



# 4fl Rougher/ Finisher



- Roughing/Finishing End Mills are used for removing large amounts of material quickly but leaving behind a finish that's almost as smooth as a traditional end mill
- Offers exceptional performance in high temperature resistance in a wide range of ferrous materials, including cast iron, tool steels and low and medium alloy steels
- Saves time over a traditional two-step roughing and finishing process
- Alcrona coating offers high resistance to materials over 42 Rc, which can help increase speeds and feeds as well as tool life
- Talon coating is formulated for super alloys, such as nickel, inconel and waspaloy
- All Tools 1/2" & Under get a .020" x 45° Chamfer
- All Tools 5/8" & Over get a .030" x 45° Chamfer
- For Weldon Flat – Add W to the part number and add \$6.00 to cost

Cutting Diameter	Flute Length	Overall Length	Shank Diameter	Alcrona		Talon		AITIN	
				Part No.	Cost	Part No.	Cost	Part No.	Cost
3/8"	3/4"	2.5"	3/8"	416049	\$80.71	417047	\$89.65	419049	\$75.64
3/8"	1.0"	3.0"	3/8"	416059	\$94.41	417057	\$103.35	419059	\$89.34
3/8"	1.25"	3.0"	3/8"	416069	\$94.41	417067	\$103.35	419069	\$89.34
3/8"	2.0"	4.0"	3/8"	416079	\$111.05	417077	\$122.57	419079	\$104.58
1/2"	1.0"	3.0"	1/2"	416089	\$120.48	417087	\$131.87	419089	\$114.52
1/2"	1.25"	3.0"	1/2"	416099	\$120.48	417097	\$131.87	419099	\$114.52
1/2"	1.625"	4.0"	1/2"	416109	\$142.45	417107	\$157.22	419109	\$134.66
5/8"	1.25"	3.5"	5/8"	416129	\$201.27	417127	\$217.72	419129	\$192.64
5/8"	1.625"	4.0"	5/8"	416139	\$212.61	417137	\$229.06	419139	\$203.98
3/4"	1.0"	4.0"	3/4"	416169	\$302.75	417167	\$322.23	419169	\$292.54
3/4"	1.625"	4.0"	3/4"	416179	\$324.09	417177	\$343.57	419179	\$313.88
3/4"	2.25"	5.0"	3/4"	416189	\$376.40	417187	\$400.26	419189	\$363.90