

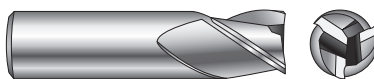
## HIGH SPEED STEEL

## 3 FLUTE SINGLE END MILLS FOR ALUMINUM

ICS USA

SPECIAL PURPOSE

CENTER CUTTING

WELDON  
SHANK

REGULAR LENGTH

RIGHT HAND CUT  
RIGHT HAND HIGH HELIX

Three Flute High Speed Steel End Mills are designed especially for milling aluminum, aluminum alloys, "aviation aluminum", copper, copper alloys, soft steels, and thermoplastics. Special high helix angle for maximum chip removal. Three flute design removes more material per revolution, tracks straighter, mills at very high feed rates, and creates a smoother finish than 2 flute end mills.

Titanium-carbonitride (TiCN) coated end mills work well in harder material and for longer production runs. The hard, smooth finish resists chipping and wear and prevents material from accumulating on the cutting edge. Titanium-carbonitride coating works especially well for cutting aluminum.

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EM-3A
1/4	3/8	5/8	2-7/16	20.50
5/16	3/8	3/4	2-1/2	20.50
3/8	3/8	3/4	2-1/2	20.50
7/16	1/2	1-1/4	3-1/4	26.00

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EM-3A
1/2	1/2	1/2	2-1/2	24.50
5/8	5/8	5/8	2-3/4	32.50
3/4	3/4	3/4	3	35.00
1	1	1	3-1/2	54.00

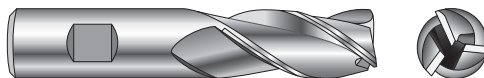
## HIGH SPEED STEEL

## 3 FLUTE LONG LENGTH SINGLE END MILLS FOR ALUMINUM

ICS USA

SPECIAL PURPOSE

CENTER CUTTING

WELDON  
SHANK

LONG LENGTH

RIGHT HAND CUT  
RIGHT HAND HIGH HELIX

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EM-3AL
1/4	3/8	1-1/4	3-1/16	22.40
5/16	3/8	1-3/8	3-1/8	22.40
3/8	3/8	1-1/2	3-1/4	22.40
1/2	1/2	1-1/4	3-1/4	26.82

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EM-3AL
5/8	5/8	1-5/8	3-3/4	33.70
3/4	3/4	1-5/8	3-7/8	35.40
1	1	2	4-1/2	57.72

## HIGH SPEED STEEL

## EXTRA LONG 3 FLUTE SINGLE END MILLS FOR ALUMINUM

ICS USA

SPECIAL PURPOSE

CENTER CUTTING

WELDON  
SHANK

EXTRA LONG LENGTH

RIGHT HAND CUT  
RIGHT HAND HIGH HELIX

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EM-3AX
1/4	3/8	1-3/4	3-9/16	26.42
5/16	3/8	2	3-3/4	26.42
3/8	3/8	2-1/2	4-1/4	26.42

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EM-3AX
1/2	1/2	2	4	30.44
5/8	5/8	2	4-1/8	36.42
1	1	4	6-1/2	83.52