

BUY 3, GET 3

ARCH[®]
Cutting Tools

ON THE FULL PATRIOT HP[®] 976 CARBIDE END MILL PRODUCT OFFERING

~~\$61~~ FOR 6*

5-Flute, 1/8 x 1/2,
Standard Length
(976-000-138)



~~\$114~~ FOR 6*

5-Flute, 1/4 x 3/4,
Standard Length
(976-000-294)



~~\$185~~ FOR 6*

5-Flute, 5/16 x 1-1/8,
Standard Length
(976-000-387)



*Price shown on the promotional document is for (6) of the same item number, rounded up to the nearest whole dollar amount. Actual list pricing is shown per item number within this document.

Final pricing will vary depending on the item numbers selected, shipping and handling, taxes, and other applicable fees. This promotion can be applied to mixed item number orders, however, the (3) highest priced item numbers on the order will be used to calculate the final promotional cost, and the (3) lowest priced items numbers will be "free." Offer valid until September 30, 2025, or while supplies last.



www.ahbinc.com | 800-991-4225 | customerservice@ahbinc.com



Advanced proprietary geometries and coatings that optimize tool life, finish, and metal removal rates

Originally optimized to tackle difficult to machine applications such as in Titanium & pre-hardened steels, this High-Performance End Mill has excelled in a wide array of exotic, alloyed and ferrous part materials. The Patriot family of high-performance end mills is designed with advanced proprietary geometry. There is a thin film coating that consistently delivers increased tool life, superior part finish and aggressive metal removal rates. This is all accomplished within a machining environment that generates extreme working temperatures.

Features

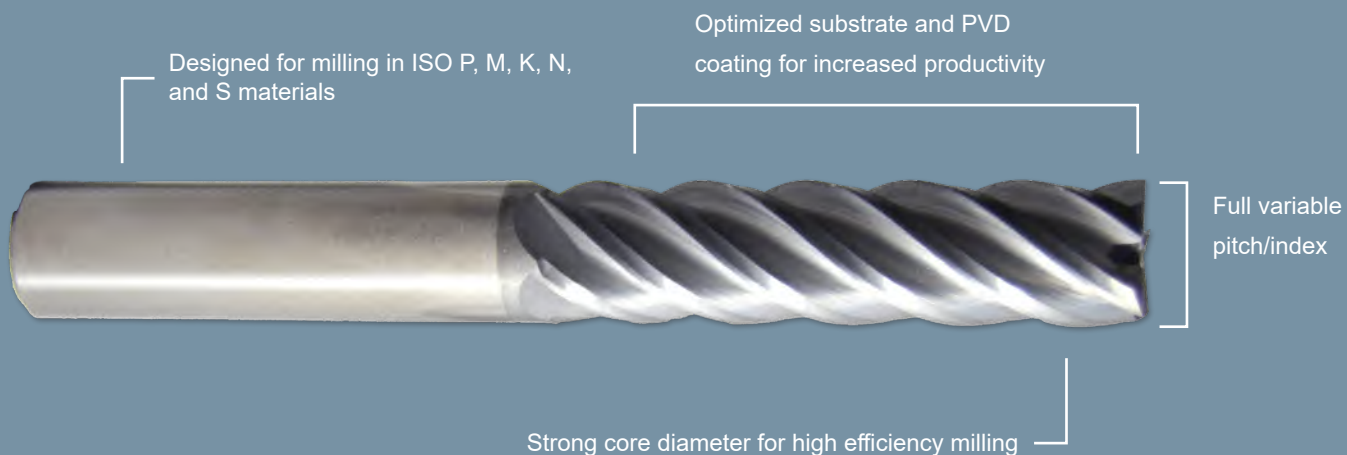
- Variable pitch / index
- Advanced, proprietary geometry
- Optimized substrate
- PVD coating
- Strong core diameter

Benefits

- Process security
- Superior metal removal rates
- Chatter reduction
- Smooth surface finish
- Cycle time reductions
- Cost savings

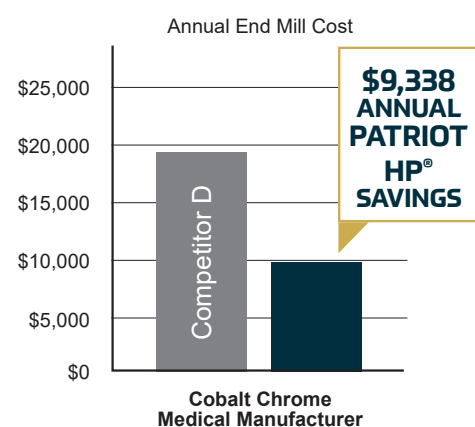
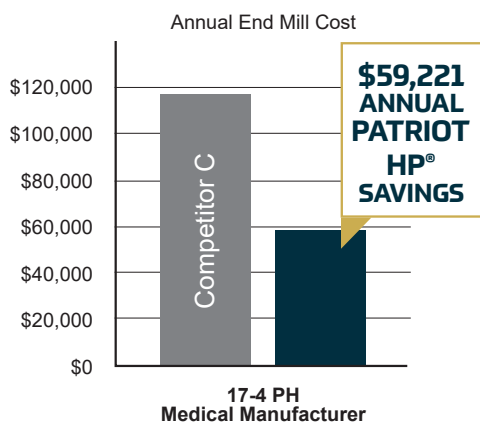
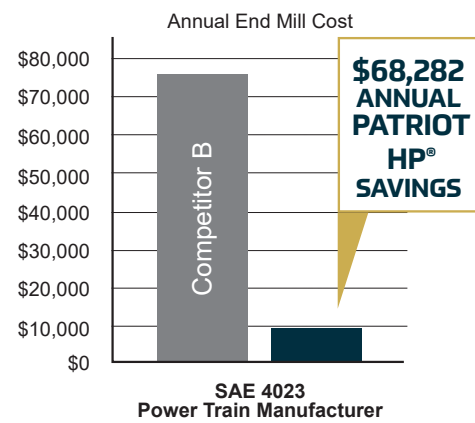
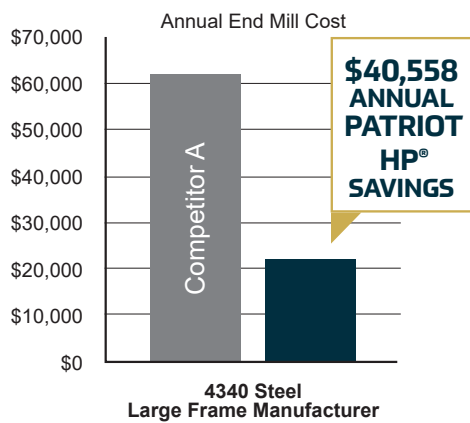
Applications

- Slotting (100% Ae)
- Roughing (>40% Ae)
- Helical interpolation and ramping
- Finish profiling
- Trochoidal milling / HEM (<40% Ae)



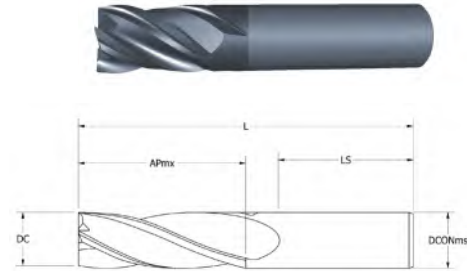
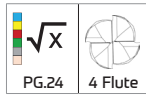
Specifications

Diameter	0.125 to 1.000"
Radius	Square, Corner, Ball Nose
Flute count	4, 5, 7
Overall length	Standard, Stub, Long, Extra Long



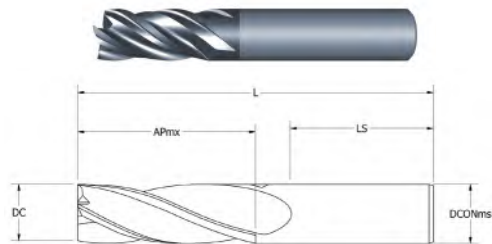
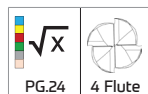
Proprietary to ARCH Cutting Tools

