

**PREMIUM (10% COBALT) MICROGRAIN CARBIDE
SOLID CARBIDE 2 FLUTE END MILLS**

ICS USA

HEAVY DUTY

CENTER CUTTING

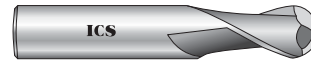
Micro-Grain Solid Carbide End Mills were developed for machining tough work hardening metals, stainless steel, titanium, monel, inconel, and super alloys. It is extremely shock resistant.

2 FLUTE - SINGLE END



REGULAR LENGTH

2 FLUTE SINGLE END (BALL NOSE)



REGULAR LENGTH

| SIZE | SHANK DIA. | FLUTE LENGTH | OVERALL LENGTH | PRICE EACH | |
|-------|------------|--------------|----------------|---------------|------------|
| | | | | SOLID CARBIDE | TIN COATED |
| | | | | SCDEM-2R | SCDEM-2T |
| 1/16 | 1/8 | 3/16 | 1-1/2 | \$14.46 | \$17.26 |
| 3/32 | 1/8 | 3/8 | 1-1/2 | 14.46 | 17.26 |
| 1/8 | 1/8 | 1/2 | 1-1/2 | 13.78 | 16.58 |
| 5/32 | 3/16 | 9/16 | 2 | 18.82 | 21.62 |
| 3/16 | 3/16 | 5/8 | 2 | 18.82 | 21.62 |
| 7/32 | 1/4 | 5/8 | 2-1/2 | 24.54 | 29.64 |
| 1/4 | 1/4 | 3/4 | 2-1/2 | 24.34 | 29.44 |
| 9/32 | 5/16 | 3/4 | 2-1/2 | 31.82 | 38.60 |
| 5/16 | 5/16 | 13/16 | 2-1/2 | 31.82 | 38.60 |
| 11/32 | 3/8 | 1 | 2-1/2 | 42.06 | 48.84 |
| 3/8 | 3/8 | 1 | 2-1/2 | 42.06 | 48.84 |
| 7/16 | 7/16 | 1 | 2-3/4 | 61.76 | 72.64 |
| 1/2 | 1/2 | 1 | 3 | 71.76 | 82.62 |
| 9/16 | 9/16 | 1-1/4 | 3-1/2 | 125.00 | 138.74 |
| 5/8 | 5/8 | 1-1/4 | 3-1/2 | 130.02 | 143.76 |
| 11/16 | 3/4 | 1-1/2 | 4 | 212.80 | 230.68 |
| 3/4 | 3/4 | 1-1/2 | 4 | 212.80 | 230.68 |
| 7/8 | 7/8 | 1-1/2 | 4 | 315.84 | 335.74 |
| 1 | 1 | 1-1/2 | 4 | 350.00 | 369.78 |

| SIZE | SHANK DIA. | FLUTE LENGTH | OVERALL LENGTH | PRICE EACH | |
|-------|------------|--------------|----------------|---------------|------------|
| | | | | SOLID CARBIDE | TIN COATED |
| | | | | SCDEM-2B | SCDEM-2BT |
| 1/16 | 1/8 | 3/16 | 1-1/2 | \$17.62 | \$20.42 |
| 3/32 | 1/8 | 3/8 | 1-1/2 | 17.62 | 20.42 |
| 1/8 | 1/8 | 1/2 | 1-1/2 | 17.62 | 20.42 |
| 5/32 | 3/16 | 9/16 | 2 | 23.78 | 26.58 |
| 3/16 | 3/16 | 5/8 | 2 | 23.78 | 26.58 |
| 7/32 | 1/4 | 5/8 | 2-1/2 | 28.36 | 33.48 |
| 1/4 | 1/4 | 3/4 | 2-1/2 | 31.58 | 36.68 |
| 9/32 | 5/16 | 3/4 | 2-1/2 | 39.82 | 46.60 |
| 5/16 | 5/16 | 13/16 | 2-1/2 | 39.82 | 46.60 |
| 3/8 | 3/8 | 1 | 2-1/2 | 51.06 | 57.84 |
| 7/16 | 7/16 | 1 | 2-1/2 | 66.42 | 77.28 |
| 1/2 | 1/2 | 1 | 2-3/4 | 86.12 | 96.98 |
| 9/16 | 9/16 | 1-1/4 | 3 | 142.02 | 155.76 |
| 5/8 | 5/8 | 1-1/4 | 3-1/2 | 158.54 | 172.26 |
| 11/16 | 3/4 | 1-1/2 | 3-1/2 | 263.06 | 280.92 |
| 3/4 | 3/4 | 1-1/2 | 4 | 228.64 | 246.52 |
| 7/8 | 7/8 | 1-1/2 | 4 | 377.30 | 397.08 |
| 1 | 1 | 1-1/2 | 4 | 406.42 | 426.20 |

