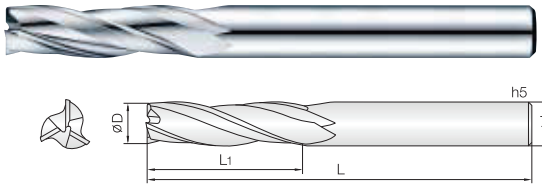
3FALE

3 Flutes Mirror Finishing Cutting End Mills for Aluminum



- **End mills for Aluminum, AL alloys, non-ferrous and non-metallic materials.**
- By 25-degree helix flute edge design with the after-treatment process, when milling workpiece, it enables superior mirror surface milling.
- Minimize fracturing by high TRS fine(0.5㎛) WC grade.

Contact Trucut Tools to order
sales@trucuttools.co.uk
Tel. 01202 717 110

3 | WC | 25° Helix Angle | Shield Edge

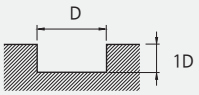
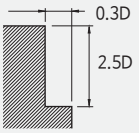
D Size	D Tolerance
Ø 6 ~ 16	+0 ~ -0.01mm

mm

	Order Number	Diameter D	Length of cut L1	Overall Length L	Shank Dia d	
New	3FALE 040 130 S04	4	13	55	4	
New	3FALE 040 180 S04	4	18	60	4	
	3FALE 060 170 S06	6	17	60	6	
	3FALE 060 220 S06	6	22	65	6	
	3FALE 080 260 S08	8	26	70	8	
	3FALE 080 360 S08	8	36	80	8	
	3FALE 100 310 S10	10	31	90	10	
	3FALE 100 410 S10	10	41	90	10	
	3FALE 120 360 S12	12	36	90	12	
	3FALE 120 460 S12	12	46	100	12	
	3FALE 160 460 S16	16	46	100	16	
	3FALE 160 660 S16	16	66	120	16	

3FALE Cutting Condition

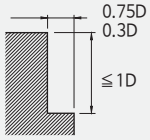
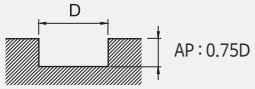
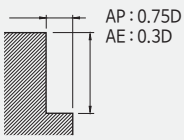
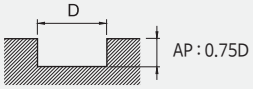
• RPM : rev./min • Feed : mm/min

Material	Slotting				Side Cutting			
	Aluminum Alloys AL7075				Aluminum Alloys AL7075			
Outside Diameter	RPM	FEED	Ap Axial Depth	Ae Radial Depth	RPM	FEED	Ap Axial Depth	Ae Radial Depth
ø 6	8,000	1,000	6	6	8,000	1,200	15	1.8
ø 8	6,000	1,000	8	8	6,000	1,200	20	2.4
ø 10	4,800	1,000	10	10	4,800	1,200	25	3
ø 12	4,000	1,000	12	12	4,000	1,200	30	3.6
ø 16	3,000	1,000	16	16	3,000	1,200	40	4.8
Depth of Cut								

- When entering the tool to the workpiece, enter the tool from outside to the workpiece.
- In case of long effective length, reduce the RPM and feed by 20% or less.
- Use this table for your reference. Adjust the parameters depending on your machining geometry, machining purpose and CNC.
- In case of workpiece and machine do not have enough rigidity and make vibration, reduce the RPM and feed in same proportion.
- Depending on the workpiece and shape, use adequate coolant.

4ALE Cutting Condition

• RPM : rev./min • Feed : mm/min

Material	Aluminum Alloys AL7075				Aluminum Alloys AL7075			
	Side Milling		Soltting		Side Milling		Soltting	
Outside Diameter	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
Ø3	12,800	975	12,880	825	5,796	439	5,796	330
Ø4	9,800	975	9,800	825	4,410	439	4,410	330
Ø5	7,700	975	7,700	825	3,465	439	3,465	330
Ø6	6,440	975	6,440	825	2,898	439	2,898	330
Ø8	4,900	975	4,900	825	2,205	439	2,205	330
Ø10	3,850	975	3,850	825	1,733	439	1,733	330
Ø12	3,080	975	3,080	825	1,386	439	1,386	330
Ø16	2,240	926	2,240	746	1,008	417	1,008	298
Ø20	1,400	829	1,400	663	630	373	630	265
Depth of Cut								

- When cutting at a high feed rate, check the stability of the cutting conditions first, as chip adhesion may occur on the cutting edge.
- The cutting edge is precisely ground. To prevent breakage, try to measure without contacting the edge if possible.
- The above cutting conditions are numerical values, so they may need to be adjusted depending on the actual machining shape, machining purpose, and applied machine.
- We recommend using air blow, cutting oil, or oil mist coolant to remove chips effectively and pay attention to heat generation and ignition during machining.
- If vertical lines appear on the surface after side milling, check the clamping of the holder and the fastening of the collet.