**4-FLUTE, STUB LENGTH,
SQUARE END, VARIABLE HELIX**



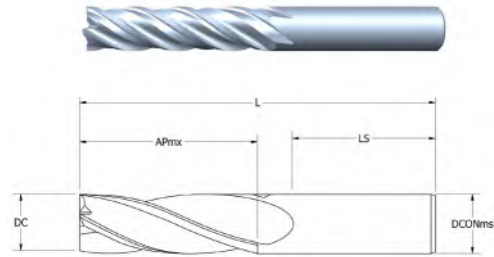
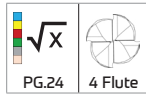
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0.1250	0.1250	0.2500	0.8750	1.5000	976-000-001	\$17.42
0.1875	0.1875	0.3750	1.2500	2.0000	976-000-002	\$27.32
0.2500	0.2500	0.5000	1.1250	2.0000	976-000-003	\$30.45
0.3125	0.3125	0.5000	1.1250	2.0000	976-000-004	\$41.96
0.3750	0.3750	0.6250	1.0000	2.0000	976-000-005	\$46.45
0.4375	0.4375	0.6250	1.5000	2.5000	976-000-006	\$63.75
0.5000	0.5000	0.7500	1.3750	2.5000	976-000-007	\$72.12
0.6250	0.6250	0.7500	1.8750	3.0000	976-000-008	\$116.16
0.7500	0.7500	1.0000	1.6250	3.0000	976-000-009	\$168.56

**4-FLUTE, STANDARD LENGTH,
SQUARE END, VARIABLE HELIX**



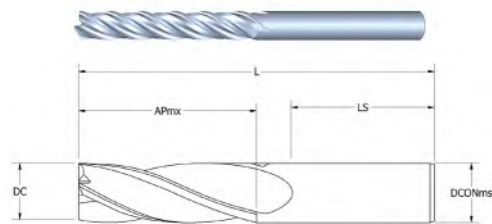
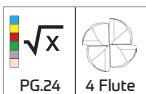
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0.3125	0.3125	0.8125	1.3125	2.5000	976-000-015	\$45.41
0.3750	0.3750	0.8750	1.2500	2.5000	976-000-016	\$51.82
0.3750	0.3750	1.0000	1.1250	2.5000	976-000-017	\$52.63
0.3750	0.3750	1.2500	0.8750	2.5000	976-000-018	\$53.78
0.4375	0.4375	1.0000	1.3750	2.7500	976-000-019	\$67.54
0.5000	0.5000	1.0000	1.6250	3.0000	976-000-020	\$75.34
0.5000	0.5000	1.2500	1.3750	3.0000	976-000-021	\$76.94
0.5000	0.5000	1.5000	1.1250	3.0000	976-000-022	\$80.32
0.5000	0.5000	1.5000	1.6250	3.5000	976-000-023	\$92.94
0.5000	0.5000	1.7500	1.3750	3.5000	976-000-024	\$96.67
0.6250	0.6250	1.5000	1.6250	3.5000	976-000-025	\$123.96
0.6250	0.6250	1.7500	1.3750	3.5000	976-000-026	\$127.28
0.7500	0.7500	1.7500	1.8750	4.0000	976-000-027	\$200.54
1.0000	1.0000	1.7500	1.8750	4.0000	976-000-028	\$321.71

**4-FLUTE. LONG LENGTH,
SQUARE END, VARIABLE HELIX**



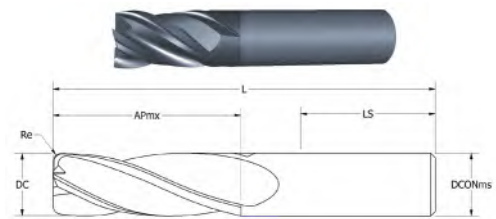
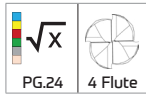
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0.2500	0.2500	1.1250	1.5000	3.0000	976-000-031	\$37.04
0.3125	0.3125	1.1250	1.5000	3.0000	976-000-032	\$52.35
0.3750	0.3750	1.2500	1.3750	3.0000	976-000-033	\$70.86
0.4375	0.4375	2.0000	1.6250	4.0000	976-000-034	\$88.97
0.5000	0.5000	2.0000	1.6250	4.0000	976-000-035	\$113.63
0.6250	0.6250	2.2500	2.3750	5.0000	976-000-036	\$204.79
0.7500	0.7500	2.2500	2.3750	5.0000	976-000-037	\$231.28
1.0000	1.0000	2.2500	2.3750	5.0000	976-000-038	\$362.14

**4-FLUTE, X-LONG LENGTH,
SQUARE END, VARIABLE HELIX**



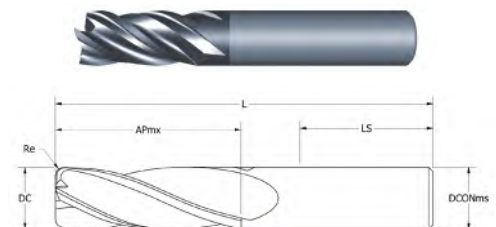
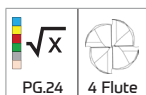
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0.3125	0.3125	1.6250	2.0000	4.0000	976-000-042	\$66.85
0.3750	0.3750	2.0000	1.6250	4.0000	976-000-043	\$84.28
0.4375	0.4375	3.0000	2.6250	6.0000	976-000-044	\$139.19
0.5000	0.5000	3.0000	2.6250	6.0000	976-000-045	\$155.83
0.6250	0.6250	3.0000	2.6250	6.0000	976-000-046	\$219.35
0.7500	0.7500	3.0000	2.6250	6.0000	976-000-047	\$260.51
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**4-FLUTE, STUB LENGTH,
CORNER RADIUS, VARIABLE HELIX**



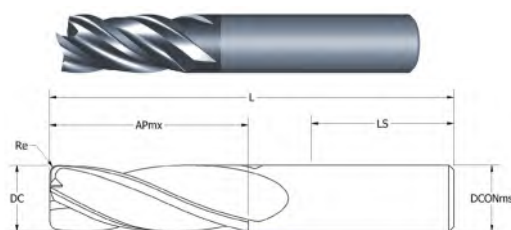
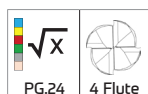
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0.1875	0.1875	0.0100	0.3750	1.2500	2.0000	976-000-129	\$28.37
0.2500	0.2500	0.0200	0.5000	1.1250	2.0000	976-000-130	\$32.12
0.3125	0.3125	0.0200	0.5000	1.1250	2.0000	976-000-131	\$43.63
0.3750	0.3750	0.0200	0.6250	1.0000	2.0000	976-000-132	\$48.51
0.4375	0.4375	0.0300	0.6250	1.5000	2.5000	976-000-133	\$66.52
0.5000	0.5000	0.0300	0.7500	1.3750	2.5000	976-000-134	\$74.76
0.6250	0.6250	0.0400	0.7500	1.8750	3.0000	976-000-135	\$121.89
0.7500	0.7500	0.0400	1.0000	1.6250	3.0000	976-000-136	\$178.07