2 FLUTE - DOUBLE END



REGULAR LENGTH

2 FLUTE DOUBLE END (BALL NOSE)



REGULAR LENGTH

| SIZE | SHANK DIA. | FLUTE LENGTH | OVERALL LENGTH | PRICE EACH | |
|------|------------|--------------|----------------|---------------|------------|
| | | | | SOLID CARBIDE | TIN COATED |
| | | | | SCDEM-2R | SCDEM-2T |
| 1/8 | 3/8 | 3/8 | 3-1/16 | \$31.00 | \$40.38 |
| 5/32 | 3/8 | 7/16 | 3-1/8 | 44.18 | 53.56 |
| 3/16 | 3/8 | 1/2 | 3-1/4 | 44.18 | 53.56 |
| 7/32 | 3/8 | 9/16 | 3-3/8 | 48.50 | 57.88 |
| 1/4 | 3/8 | 5/8 | 3-3/8 | 49.00 | 58.38 |
| 9/32 | 3/8 | 11/16 | 3-1/2 | 65.94 | 75.32 |
| 5/16 | 3/8 | 3/4 | 3-1/2 | 58.50 | 67.88 |
| 3/8 | 3/8 | 3/4 | 3-1/2 | 75.68 | 85.06 |
| 7/16 | 1/2 | 7/8 | 4 | 107.20 | 122.96 |
| 1/2 | 1/2 | 1 | 4 | 120.84 | 136.60 |

| SIZE | SHANK DIA. | FLUTE LENGTH | OVERALL LENGTH | PRICE EACH | |
|------|------------|--------------|----------------|---------------|------------|
| | | | | SOLID CARBIDE | TIN COATED |
| | | | | SCDEM-2B | SCDEM-2BT |
| 1/8 | 3/8 | 3/8 | 3-1/16 | \$37.72 | \$47.10 |
| 5/32 | 3/8 | 7/16 | 3-1/8 | 53.70 | 63.08 |
| 3/16 | 3/8 | 1/2 | 3-1/4 | 53.70 | 63.08 |
| 7/32 | 3/8 | 9/16 | 3-3/8 | 58.96 | 68.34 |
| 1/4 | 3/8 | 5/8 | 3-3/8 | 59.60 | 68.98 |
| 9/32 | 3/8 | 11/16 | 3-1/2 | 83.10 | 92.48 |
| 5/16 | 3/8 | 3/4 | 3-1/2 | 67.68 | 77.06 |
| 3/8 | 3/8 | 3/4 | 3-1/2 | 87.60 | 96.98 |
| 7/16 | 1/2 | 7/8 | 4 | 124.40 | 140.16 |
| 1/2 | 1/2 | 1 | 4 | 139.82 | 155.58 |

TOLERANCES
 1/32" - 1/4" Flute Dia.: + .000 - .002"
 17/64" - 1" Flute Dia.: + .000 - .003"
 All Sizes Shank Dia.: + .000 - .005"