Roughing Endmills for alloy steel, SUS, Inconel, Mild steel and various hard-to-cut materials.
- JCRO coating provides wear resistance improvement as well as avoid edge stress in various applications.
- 45 helix Design for minimizing cutting resistance and long time process.
- High speed and roughing work applicable by fine pitch flute.

















D Size	D Tolerance	
Ø3 ~ 9	-0.02 ~ -0.04 mm	
ø10 ~ 20	-0.02 ~ -0.05 mm	

■ 3 &4 &5 SUR

Cutting Condition

• RPM: rev./min • Feed: mm/min

Material	Stainless Steels / Titanium Alloy Steels				
	SUS304/SUS 316/Ti6A				
Outside Diameter	RPM	FEED	Ap Axial Depth	Ae Radial Depth	
ø3	5,000	380	0.9	3	
Ø4	4,800	350	1.2	4	
ø5	4,700	350	1.5	5	
ø6	4,400	340	1.5	6	
Ø7	3,800	340	1.75	7	
ø8	3,300	340	2	8	
ø9	3,000	340	2.25	9	
ø10	2,700	330	2.5	10	
ø12	2,200	330	1.8	12	
ø14	2,000	310	2.1	14	
ø16	1,750	300	2.4	16	
ø20	1,300	210	2	20	
Depth of Cut		1.0D	\emptyset 3 \sim 5 = 0.3 x D \emptyset 6 \sim 10 = 0.25 x D \emptyset 12 \sim 16 = 0.15 x D \emptyset 18 \sim 20 = 0.1 x D		

When entering the tool to the workpiece, enter the tool from outside to the workpiece.

If the effective length is long, reduce the RPM and feed maximum 30%.

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
- $\bullet \ \ \text{In case of workpiece and machine do not have enough rigidity and make vibration, reduce the RPM and feed in same proportion.}$
- $\bullet\,$ Depending on the workpiece and shape, use adequate coolant.
- For parting off stainless or hear resistant alloy, using water-soluble oil is the most effective way.

proportion.