**4-FLUTE, STANDARD LENGTH,
CORNER RADIUS, VARIABLE HELIX**



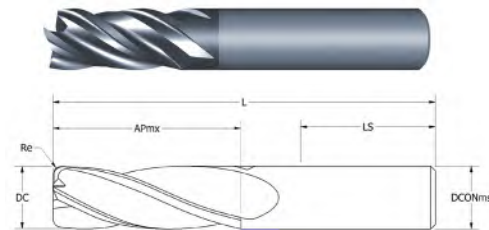
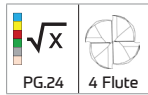
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0100	0.5000	0.6250	1.5000	976-000-137	\$19.74
0.1250	0.1250	0.0150	0.5000	0.6250	1.5000	976-000-138	\$20.27
0.1250	0.1250	0.0200	0.5000	0.6250	1.5000	976-000-139	\$20.73
0.1875	0.1875	0.0100	0.6250	1.0000	2.0000	976-000-140	\$29.40
0.1875	0.1875	0.0150	0.6250	1.0000	2.0000	976-000-141	\$29.76
0.1875	0.1875	0.0200	0.6250	1.0000	2.0000	976-000-142	\$29.99
0.1875	0.1875	0.0300	0.6250	1.0000	2.0000	976-000-143	\$30.12
0.2500	0.2500	0.0100	0.7500	1.3750	2.5000	976-000-144	\$33.60
0.2500	0.2500	0.0150	0.7500	1.3750	2.5000	976-000-145	\$33.94
0.2500	0.2500	0.0200	0.7500	1.3750	2.5000	976-000-146	\$34.16
0.2500	0.2500	0.0300	0.7500	1.3750	2.5000	976-000-147	\$34.40
0.2500	0.2500	0.0600	0.7500	1.3750	2.5000	976-000-148	\$35.32
0.2500	0.2500	0.0100	1.0000	1.1250	2.5000	976-000-149	\$34.29
0.2500	0.2500	0.0150	1.0000	1.1250	2.5000	976-000-150	\$34.63
0.2500	0.2500	0.0200	1.0000	1.1250	2.5000	976-000-151	\$35.09
0.2500	0.2500	0.0300	1.0000	1.1250	2.5000	976-000-152	\$35.43
0.2500	0.2500	0.0600	1.0000	1.1250	2.5000	976-000-153	\$36.69
0.2500	0.2500	0.0100	1.2500	0.8750	2.5000	976-000-154	\$37.04
0.2500	0.2500	0.0150	1.2500	0.8750	2.5000	976-000-155	\$37.50
0.2500	0.2500	0.0200	1.2500	0.8750	2.5000	976-000-156	\$37.84
0.2500	0.2500	0.0300	1.2500	0.8750	2.5000	976-000-157	\$38.29
0.2500	0.2500	0.0600	1.2500	0.8750	2.5000	976-000-158	\$38.88
0.3125	0.3125	0.0100	0.8125	1.3125	2.5000	976-000-159	\$47.36
0.3125	0.3125	0.0150	0.8125	1.3125	2.5000	976-000-160	\$47.69
0.3125	0.3125	0.0200	0.8125	1.3125	2.5000	976-000-161	\$48.05

**4-FLUTE, STANDARD LENGTH,
CORNER RADIUS, VARIABLE HELIX**



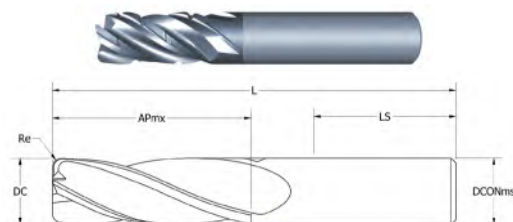
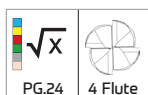
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0.3750	0.3750	0.0100	0.8750	1.2500	2.5000	976-000-164	\$55.04
0.3750	0.3750	0.0150	0.8750	1.2500	2.5000	976-000-165	\$55.27
0.3750	0.3750	0.0200	0.8750	1.2500	2.5000	976-000-166	\$55.95
0.3750	0.3750	0.0300	0.8750	1.2500	2.5000	976-000-167	\$56.31
0.3750	0.3750	0.0600	0.8750	1.2500	2.5000	976-000-168	\$56.87
0.3750	0.3750	0.0100	1.0000	1.1250	2.5000	976-000-169	\$56.08
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0.3750	0.3750	0.0300	1.0000	1.1250	2.5000	976-000-172	\$57.68
0.3750	0.3750	0.0600	1.0000	1.1250	2.5000	976-000-173	\$58.02
0.3750	0.3750	0.0100	1.2500	0.8750	2.5000	976-000-174	\$57.36
0.3750	0.3750	0.0150	1.2500	0.8750	2.5000	976-000-175	\$57.79
0.3750	0.3750	0.0200	1.2500	0.8750	2.5000	976-000-176	\$58.36
0.3750	0.3750	0.0300	1.2500	0.8750	2.5000	976-000-177	\$58.82
0.3750	0.3750	0.0600	1.2500	0.8750	2.5000	976-000-178	\$59.39
0.4375	0.4375	0.0150	1.0000	1.3750	2.7500	976-000-179	\$71.44
0.4375	0.4375	0.0200	1.0000	1.3750	2.7500	976-000-180	\$71.78
0.4375	0.4375	0.0300	1.0000	1.3750	2.7500	976-000-181	\$72.12
0.4375	0.4375	0.0600	1.0000	1.3750	2.7500	976-000-182	\$72.24
0.5000	0.5000	0.0100	1.0000	1.6250	3.0000	976-000-183	\$72.47
0.5000	0.5000	0.0150	1.0000	1.6250	3.0000	976-000-184	\$73.15
0.5000	0.5000	0.0300	1.0000	1.6250	3.0000	976-000-185	\$73.43
0.5000	0.5000	0.0600	1.0000	1.6250	3.0000	976-000-186	\$73.74
0.5000	0.5000	0.0900	1.0000	1.6250	3.0000	976-000-187	\$74.42
0.5000	0.5000	0.1200	1.0000	1.6250	3.0000	976-000-188	\$74.55
0.5000	0.5000	0.0100	1.2500	1.3750	3.0000	976-000-189	\$82.10
0.5000	0.5000	0.0150	1.2500	1.3750	3.0000	976-000-190	\$82.45
0.5000	0.5000	0.0300	1.2500	1.3750	3.0000	976-000-191	\$82.78
0.5000	0.5000	0.0600	1.2500	1.3750	3.0000	976-000-192	\$83.47
0.5000	0.5000	0.0900	1.2500	1.3750	3.0000	976-000-193	\$83.93
0.5000	0.5000	0.1200	1.2500	1.3750	3.0000	976-000-194	\$84.39
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0.5000	0.5000	0.0150	1.5000	1.1250	3.0000	976-000-196	\$85.54
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0.5000	0.5000	0.0600	1.5000	1.1250	3.0000	976-000-198	\$86.11
0.5000	0.5000	0.0900	1.5000	1.1250	3.0000	976-000-199	\$86.46
0.5000	0.5000	0.1200	1.5000	1.1250	3.0000	976-000-200	\$84.97
0.5000	0.5000	0.0100	1.5000	1.6250	3.5000	976-000-201	\$97.48
0.5000	0.5000	0.0150	1.5000	1.6250	3.5000	976-000-202	\$97.92
0.5000	0.5000	0.0300	1.5000	1.6250	3.5000	976-000-203	\$98.50
0.5000	0.5000	0.0600	1.5000	1.6250	3.5000	976-000-204	\$98.84
0.5000	0.5000	0.0900	1.5000	1.6250	3.5000	976-000-205	\$99.64
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4-FLUTE, STANDARD LENGTH,
CORNER RADIUS, VARIABLE HELIX



