



- Endmills for various work materials, hardened steel pre-hardened steel, tool steel and cast iron.
- (HRc ~50),
- JCRO coating provides wear resistance improvement as well as avoid edge stress in various applications.
- Minimize edge chipping by applying straight 4flutes design.Various shapes and length provides optimum efficiency.

















D Size	D Tolerance		
ø5 ~ 12	-0.01 ~ -0.025 mm		

: mm

/4TRS /3TRC 4TES

/4 &6TDA /4 &6TAC

■ Use the same RPM and reduce the feed by 30% for 3TRC.

			Slotting				
Material	Mild Steels / Carbon Steels		Alloy Steels		Preharde	Prehardened Steels	
Outside Diameter	RPM	FEED	RPM	FEED	RPM	FEED	
ø1.5	3,050	117	1,890	77	1,530	59	
ø2	2,850	110	1,790	72	1,440	55	
ø2.5	2,680	99	1,700	66	1,350	50	
ø3	2,500	92	1,610	60	1,260	45	
Ø4	2,150	81	1,430	54	1,080	41	
Ø5	1,800	70	1,200	47	900	35	
ø6	1,430	59	950	39	720	30	
Ø8	1,070	44	720	30	540	22	
Ø10	860	35	580	23	430	17	
ø12	720	30	480	20	360	14	

Depth of Cut



Side Cutting									
Material	Mild Steels / Carbon Steels		Alloy Steels		Preharde	Prehardened Steels			
Outside Diameter	RPM	FEED	RPM	FEED	RPM	FEED			
Ø1.5	3,050	162	1,890	94	1,530	76			
ø2	2,850	149	1,790	88	1,440	70			
ø2.5	2,680	135	1,700	83	1,350	65			
ø3	2,500	122	1,610	79	1,260	59			
ø4	2,150	108	1,430	72	1,080	54			
Ø5	1,800	95	1,200	65	900	49			
Ø6	1,430	86	950	58	720	43			
Ø8	1,070	64	720	43	540	32			
ø10	860	52	580	34	430	26			
ø12	720	43	480	29	360	22			
Depth of Cut	Ae 0.1D								

- When entering the tool to the workpiece, enter the tool from outside to the workpiece.
 The parameters on the table is based on 4 flutes. For using 3TRC, use the same RPM and reduce the feed by 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
- If a vibration is occurred while side milling, reduce the feed.