

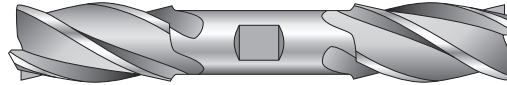
# 4 FLUTE DOUBLE END MILLS

ICS USA

GENERAL PURPOSE

CENTER CUTTING

WELDON SHANK



REGULAR LENGTH

RIGHT HAND CUT  
RIGHT HAND HELIX

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EACH	
				HSS	TiN COATED
				DEM-4C	DEM-4CT
1/8	3/8	3/8	3-1/16	17.48	26.00
5/32	3/16	15/64	3-1/8	14.80	26.50
3/16	3/8	1/2	3-1/4	17.48	26.00
13/64	3/8	9/16	3-1/4	24.40	-
7/32	3/8	9/16	3-1/4	24.40	26.50
15/64	3/8	5/8	3-3/8	24.40	26.50
1/4	3/8	5/8	3-3/8	17.48	26.00
17/64	3/8	11/16	3-3/8	24.40	26.50
9/32	3/8	11/16	3-3/8	24.40	26.50
5/16	3/8	3/4	3-1/2	18.48	30.14
21/64	3/8	3/4	3-1/2	24.40	-
11/32	3/8	3/4	3-1/2	24.40	26.50

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EACH	
				HSS	TiN COATED
				DEM-4C	DEM-4CT
3/8	3/8	3/4	3-1/2	18.48	26.00
13/32	1/2	1	4-1/8	41.64	43.72
7/16	1/2	1	4-1/8	34.00	38.30
1/2	1/2	1	4-1/8	26.10	38.30
17/32	5/8	1-3/8	5	42.00	-
9/16	5/8	1-3/8	5	31.00	48.34
5/8	5/8	1-3/8	5	31.00	48.34
11/16	3/4	1-5/8	5-5/8	56.08	-
3/4	3/4	1-5/8	5-5/8	43.36	59.64
7/8	7/8	1-7/8	6-1/8	54.00	71.54
1	1	1-7/8	6-3/8	68.00	98.20

TOLERANCES  
Flute Dia.: + .003 - .000"  
Shank Dia.: + .0005 - .0005"

## HIGH SPEED STEEL

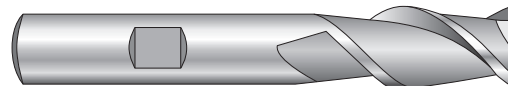
# 2 FLUTE SINGLE END MILLS FOR ALUMINUM

ICS USA

SPECIAL PURPOSE

CENTER CUTTING

WELDON SHANK



REGULAR LENGTH

RIGHT HAND CUT  
RIGHT HAND HELIX

These Two Flute High Speed Steel End Mills are designed for milling aluminum, aluminum alloys, "aviation aluminum", copper, copper alloys, soft steels, and thermoplastics. Special high helix angle for maximum chip removal. Order zirconium nitride coated end mills to minimize packing of chips in the flutes and for very fast removal of material. Zirconium nitride is harder than titanium nitride and can be subjected to higher operating temperatures. Performance reports show a 200%-500% improvement over titanium nitride when machining the aforementioned materials.

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EACH	
				HSS	ZrN COATED
				EM-2A	EM-2AZ
1/8	3/8	3/8	2-5/16	14.04	-
3/16	3/8	1/2	2-3/8	14.04	-
1/4	3/8	5/8	2-1/2	16.40	CALL FOR PRICE
5/16	3/8	3/4	2-1/2	16.40	FOR PRICE
3/8	3/8	3/4	2-1/2	16.40	PRICE
7/16	3/8	1	2-11/16	18.48	-
1/2	1/2	1-1/4	3-1/4	20.04	-
5/8	1/2	1-3/8	3-3/8	30.50	-

SIZE	SHANK DIA.	FLUTE LENGTH	OVERALL LENGTH	PRICE EACH	
				HSS	ZrN COATED
				EM-2A	EM-2AZ
5/8	5/8	1-5/8	3-3/4	26.12	-
3/4	1/2	1-5/8	3-5/8	34.50	-
3/4	3/4	1-5/8	3-7/8	30.54	CALL FOR PRICE
13/16	3/4	1-7/8	4-1/8	44.00	FOR PRICE
7/8	3/4	1-7/8	4-1/8	45.04	PRICE
7/8	7/8	1-7/8	4-1/8	45.04	-
1	3/4	1-7/8	4-1/8	55.74	-
1	1	2	4-1/2	55.74	-