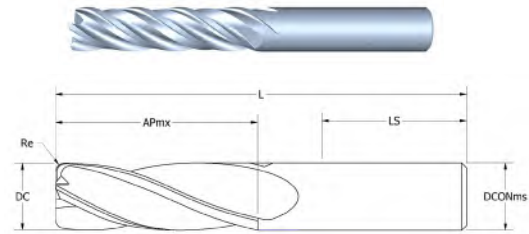
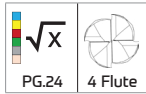
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.5000	0.5000	0.0300	1.7500	1.3750	3.5000	976-000-209	\$103.89
0.5000	0.5000	0.0600	1.7500	1.3750	3.5000	976-000-210	\$104.23
0.5000	0.5000	0.0900	1.7500	1.3750	3.5000	976-000-211	\$104.57
0.5000	0.5000	0.1200	1.7500	1.3750	3.5000	976-000-212	\$105.26
0.6250	0.6250	0.0300	1.5000	1.6250	3.5000	976-000-213	\$130.25
0.6250	0.6250	0.0400	1.5000	1.6250	3.5000	976-000-214	\$130.60
0.6250	0.6250	0.0600	1.5000	1.6250	3.5000	976-000-215	\$130.95
0.6250	0.6250	0.0900	1.5000	1.6250	3.5000	976-000-216	\$131.40
0.6250	0.6250	0.1200	1.5000	1.6250	3.5000	976-000-217	\$131.75
0.6250	0.6250	0.0300	1.7500	1.3750	3.5000	976-000-218	\$133.36
0.6250	0.6250	0.0400	1.7500	1.3750	3.5000	976-000-219	\$134.05
0.6250	0.6250	0.0600	1.7500	1.3750	3.5000	976-000-220	\$134.50
0.6250	0.6250	0.0900	1.7500	1.3750	3.5000	976-000-221	\$134.84
0.6250	0.6250	0.1200	1.7500	1.3750	3.5000	976-000-222	\$135.19
0.7500	0.7500	0.0300	1.7500	1.8750	4.0000	976-000-223	\$205.59
0.7500	0.7500	0.0400	1.7500	1.8750	4.0000	976-000-224	\$206.16
0.7500	0.7500	0.0600	1.7500	1.8750	4.0000	976-000-225	\$207.99
0.7500	0.7500	0.0900	1.7500	1.8750	4.0000	976-000-226	\$208.57
0.7500	0.7500	0.1200	1.7500	1.8750	4.0000	976-000-227	\$209.03
1.0000	1.0000	0.0300	1.7500	1.8750	4.0000	976-000-228	\$339.43
1.0000	1.0000	0.0400	1.7500	1.8750	4.0000	976-000-229	\$339.77
1.0000	1.0000	0.0600	1.7500	1.8750	4.0000	976-000-230	\$340.22
1.0000	1.0000	0.0900	1.7500	1.8750	4.0000	976-000-231	\$340.57
1.0000	1.0000	0.1200	1.7500	1.8750	4.0000	976-000-232	\$341.02

4-FLUTE, STANDARD LENGTH,
CORNER RADIUS, ROUGHING/CHIP BREAKER



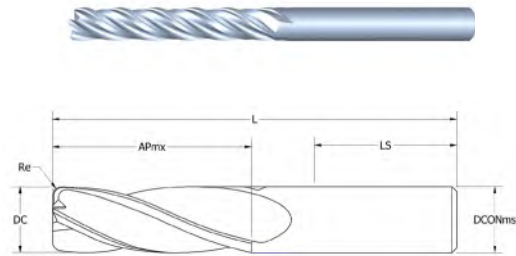
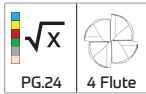
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.2500	0.2500	0.0200	0.7500	1.3750	2.5000	976-000-529	\$56.08
0.3750	0.3750	0.0200	0.8750	1.2500	2.5000	976-000-530	\$80.27
0.5000	0.5000	0.0300	1.0000	1.6250	3.0000	976-000-531	\$105.84
0.6250	0.6250	0.0400	1.5000	1.6250	3.5000	976-000-532	\$170.97
0.7500	0.7500	0.0400	1.7500	1.8750	4.0000	976-000-533	\$252.25
1.0000	1.0000	0.0400	1.7500	1.8750	4.0000	976-000-534	\$386.10

**4-FLUTE, LONG LENGTH,
CORNER RADIUS, VARIABLE HELIX**

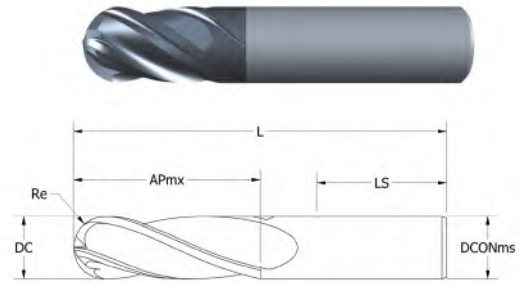
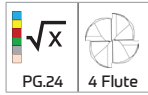


DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0150	0.7500	1.3750	2.5000	976-000-233	\$31.14
0.1250	0.1250	0.0300	0.7500	1.3750	2.5000	976-000-234	\$31.49
0.1875	0.1875	0.0150	0.7500	1.3750	2.5000	976-000-235	\$35.32
0.1875	0.1875	0.0300	0.7500	1.3750	2.5000	976-000-236	\$35.78
0.2500	0.2500	0.0150	1.1250	1.5000	3.0000	976-000-237	\$40.20
0.2500	0.2500	0.0300	1.1250	1.5000	3.0000	976-000-238	\$41.17
0.3125	0.3125	0.0150	1.1250	1.5000	3.0000	976-000-239	\$55.72
0.3125	0.3125	0.0300	1.1250	1.5000	3.0000	976-000-240	\$56.18
0.3750	0.3750	0.0300	1.2500	1.3750	3.0000	976-000-241	\$77.17
0.3750	0.3750	0.0600	1.2500	1.3750	3.0000	976-000-242	\$77.86
0.4375	0.4375	0.0300	2.0000	1.6250	4.0000	976-000-243	\$95.40
0.4375	0.4375	0.0600	2.0000	1.6250	4.0000	976-000-244	\$96.21
0.5000	0.5000	0.0300	2.0000	1.6250	4.0000	976-000-245	\$121.20
0.5000	0.5000	0.0600	2.0000	1.6250	4.0000	976-000-246	\$121.66
0.6250	0.6250	0.0300	2.2500	2.3750	5.0000	976-000-247	\$205.93
0.6250	0.6250	0.0600	2.2500	2.3750	5.0000	976-000-248	\$207.30
0.7500	0.7500	0.0300	2.2500	2.3750	5.0000	976-000-249	\$246.52
0.7500	0.7500	0.0600	2.2500	2.3750	5.0000	976-000-250	\$246.98
1.0000	1.0000	0.0300	2.2500	2.3750	5.0000	976-000-251	\$380.42
1.0000	1.0000	0.0600	2.2500	2.3750	5.0000	976-000-252	\$380.87

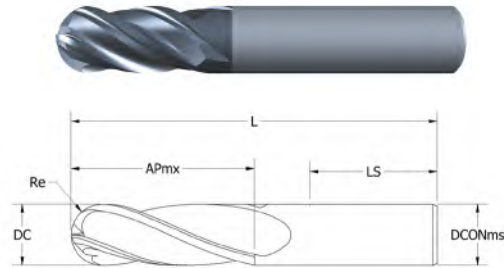
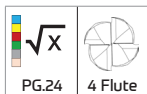
4-FLUTE, X LONG LENGTH,
CORNER RADIUS, VARIABLE HELIX



DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0150	1.0000	1.6250	3.0000	976-000-253	\$41.30
0.1250	0.1250	0.0300	1.0000	1.6250	3.0000	976-000-255	\$41.74
0.1875	0.1875	0.0150	1.1250	1.5000	3.0000	976-000-256	\$44.95
0.1875	0.1875	0.0300	1.1250	1.5000	3.0000	976-000-257	\$45.64
0.2500	0.2500	0.0150	1.5000	2.1250	4.0000	976-000-258	\$51.49
0.2500	0.2500	0.0300	1.5000	2.1250	4.0000	976-000-259	\$51.72
0.3125	0.3125	0.0300	1.6250	2.0000	4.0000	976-000-260	\$71.44
0.3125	0.3125	0.0600	1.6250	2.0000	4.0000	976-000-262	\$72.01
0.3750	0.3750	0.0300	2.0000	1.6250	4.0000	976-000-263	\$92.08
0.3750	0.3750	0.0600	2.0000	1.6250	4.0000	976-000-264	\$92.77
0.4375	0.4375	0.0300	3.0000	2.6250	6.0000	976-000-265	\$148.60
0.4375	0.4375	0.0600	3.0000	2.6250	6.0000	976-000-267	\$149.06
0.5000	0.5000	0.0300	3.0000	2.6250	6.0000	976-000-268	\$163.85
0.5000	0.5000	0.0600	3.0000	2.6250	6.0000	976-000-269	\$164.31
0.6250	0.6250	0.0300	3.0000	2.6250	6.0000	976-000-270	\$230.82
0.6250	0.6250	0.0600	3.0000	2.6250	6.0000	976-000-271	\$231.50
0.7500	0.7500	0.0300	3.0000	2.6250	6.0000	976-000-272	\$272.54
0.7500	0.7500	0.0600	3.0000	2.6250	6.0000	976-000-273	\$277.76
1.0000	1.0000	0.0300	3.0000	2.6250	6.0000	976-000-274	\$456.39
1.0000	1.0000	0.0600	3.0000	2.6250	6.0000	976-000-275	\$456.62

