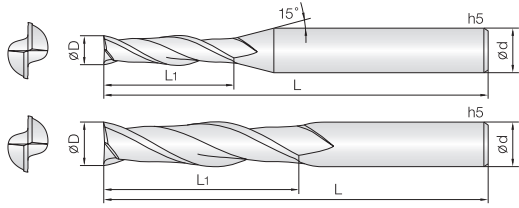


2LEM 2 Flutes Long Length End Mills



- Endmill for various work materials, hardened steel (HRC~55), pre-hardened steel, tool steel and cast iron
- Good wear resistance by Si-based PVD coating.
- Improve tool performance by even run-out and tolerance control.
- Various flute and overall length design for covering wide range applications as well as high efficiency machining.
- Minimize edge chipping by improving corner strength.

2

WC

TISIN
Coating

D
+0 -0.01
Ø1 ~ 5

D
-0.01 -0.025
Ø6 ~ 12

D
-0.015 -0.03
Ø14 ~ 25

30°
Helix Angle

Shield Edge

D Size	D Tolerance
Ø1 ~ 5	+0 ~ -0.01 mm
Ø6 ~ 12	-0.01 ~ -0.025 mm
Ø14 ~ 25	-0.015 ~ -0.03 mm

Slotting								
Material	Alloy Steel/ Tool Steel		Prehardened Steel / Hardened Steel		Hardened Steels		Hardened Steels	
Hardness	30 ~ 40HRC		40 ~ 50HRC		50 ~ 55HRC		55 ~ 62HRC	
Outside Diameter	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
∅ 1	13,000	60	9,000	35	5,700	15	6,500	20
∅ 1.5	10,000	60	6,000	45	4,500	15	4,500	35
∅ 2	6,400	60	4,800	45	3,000	15	3,500	30
∅ 3	4,200	60	3,400	55	2,100	20	2,600	40
∅ 4	3,400	60	2,700	30	1,700	20	1,600	20
∅ 5	2,900	60	2,300	40	1,500	20	1,350	25
∅ 6	2,500	60	2,000	50	1,300	25	1,100	30
∅ 8	1,900	60	1,500	50	1,000	25	900	35
∅ 10	1,600	60	1,300	50	800	25	710	30
∅ 12	1,300	60	1,100	45	670	20	600	25
∅ 16	1,000	40	820	30	500	15	450	20
∅ 20	800	30	650	25	400	13	360	15
∅ 25	650	25	520	20	320	10	280	12

Depth of Cut

~ 50HRC

50HRC ~

0.05D

Side Cutting								
Material	Alloy Steel/ Tool Steel		Prehardened Steel / Hardened Steel		Hardened Steels		Hardened Steels	
Hardness	30 ~ 40HRC		40 ~ 50HRC		50 ~ 55HRC		55 ~ 62HRC	
Outside Diameter	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
∅ 1	13,000	60	9,000	35	6,500	20	6,500	20
∅ 1.5	10,000	60	6,000	45	5,000	35	4,500	25
∅ 2	6,400	60	4,800	45	3,500	30	3,500	25
∅ 3	4,200	65	3,400	55	2,600	40	2,600	30
∅ 4	3,400	80	2,700	65	2,100	50	1,600	35
∅ 5	2,900	100	2,300	80	1,800	60	1,350	40
∅ 6	2,500	120	2,000	100	1,500	75	1,100	50
∅ 8	1,900	130	1,500	100	1,200	85	900	50
∅ 10	1,600	130	1,300	100	950	75	710	50
∅ 12	1,300	120	1,100	90	800	60	600	40
∅ 16	1,000	80	820	65	600	45	450	30
∅ 20	800	65	650	50	480	40	360	25
∅ 25	650	50	520	40	380	30	280	20

Depth of Cut

~ 50HRC

50HRC ~

0.02D

십시오.

- 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.
- The parameters on the table is based on 2 flutes. For using 4 flutes, use the same RPM and raise up the feed up to 50% in stable milling condition.
- When milling workpiece, HRC over 60 hardened steel, reduce 20% of the RPM and feed compared to the same diameter.
- 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 (∅1 or less, the vibration tolerance management should be within 5 μm).
- Air blow or mist coolants are recommended and note for chip emission, heat, or ignition.