

**MICROGRAIN SOLID CARBIDE END MILL**

- 4 flute or 2 flute
- Single end
- Center cutting



Dia	Shk Dia	Flt Length	Oal	Item # 4 Flute	Price	Item # 2 Flute	Price
1/16"	1/8"	3/16"	1-1/2"	1006-0116	\$13.00/PC	1008-0116	\$13.00/PC
1/8"	1/8"	1/2"	1-1/2"	1006-0018	\$14.00/PC	1008-0018	\$14.00/PC
3/16"	3/16"	5/8"	2"	1006-0316	\$17.00/PC	1008-0316	\$17.00/PC
1/4"	1/4"	3/4"	2"	1006-0014	\$26.00/PC	1008-0014	\$26.00/PC
5/16"	5/16"	3/4"	2-1/2"	1006-0516	\$32.00/PC	1008-0516	\$32.00/PC
3/8"	3/8"	1"	2-1/2"	1006-0038	\$38.00/PC	1008-0038	\$38.00/PC
1/2"	1/2"	1"	3"	1006-0012	\$55.00/PC	1008-0012	\$55.00/PC
9/16"	9/16"	1-1/8"	3-1/2"	1006-0916	\$126.00/PC	1008-0916	\$126.00/PC
5/8"	5/8"	1-1/4"	3-1/2"	1006-0058	\$129.00/PC	1008-0058	\$129.00/PC
3/4"	3/4"	1-1/2"	4"	1006-0034	\$189.00/PC	1008-0034	\$189.00/PC
7/8"	7/8"	1-1/2"	4"	1006-0078	\$329.00/PC	1008-0078	\$329.00/PC
1"	1"	1-1/2"	4"	1006-0001	\$329.00/PC	1008-0001	\$329.00/PC

**M42-8% PREMIUM COBALT END MILL, 4 FLUTE**



Item#	Dia	Shk Dia	Flt Length	Oal	Flute	Price
CO-18	1/8"	3/8"	3/8"	2-5/16"	4	\$12.00/PC
CO-316	3/16"	3/8"	1/2"	2-3/8"	4	\$14.00/PC
CO-14	1/4"	3/8"	5/8"	2-7/16"	4	\$14.00/PC
CO-516	5/16"	3/8"	3/4"	2-1/2"	4	\$14.00/PC
CO-38	3/8"	3/8"	3/4"	2-1/2"	4	\$15.00/PC
CO-716	7/16"	1/2"	1"	2-3/4"	4	\$16.00/PC
CO-12	1/2"	1/2"	1-1/4"	3-1/4"	4	\$18.00/PC
CO-916	9/16"	1/2"	1-3/8"	3-3/8"	4	\$24.00/PC
CO-58	5/8"	5/8"	1-5/8"	3-3/4"	4	\$30.00/PC
CO-1116	11/16"	5/8"	1-5/8"	3-3/4"	4	\$34.00/PC
CO-34	3/4"	3/4"	1-5/8"	3-7/8"	4	\$42.00/PC
CO-1316	13/16"	3/4"	1-7/8"	4-1/8"	4	\$45.00/PC
CO-78	7/8"	3/4"	1-7/8"	4-1/8"	4	\$66.00/PC
CO-1516	15/16"	3/4"	1-7/8"	4-1/8"	4	\$66.00/PC
CO-134	1"	3/4"	1-7/8"	4-1/8"	4	\$68.00/PC
CO-1	1"	1"	2"	4-1/2"	4	\$72.00/PC

**TiAlN COATED M42-8% COBALT ROUGHING END MILL**

ISO9002

- TiAlN Coated
- Center cutting
- M42-8% premium cobalt
- Flutes ground by a world-class ISO-9002 factory. CNC qualified



Dia	Shk Dia	Flt Length	Oal	Fl	Item # Standard Tooth	Price	Item # Fine Tooth	Price
1/4"	3/8"	3/4"	2-1/2"	4	1102-0014	\$19.60/PC	1104-0014	\$21.00/PC
5/16"	3/8"	3/4"	2-1/2"	4	1102-0516	\$19.60/PC	1104-0516	\$21.00/PC
3/8"	3/8"	3/4"	2-1/2"	4	1102-0038	\$19.60/PC	1104-0038	\$21.00/PC
1/2"	1/2"	1-1/4"	3-1/4"	4	1102-0012	\$24.00/PC	1104-0012	\$25.00/PC
1/2"	1/2"	2"	4"	4	1102-0120	\$30.00/PC	1104-0120	\$34.00/PC
5/8"	5/8"	1-5/8"	3-3/4"	4	1102-0058	\$32.00/PC	1104-0058	\$38.00/PC
3/4"	3/4"	1-5/8"	3-3/4"	4	1102-0034	\$40.00/PC	1104-0034	\$43.00/PC
1"	1"	2"	4-1/2"	5	1102-0001	\$63.00/PC	1104-0001	\$66.00/PC
1"	1"	3"	5-1/2"	5	1102-0031	\$80.00/PC	1104-0031	\$86.00/PC
1"	1"	4"	6-1/2"	5	1102-0114	\$116.00/PC		

**M42-8% COBALT ROUGHING END MILL**

1002-0014

ISO9002

- Center cutting
- M42-8% premium cobalt
- Flutes ground by a world-class ISO-9002 factory. CNC qualified