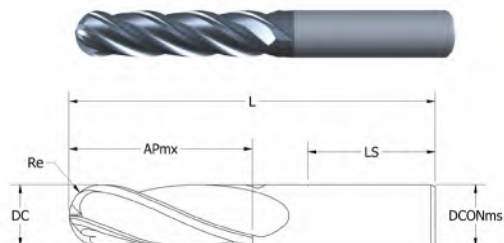
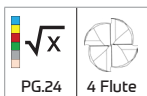
**4-FLUTE, STUB LENGTH,
 BALL END, VARIABLE HELIX**


DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0625	0.2500	0.8750	1.5000	976-000-488	\$22.81
0.1875	0.1875	0.0938	0.3750	1.2500	2.0000	976-000-489	\$31.14
0.2500	0.2500	0.1250	0.5000	1.1250	2.0000	976-000-490	\$35.78
0.3125	0.3125	0.1563	0.5000	1.1250	2.0000	976-000-491	\$48.85
0.3750	0.3750	0.1875	0.6250	1.0000	2.0000	976-000-492	\$54.24
0.4375	0.4375	0.2188	0.6250	1.5000	2.5000	976-000-493	\$68.00
0.5000	0.5000	0.2500	0.7500	1.3750	2.5000	976-000-494	\$77.51
0.6250	0.6250	0.3125	0.7500	1.8750	3.0000	976-000-495	\$149.29
0.7500	0.7500	0.3750	1.0000	1.6250	3.0000	976-000-496	\$195.50

**4-FLUTE, STANDARD LENGTH,
 BALL END, VARIABLE HELIX**


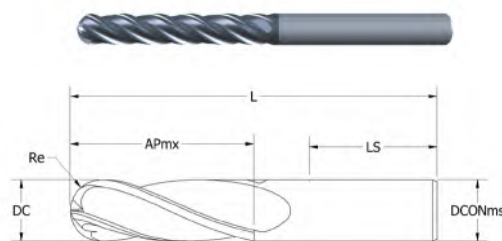
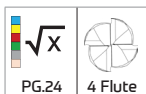
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0625	0.5000	0.6250	1.5000	976-000-497	\$28.14
0.1875	0.1875	0.0938	0.6250	1.0000	2.0000	976-000-498	\$33.02
0.2500	0.2500	0.1250	0.7500	1.3750	2.5000	976-000-499	\$41.17
0.3125	0.3125	0.1563	0.8125	1.3125	2.5000	976-000-500	\$51.95
0.3750	0.3750	0.1875	0.8750	1.2500	2.5000	976-000-501	\$60.31
0.3750	0.3750	0.1875	1.0000	1.1250	2.5000	976-000-502	\$62.61
0.4375	0.4375	0.2188	1.0000	1.3750	2.7500	976-000-503	\$80.29
0.5000	0.5000	0.2500	1.0000	1.6250	3.0000	976-000-504	\$89.78
0.5000	0.5000	0.2500	1.2500	1.3750	3.0000	976-000-505	\$91.96
0.6250	0.6250	0.3125	1.5000	1.6250	3.5000	976-000-506	\$160.07
0.7500	0.7500	0.3750	1.7500	1.8750	4.0000	976-000-507	\$216.70
1.0000	1.0000	0.5000	1.7500	1.8750	4.0000	976-000-508	\$398.14

**4-FLUTE, LONG LENGTH,
BALL END, VARIABLE HELIX**



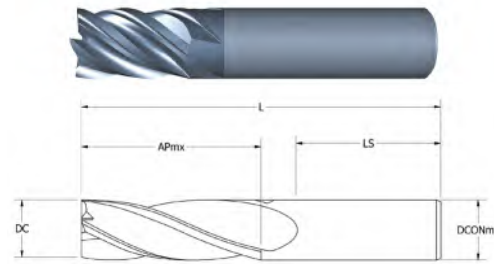
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0625	0.7500	1.3750	2.5000	976-000-509	\$34.06
0.1875	0.1875	0.0938	0.7500	1.3750	2.5000	976-000-510	\$38.75
0.2500	0.2500	0.1250	1.1250	1.5000	3.0000	976-000-511	\$44.26
0.3125	0.3125	0.1563	1.1250	1.5000	3.0000	976-000-512	\$59.98
0.3750	0.3750	0.1875	1.2500	1.3750	3.0000	976-000-513	\$79.80
0.4375	0.4375	0.2188	2.0000	1.6250	4.0000	976-000-514	\$99.87
0.5000	0.5000	0.2500	2.0000	1.6250	4.0000	976-000-515	\$122.80
0.6250	0.6250	0.3125	2.2500	2.3750	5.0000	976-000-516	\$212.80
0.7500	0.7500	0.3750	2.2500	2.3750	5.0000	976-000-517	\$257.98
1.0000	1.0000	0.5000	2.2500	2.3750	5.0000	976-000-518	\$424.25

**4-FLUTE, X LONG LENGTH,
BALL END VARIABLE HELIX**



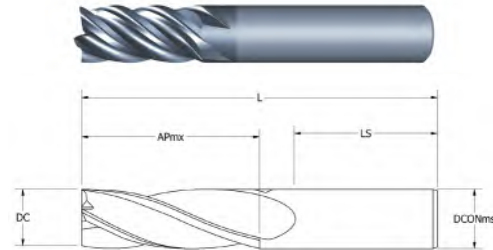
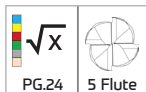
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0625	1.0000	1.6250	3.0000	976-000-519	\$43.60
0.1875	0.1875	0.0938	1.1250	1.5000	3.0000	976-000-520	\$47.92
0.2500	0.2500	0.1250	1.5000	2.1250	4.0000	976-000-521	\$60.66
0.3125	0.3125	0.1563	1.6250	2.0000	4.0000	976-000-522	\$75.57
0.3750	0.3750	0.1875	1.7500	1.8750	4.0000	976-000-523	\$87.04
0.4375	0.4375	0.2188	3.0000	2.6250	6.0000	976-000-524	\$152.04
0.5000	0.5000	0.2500	3.0000	2.6250	6.0000	976-000-525	\$187.47
0.6250	0.6250	0.3125	3.0000	2.6250	6.0000	976-000-526	\$236.32
0.7500	0.7500	0.3750	3.0000	2.6250	6.0000	976-000-527	\$299.23
1.0000	1.0000	0.5000	3.0000	2.6250	6.0000	976-000-528	\$476.94

**5-FLUTE, STUB LENGTH,
SQUARE END**



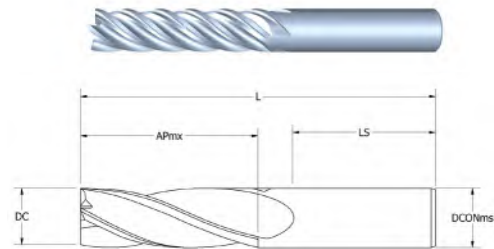
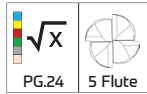
DC [in.]	DCONms [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.2500	0.8750	1.5000	976-000-049	\$20.37
0.1875	0.1875	0.3750	1.2500	2.0000	976-000-050	\$31.14
0.2500	0.2500	0.5000	1.1250	2.0000	976-000-051	\$33.94
0.3125	0.3125	0.5000	1.1250	2.0000	976-000-052	\$45.64
0.3750	0.3750	0.6250	1.0000	2.0000	976-000-053	\$53.55
0.4375	0.4375	0.6250	1.5000	2.5000	976-000-054	\$72.12
0.5000	0.5000	0.7500	1.3750	2.5000	976-000-055	\$79.92
0.6250	0.6250	0.7500	1.8750	3.0000	976-000-056	\$124.06
0.7500	0.7500	1.0000	1.6250	3.0000	976-000-057	\$181.05

