

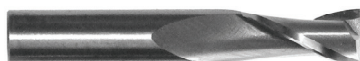
# Premium Solid Carbide End mill Promotion

**General Purpose Premium Carbide Features Include:**

- \*All tools made from high performance sub-micrograin carbide
- \*All tools meet or exceed aerospace specifications
- \*All tools ground to an exceptionally high finish which results in sharper cutting edge, longer tool life and superior finish
- \*Center Cutting
- \*30 degree Helix
- \*Right hand cutting
- \*Right hand Sprial



**Made in USA**



**Standard Length, Square End**

Cutter Dia	Shank Dia	Flute Length	Overall Length	Uncoated			ALTiN Coated		
				2 Flute Item No.	4 Flute Item No.	Sale Price	2 Flute Item No.	4 Flute Item No.	Sale Price
1/8	1/8	1/2	1-1/2	NC42008	NC44008	\$4.95	NC42008A	NC44008A	\$6.50
3/16	3/16	5/8	2	NC42012	NC44012	\$7.25	NC42012A	NC44012A	\$8.90
1/4	1/4	3/4	2-1/2	NC42016	NC44016	\$8.95	NC42016A	NC44016A	\$10.95
5/16	5/16	7/8	2-1/2	NC42020	NC44020	\$11.95	NC42020A	NC44020A	\$15.95
3/8	3/8	7/8	2-1/2	NC42024	NC44024	\$14.95	NC42024A	NC44024A	\$19.75
1/2	1/2	1	3	NC42032	NC44032	\$23.95	NC42032A	NC44032A	\$29.95
5/8	5/8	1-1/4	3-1/2	NC42034	NC44034	\$45.95	NC42034A	NC44034A	\$55.00
3/4	3/4	1-1/2	4	NC42036	NC44036	\$67.95	NC42036A	NC44036A	\$78.00
1	1	1-1/2	4	NC42040	NC44040	\$99.95	NC42040A	NC44040A	\$118.00



**Standard Length, Ball Nose**

Cutter Dia	Shank Dia	Flute Length	Overall Length	Uncoated			ALTiN Coated		
				2 Flute Item No.	4 Flute Item No.	Sale Price	2 Flute Item No.	4 Flute Item No.	Sale Price
1/8	1/8	1/2	1-1/2	NC62008	NC64008	\$6.75	NC62008A	NC64008A	\$7.75
3/16	3/16	5/8	2	NC62012	NC64012	\$8.95	NC62012A	NC64012A	\$10.95
1/4	1/4	3/4	2-1/2	NC62016	NC64016	\$10.75	NC62016A	NC64016A	\$12.95
5/16	5/16	7/8	2-1/2	NC62020	NC64020	\$13.95	NC62020A	NC64020A	\$17.50
3/8	3/8	7/8	2-1/2	NC62024	NC64024	\$16.95	NC62024A	NC64024A	\$21.00
1/2	1/2	1	3	NC62032	NC64032	\$29.95	NC62032A	NC64032A	\$37.50
5/8	5/8	1-1/4	3-1/2	NC62034	NC64034	\$52.00	NC62034A	NC64034A	\$59.00
3/4	3/4	1-1/2	4	NC62036	NC64036	\$76.00	NC62036A	NC64036A	\$85.00
1	1	1-1/2	4	NC62040	NC64040	\$130.00	NC62040A	NC64040A	\$145.00

Distributed by:

# Aluma-Flo<sup>®</sup> High Performance End Mills for Aluminum

**New Solid Carbide High Performance Features Include:**

- \*Reduce Cycle Time - one tool for roughing, finishing, slot and profile cuts
- \*Promotes dynamic chip movement at high velocity
- \*Specifically Designed for Aluminum
- \*High Performance Zirconium Nitride (ZrN) coating
- \*3 Flute, variable helix angle, center cutting
- \*Available in stub, regular and long lengths



**New High Performance  
ZrN coating**



**Save Time...Save Money!**



**Stub, Standard & Long Length**

Cutter Dia	Shank Dia	Flute Length	Overall Length	Item #	Sale Price
1/8	1/8	1/4	1-1/2	NC43S50	\$10.75
1/8	1/8	1/2	1-1/2	NC43050	\$10.75
3/16	3/16	5/16	2	NC43S58	\$17.00
3/16	3/16	5/8	2	NC43058	\$17.00
1/4	1/4	1/2	2	NC43S66	\$19.45
1/4	1/4	3/4	2-1/2	NC43066	\$22.00
1/4	1/4	1-1/4	3	NC43L66	\$33.70
5/16	5/16	13/16	2-1/2	NC43070	\$31.70
3/8	3/8	1/2	2	NC43S74	\$30.70
3/8	3/8	1	2-1/2	NC43074	\$35.80
3/8	3/8	1-1/2	3-1/2	NC43L74	\$51.85
7/16	7/16	1	2-3/4	NC43078	\$44.40
1/2	1/2	5/8	2-1/2	NC43S82	\$48.15
1/2	1/2	1	3	NC43082	\$51.40
1/2	1/2	2	4	NC43L82	\$69.45
9/16	9/16	1-1/4	3	NC43083	\$70.45
5/8	5/8	7/8	3	NC43S84	\$81.70
5/8	5/8	1-1/4	3-1/2	NC43084	\$91.90
5/8	5/8	2-1/2	6	NC43L84	\$133.10
3/4	3/4	1	3-1/2	NC43S86	\$122.40
3/4	3/4	1-1/2	4	NC43086	\$128.80
3/4	3/4	3	6	NC43L86	\$200.40
1	1	1	3-1/2	NC43S90	\$204.20
1	1	1-1/2	4	NC43090	\$214.95
1	1	3	6	NC43L90	\$334.30

**Ensure adequate coolant is applied for maximum tool life**

**Reduce feed rate by 20% when using long length tools**

**Don't see what your looking for? Other sizes are available upon request.**

**Recommended Starting Parameters for Speeds & Feeds**

Diameter	SFM Range	IPT	Recommended DOC	
			Slot	Profile
1/8	1000-2500	.002-.003	0.075	0.125 - 0.187
3/16	1000-2500	.003-.004	0.100	0.187 - 0.250
1/4	1000-2500	.004-.006	0.125	0.250 - 0.375
5/16	1000-2500	.005-.007	0.150	0.300 - 0.450
3/8	1000-2500	.007-.009	0.200	0.375 - 0.550
1/2	1000-2500	.006-.010	0.250	0.500 - 0.750
5/8	1000-2500	.008-.012	0.300	0.625 - 0.900
3/4	1000-2500	.010-.014	0.400	0.750 - 1.125
1	1000-2500	.008-.016	0.500	1.000 - 1.500