Item # Standard Tooth	Dia	Shank Dia.	Flute Length	Overall Length	Flute	Price
1002-0014	1/4"	3/8"	3/4"	2-1/2"	4	\$18.00/PC
1002-0516	5/16"	3/8"	3/4"	2-1/2"	4	\$18.00/PC
1002-0038	3/8"	3/8"	3/4"	2-1/2"	4	\$18.00/PC
1002-0012	1/2"	1/2"	1-1/4"	3-1/4"	4	\$22.00/PC
1002-0120	1/2"	1/2"	2"	4"	4	\$28.00/PC
1002-0916	9/16"	1/2"	1-3/8"	3-3/8"	4	\$30.00/PC
1002-0058	5/8"	5/8"	1-5/8"	3-3/4"	4	\$39.00/PC
1002-0580	5/8"	5/8"	2-1/2"	4-5/8"	4	\$42.00/PC
1002-1116	11/16"	5/8"	1-5/8"	3-3/4"	4	\$49.00/PC
1002-0034	3/4"	3/4"	1-5/8"	3-3/4"	4	\$39.00/PC
1002-0340	3/4"	3/4"	3"	5-1/4"	4	\$49.00/PC
1002-0078	7/8"	3/4"	1-5/8"	4-1/8"	4	\$51.00/PC
1002-1516	15/16"	3/4"	1-7/8"	4-1/8"	4	\$56.00/PC
1002-0001	1"	1"	2"	4-1/2"	5	\$60.00/PC
1002-0113	1"	1"	3"	5-1/2"	5	\$75.00/PC
1002-0114	1"	1"	4"	6-1/2"	5	\$109.00/PC

**H.S.S. END MILL, TIN COATED, 4 FLUTE**

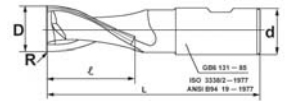
1400-3211

- Multiple flute
- Single end
- Regular length
- Right hand cut
- Right hand spiral
- Center-cutting



Item #	Dia	Shank Diameter	Flute Length	Overall Length	Flute	Price
1400-3201	1/8"	3/8"	3/8"	2-5/16"	4	\$9.00/PC
1400-3203	3/16"	3/8"	1/2"	2-3/8"	4	\$9.00/PC
1400-3205	1/4"	3/8"	5/8"	2-7/16"	4	\$9.00/PC
1400-3207	5/16"	3/8"	3/4"	2-1/2"	4	\$9.00/PC
1400-3209	3/8"	3/8"	3/4"	2-1/2"	4	\$11.00/PC
1400-3211	1/2"	1/2"	1-1/4"	3-1/4"	4	\$11.60/PC
1400-3213	5/8"	5/8"	1-5/8"	3-3/4"	4	\$16.00/PC
1400-3214	9/16"	1/2"	1-1/8"	3-3/8"	4	\$16.00/PC
1400-3215	11/16"	5/8"	1-5/8"	3-3/4"	4	\$24.00/PC
1400-3217	3/4"	3/4"	1-5/8"	3-7/8"	4	\$27.00/PC
1400-3218	7/8"	3/4"	1-7/8"	4-1/8"	4	\$32.00/PC
1400-3220	1"	3/4"	1-7/8"	4-1/8"	4	\$35.00/PC
1400-3221	1"	1"	2"	4-1/2"	4	\$42.00/PC

**2 FLUTE CARBIDE TIPPED END MILL FOR ALUMINUM**



Mill Dia. (D)	Shank Dia. (d)	LOC (l)	Oal (L)	Corner Radius (R)	Item#	Price
1/2"	1/2"	1"	3"	1/64"	0193-6327	\$52.00/PC
5/8"	5/8"	1-1/4"	3-5/8"	1/64"	0193-6400	\$58.00/PC
3/4"	3/4"	1-1/2"	4-1/8"	1/64"	0193-6483	\$69.00/PC
1"	1"	1-3/4"	4-3/4"	1/64"	0193-6640	\$83.00/PC

**Recommended Cutting Specification**

Cutting Speed m/m	Feed per Tooth	Materials to Machined
300-900	0.05-0.015	Aluminum, Magnesium Alloy & Other Light Alloy

**20PCS TIN COATED H.S.S. END MILL SET**

- Item #1810-0100, Inch set \$156.00/SET
- one of each size in both 2 & 4 flute
- With 3/8" shank: 3/16", 1/4", 5/16", 3/8", & 7/16"
- With 1/2" shank: 1/2", & 9/16"
- With 5/8" shank: 5/8", & 11/16"
- With 3/4" shank: 3/4"

1810-0104



- Item #1810-0104, Metric set \$156.00/SET
- Metric size: 3, 4, 5, 6, 8, 10, 12, 14, 18 & 20mm, 2F+4F

**END MILL GRINDING FIXTURE**

- Features:
- Use of 5C collets assures concentricity.
- Grinding 1/16" to 1-1/8" shank end mill.
- Grinds 2-3-4-6-8 and 12 fluted end mill and shell mill face only
- Shell mill can easily be held with straight shank arbor.



\$84.00 set

Item #2330-0050

**6PCS MULTI FLUTE BRIDGEPORT H.S.S. END MILL SET**

- Features:
- Size:
- 3/4" x 3/4" shank with 4 flute
- 7/8" x 3/4" shank with 4 flute
- 1" x 3/4" shank with 4 flute
- 1-1/8" x 3/4" shank with 6 flute
- 1-1/4" x 3/4" shank with 6 flute
- 1-1/2" x 3/4" shank with 6 flute
- Comes complete with wood stand

Item #1822-0206

\$208.00 set