**5-FLUTE, STANDARD LENGTH,
SQUARE END**



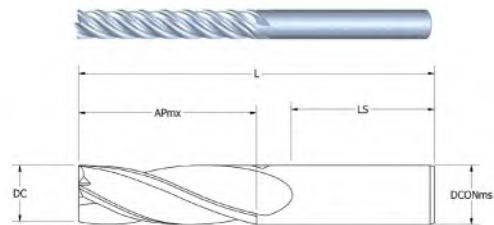
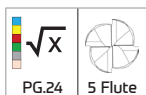
DC [in.]	DCONms [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.5000	0.6250	1.5000	976-000-058	\$21.42
0.1875	0.1875	0.6250	1.0000	2.0000	976-000-059	\$32.46
0.2500	0.2500	0.7500	1.3750	2.5000	976-000-060	\$35.78
0.2500	0.2500	1.0000	1.1250	2.5000	976-000-061	\$36.46
0.2500	0.2500	1.2500	0.8750	2.5000	976-000-062	\$36.69
0.3125	0.3125	0.8125	1.3125	2.5000	976-000-063	\$50.11
0.3750	0.3750	0.8750	1.2500	2.5000	976-000-064	\$60.83
0.3750	0.3750	1.0000	1.1250	2.5000	976-000-065	\$61.00
0.3750	0.3750	1.2500	0.8750	2.5000	976-000-066	\$61.45
0.4375	0.4375	1.0000	1.3750	2.7500	976-000-067	\$75.44
0.5000	0.5000	1.0000	1.6250	3.0000	976-000-068	\$87.15
0.5000	0.5000	1.2500	1.3750	3.0000	976-000-069	\$91.50
0.5000	0.5000	1.5000	1.1250	3.0000	976-000-070	\$94.14
0.5000	0.5000	1.5000	1.6250	3.5000	976-000-071	\$103.89
0.5000	0.5000	1.7500	1.3750	3.5000	976-000-072	\$107.79
0.6250	0.6250	1.5000	1.6250	3.5000	976-000-073	\$135.99
0.6250	0.6250	1.7500	1.3750	3.5000	976-000-074	\$137.02
0.7500	0.7500	1.7500	1.8750	4.0000	976-000-075	\$213.62
1.0000	1.0000	1.7500	1.8750	4.0000	976-000-076	\$346.35

**5-FLUTE, LONG LENGTH,
SQUARE END**



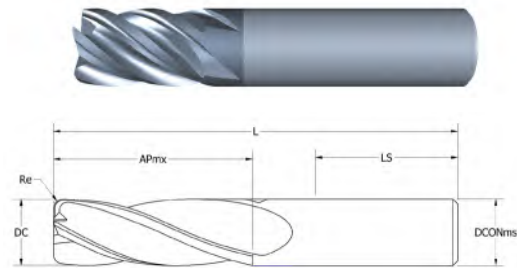
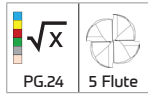
DC [in.]	DCONms [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.7500	1.3750	2.5000	976-000-077	\$30.80
0.1875	0.1875	0.7500	1.3750	2.5000	976-000-078	\$35.83
0.2500	0.2500	1.1250	1.5000	3.0000	976-000-079	\$41.17
0.3125	0.3125	1.1250	1.5000	3.0000	976-000-080	\$56.87
0.3750	0.3750	1.2500	1.3750	3.0000	976-000-081	\$79.01
0.4375	0.4375	2.0000	1.6250	4.0000	976-000-082	\$98.14
0.5000	0.5000	2.0000	1.6250	4.0000	976-000-083	\$126.02
0.6250	0.6250	2.2500	2.3750	5.0000	976-000-084	\$212.80
0.7500	0.7500	2.2500	2.3750	5.0000	976-000-085	\$253.40
1.0000	1.0000	2.2500	2.3750	5.0000	976-000-086	\$398.59

**5-FLUTE, X LONG LENGTH,
SQUARE END**



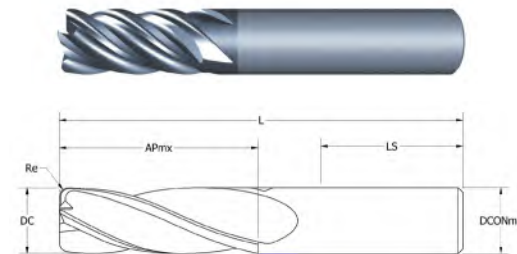
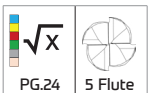
DC [in.]	DCONms [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	1.0000	1.6250	3.0000	976-000-087	\$42.48
0.1875	0.1875	1.1250	1.5000	3.0000	976-000-088	\$46.09
0.2500	0.2500	1.5000	2.1250	4.0000	976-000-089	\$53.09
0.3125	0.3125	1.6250	2.0000	4.0000	976-000-090	\$73.51
0.3750	0.3750	2.0000	1.6250	4.0000	976-000-091	\$93.56
0.4375	0.4375	3.0000	2.6250	6.0000	976-000-092	\$155.02
0.5000	0.5000	3.0000	2.6250	6.0000	976-000-093	\$169.59
0.6250	0.6250	3.0000	2.6250	6.0000	976-000-094	\$236.32
0.7500	0.7500	3.0000	2.6250	6.0000	976-000-095	\$283.90
1.0000	1.0000	3.0000	2.6250	6.0000	976-000-096	\$459.91

**5-FLUTE, STUB LENGTH,
CORNER RADIUS**



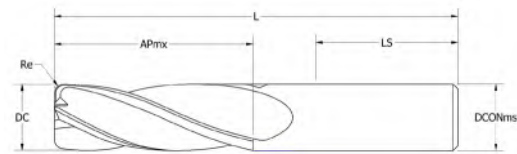
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0100	0.2500	0.8750	1.5000	976-000-276	\$22.05
0.1875	0.1875	0.0100	0.3750	1.2500	2.0000	976-000-277	\$32.33
0.2500	0.2500	0.0200	0.5000	1.1250	2.0000	976-000-278	\$37.27
0.3125	0.3125	0.0200	0.5000	1.1250	2.0000	976-000-279	\$47.13
0.3750	0.3750	0.0200	0.6250	1.0000	2.0000	976-000-280	\$56.18
0.4375	0.4375	0.0300	0.6250	1.5000	2.5000	976-000-281	\$76.60
0.5000	0.5000	0.0300	0.7500	1.3750	2.5000	976-000-282	\$85.77
0.6250	0.6250	0.0400	0.7500	1.8750	3.0000	976-000-283	\$132.20
0.7500	0.7500	0.0400	1.0000	1.6250	3.0000	976-000-284	\$186.33

**5-FLUTE, STANDARD LENGTH,
CORNER RADIUS**



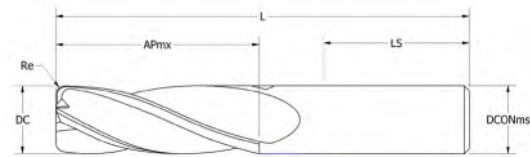
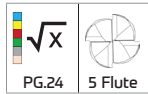
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0100	0.5000	0.6250	1.5000	976-000-285	\$22.92
0.1250	0.1250	0.0150	0.5000	0.6250	1.5000	976-000-286	\$23.28
0.1250	0.1250	0.0200	0.5000	0.6250	1.5000	976-000-287	\$23.85
0.1875	0.1875	0.0100	0.6250	1.0000	2.0000	976-000-288	\$33.31
0.1875	0.1875	0.0150	0.6250	1.0000	2.0000	976-000-289	\$34.57
0.1875	0.1875	0.0200	0.6250	1.0000	2.0000	976-000-290	\$34.98
0.1875	0.1875	0.0300	0.6250	1.0000	2.0000	976-000-291	\$35.43
0.2500	0.2500	0.0100	0.7500	1.3750	2.5000	976-000-292	\$35.78
0.2500	0.2500	0.0150	0.7500	1.3750	2.5000	976-000-293	\$36.46
0.2500	0.2500	0.0200	0.7500	1.3750	2.5000	976-000-294	\$38.06
0.2500	0.2500	0.0300	0.7500	1.3750	2.5000	976-000-295	\$38.52
0.2500	0.2500	0.0600	0.7500	1.3750	2.5000	976-000-296	\$38.88
0.2500	0.2500	0.0100	1.0000	1.1250	2.5000	976-000-297	\$39.22
0.2500	0.2500	0.0150	1.0000	1.1250	2.5000	976-000-298	\$39.68
0.2500	0.2500	0.0200	1.0000	1.1250	2.5000	976-000-299	\$40.02
0.2500	0.2500	0.0300	1.0000	1.1250	2.5000	976-000-300	\$40.36
0.2500	0.2500	0.0600	1.0000	1.1250	2.5000	976-000-301	\$40.82
0.2500	0.2500	0.0100	1.2500	0.8750	2.5000	976-000-302	\$41.17
0.2500	0.2500	0.0150	1.2500	0.8750	2.5000	976-000-303	\$41.51
0.2500	0.2500	0.0200	1.2500	0.8750	2.5000	976-000-304	\$41.96
0.2500	0.2500	0.0300	1.2500	0.8750	2.5000	976-000-305	\$42.32
0.2500	0.2500	0.0600	1.2500	0.8750	2.5000	976-000-306	\$42.65

5-FLUTE, STANDARD LENGTH,
CORNER RADIUS



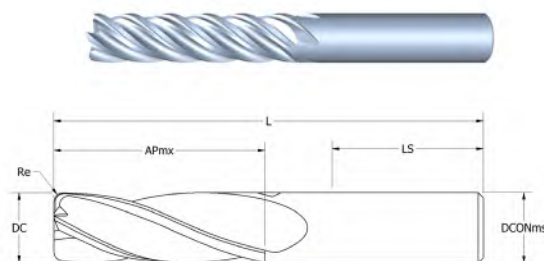
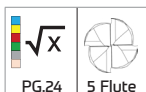
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.3125	0.3125	0.0100	0.8125	1.3125	2.5000	976-000-307	\$52.76
0.3125	0.3125	0.0150	0.8125	1.3125	2.5000	976-000-308	\$53.21
0.3125	0.3125	0.0200	0.8125	1.3125	2.5000	976-000-309	\$53.44
0.3125	0.3125	0.0300	0.8125	1.3125	2.5000	976-000-310	\$53.78
0.3125	0.3125	0.0600	0.8125	1.3125	2.5000	976-000-311	\$54.12
0.3750	0.3750	0.0100	0.8750	1.2500	2.5000	976-000-312	\$64.21
0.3750	0.3750	0.0150	0.8750	1.2500	2.5000	976-000-313	\$64.67
0.3750	0.3750	0.0200	0.8750	1.2500	2.5000	976-000-314	\$65.12
0.3750	0.3750	0.0300	0.8750	1.2500	2.5000	976-000-315	\$65.48
0.3750	0.3750	0.0600	0.8750	1.2500	2.5000	976-000-316	\$65.81
0.3750	0.3750	0.0100	1.0000	1.1250	2.5000	976-000-317	\$66.27
0.3750	0.3750	0.0150	1.0000	1.1250	2.5000	976-000-318	\$66.62
0.3750	0.3750	0.0200	1.0000	1.1250	2.5000	976-000-319	\$66.97
0.3750	0.3750	0.0300	1.0000	1.1250	2.5000	976-000-320	\$67.19
0.3750	0.3750	0.0600	1.0000	1.1250	2.5000	976-000-321	\$67.54
0.3750	0.3750	0.0100	1.2500	0.8750	2.5000	976-000-322	\$67.88
0.3750	0.3750	0.0150	1.2500	0.8750	2.5000	976-000-323	\$68.11
0.3750	0.3750	0.0200	1.2500	0.8750	2.5000	976-000-324	\$68.34
0.3750	0.3750	0.0300	1.2500	0.8750	2.5000	976-000-325	\$68.69
0.3750	0.3750	0.0600	1.2500	0.8750	2.5000	976-000-326	\$69.02
0.4375	0.4375	0.0150	1.0000	1.3750	2.7500	976-000-327	\$79.01
0.4375	0.4375	0.0200	1.0000	1.3750	2.7500	976-000-328	\$79.34
0.4375	0.4375	0.0300	1.0000	1.3750	2.7500	976-000-329	\$79.57
0.4375	0.4375	0.0600	1.0000	1.3750	2.7500	976-000-330	\$79.80
0.5000	0.5000	0.0100	1.0000	1.6250	3.0000	976-000-331	\$91.50
0.5000	0.5000	0.0150	1.0000	1.6250	3.0000	976-000-332	\$91.85
0.5000	0.5000	0.0300	1.0000	1.6250	3.0000	976-000-333	\$92.19
0.5000	0.5000	0.0600	1.0000	1.6250	3.0000	976-000-334	\$92.41
0.5000	0.5000	0.0900	1.0000	1.6250	3.0000	976-000-335	\$92.77
0.5000	0.5000	0.1200	1.0000	1.6250	3.0000	976-000-336	\$93.23
0.5000	0.5000	0.0100	1.2500	1.3750	3.0000	976-000-337	\$94.37
0.5000	0.5000	0.0150	1.2500	1.3750	3.0000	976-000-338	\$94.71
0.5000	0.5000	0.0300	1.2500	1.3750	3.0000	976-000-339	\$95.06
0.5000	0.5000	0.0600	1.2500	1.3750	3.0000	976-000-340	\$95.40
0.5000	0.5000	0.0900	1.2500	1.3750	3.0000	976-000-341	\$95.63
0.5000	0.5000	0.1200	1.2500	1.3750	3.0000	976-000-342	\$95.86
0.5000	0.5000	0.0100	1.5000	1.1250	3.0000	976-000-343	\$97.35
0.5000	0.5000	0.0150	1.5000	1.1250	3.0000	976-000-344	\$97.69
0.5000	0.5000	0.0300	1.5000	1.1250	3.0000	976-000-345	\$97.92
0.5000	0.5000	0.0600	1.5000	1.1250	3.0000	976-000-346	\$98.14
0.5000	0.5000	0.0900	1.5000	1.1250	3.0000	976-000-347	\$98.50
0.5000	0.5000	0.1200	1.5000	1.1250	3.0000	976-000-348	\$98.84

**5-FLUTE, STANDARD LENGTH,
CORNER RADIUS**



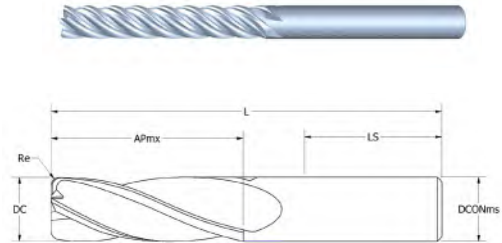
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.5000	0.5000	0.0100	1.5000	1.6250	3.5000	976-000-349	\$107.79
0.5000	0.5000	0.0150	1.5000	1.6250	3.5000	976-000-350	\$108.01
0.5000	0.5000	0.0300	1.5000	1.6250	3.5000	976-000-351	\$108.24
0.5000	0.5000	0.0600	1.5000	1.6250	3.5000	976-000-352	\$108.47
0.5000	0.5000	0.0900	1.5000	1.6250	3.5000	976-000-353	\$108.70
0.5000	0.5000	0.1200	1.5000	1.6250	3.5000	976-000-354	\$109.16
0.5000	0.5000	0.0100	1.7500	1.3750	3.5000	976-000-355	\$111.57
0.5000	0.5000	0.0150	1.7500	1.3750	3.5000	976-000-356	\$111.90
0.5000	0.5000	0.0300	1.7500	1.3750	3.5000	976-000-357	\$112.13
0.5000	0.5000	0.0600	1.7500	1.3750	3.5000	976-000-358	\$112.49
0.5000	0.5000	0.0900	1.7500	1.3750	3.5000	976-000-359	\$112.83
0.5000	0.5000	0.1200	1.7500	1.3750	3.5000	976-000-360	\$113.06
0.6250	0.6250	0.0300	1.5000	1.6250	3.5000	976-000-361	\$140.23
0.6250	0.6250	0.0400	1.5000	1.6250	3.5000	976-000-362	\$141.72
0.6250	0.6250	0.0600	1.5000	1.6250	3.5000	976-000-363	\$142.07
0.6250	0.6250	0.0900	1.5000	1.6250	3.5000	976-000-364	\$142.41
0.6250	0.6250	0.1200	1.5000	1.6250	3.5000	976-000-365	\$142.64
0.6250	0.6250	0.0300	1.7500	1.8750	4.0000	976-000-366	\$142.86
0.6250	0.6250	0.0400	1.7500	1.8750	4.0000	976-000-367	\$143.22
0.6250	0.6250	0.0600	1.7500	1.8750	4.0000	976-000-368	\$143.68
0.6250	0.6250	0.0900	1.7500	1.8750	4.0000	976-000-369	\$144.01
0.6250	0.6250	0.1200	1.7500	1.8750	4.0000	976-000-370	\$144.36
0.7500	0.7500	0.0300	1.7500	1.8750	4.0000	976-000-371	\$218.43
0.7500	0.7500	0.0400	1.7500	1.8750	4.0000	976-000-372	\$219.00
0.7500	0.7500	0.0600	1.7500	1.8750	4.0000	976-000-373	\$219.23
0.7500	0.7500	0.0900	1.7500	1.8750	4.0000	976-000-374	\$219.46
0.7500	0.7500	0.1200	1.7500	1.8750	4.0000	976-000-375	\$219.69
1.0000	1.0000	0.0300	1.7500	1.8750	4.0000	976-000-376	\$364.06
1.0000	1.0000	0.0400	1.7500	1.8750	4.0000	976-000-377	\$364.41
1.0000	1.0000	0.0600	1.7500	1.8750	4.0000	976-000-378	\$364.74
1.0000	1.0000	0.0900	1.7500	1.8750	4.0000	976-000-379	\$364.97
1.0000	1.0000	0.1200	1.7500	1.8750	4.0000	976-000-380	\$365.20

5-FLUTE, LONG LENGTH,
CORNER RADIUS



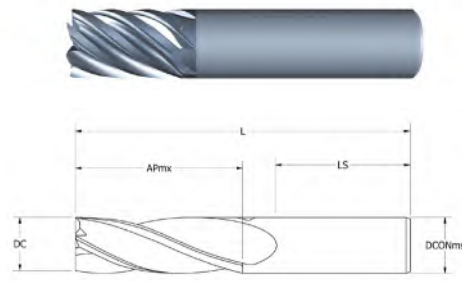
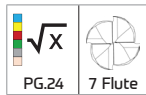
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0150	0.7500	1.3750	2.5000	976-000-381	\$34.06
0.1250	0.1250	0.0300	0.7500	1.3750	2.5000	976-000-382	\$34.40
0.1875	0.1875	0.0150	0.7500	1.3750	2.5000	976-000-383	\$39.68
0.1875	0.1875	0.0300	0.7500	1.3750	2.5000	976-000-384	\$39.90
0.2500	0.2500	0.0150	1.1250	1.5000	3.0000	976-000-385	\$44.77
0.2500	0.2500	0.0300	1.1250	1.5000	3.0000	976-000-386	\$45.18
0.3125	0.3125	0.0150	1.1250	1.5000	3.0000	976-000-387	\$61.81
0.3125	0.3125	0.0300	1.1250	1.5000	3.0000	976-000-388	\$61.97
0.3750	0.3750	0.0300	1.2500	1.3750	3.0000	976-000-389	\$85.88
0.3750	0.3750	0.0600	1.2500	1.3750	3.0000	976-000-390	\$86.23
0.4375	0.4375	0.0300	2.0000	1.6250	4.0000	976-000-391	\$107.67
0.4375	0.4375	0.0600	2.0000	1.6250	4.0000	976-000-392	\$108.01
0.5000	0.5000	0.0300	2.0000	1.6250	4.0000	976-000-393	\$136.33
0.5000	0.5000	0.0600	2.0000	1.6250	4.0000	976-000-394	\$136.68
0.6250	0.6250	0.0300	2.2500	2.3750	5.0000	976-000-395	\$224.28
0.6250	0.6250	0.0600	2.2500	2.3750	5.0000	976-000-396	\$227.38
0.7500	0.7500	0.0300	2.2500	2.3750	5.0000	976-000-397	\$268.22
0.7500	0.7500	0.0600	2.2500	2.3750	5.0000	976-000-398	\$268.45
1.0000	1.0000	0.0300	2.2500	2.3750	5.0000	976-000-399	\$425.73
1.0000	1.0000	0.0600	2.2500	2.3750	5.0000	976-000-400	\$426.07

**5-FLUTE, X LONG LENGTH,
CORNER RADIUS**



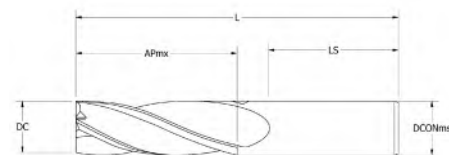
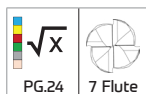
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1250	0.1250	0.0150	1.0000	1.3750	3.0000	976-000-401	\$45.88
0.1250	0.1250	0.0300	1.0000	1.3750	3.0000	976-000-403	\$46.32
0.1875	0.1875	0.0150	1.1250	1.3750	3.0000	976-000-404	\$49.19
0.1875	0.1875	0.0300	1.1250	1.3750	3.0000	976-000-405	\$49.42
0.2500	0.2500	0.0150	1.5000	1.5000	4.0000	976-000-406	\$57.10
0.2500	0.2500	0.0300	1.5000	1.5000	4.0000	976-000-407	\$57.45
0.3125	0.3125	0.0300	1.6250	1.5000	4.0000	976-000-408	\$77.97
0.3125	0.3125	0.0600	1.6250	1.5000	4.0000	976-000-410	\$78.20
0.3750	0.3750	0.0300	2.0000	1.3750	6.0000	976-000-411	\$102.40
0.3750	0.3750	0.0600	2.0000	1.3750	6.0000	976-000-412	\$102.73
0.4375	0.4375	0.0300	3.0000	1.6250	6.0000	976-000-413	\$161.21
0.4375	0.4375	0.0600	3.0000	1.6250	6.0000	976-000-415	\$161.56
0.5000	0.5000	0.0300	3.0000	1.6250	6.0000	976-000-416	\$177.27
0.5000	0.5000	0.0600	3.0000	1.6250	6.0000	976-000-417	\$177.61
0.6250	0.6250	0.0300	3.0000	2.3750	6.0000	976-000-418	\$252.71
0.6250	0.6250	0.0600	3.0000	2.3750	6.0000	976-000-419	\$252.94
0.7500	0.7500	0.0300	3.0000	2.3750	6.0000	976-000-420	\$302.41
0.7500	0.7500	0.0600	3.0000	2.3750	6.0000	976-000-421	\$416.31
1.0000	1.0000	0.0300	3.0000	2.3750	6.0000	976-000-422	\$491.47
1.0000	1.0000	0.0600	3.0000	2.3750	6.0000	976-000-423	\$491.70

7-FLUTE, STUB LENGTH, SQUARE END



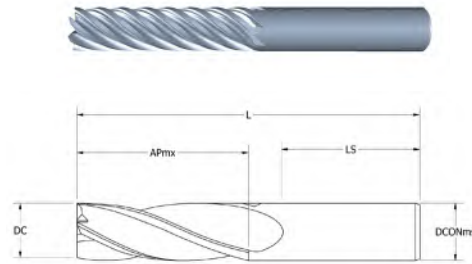
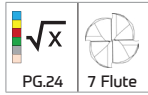
DC [in.]	DCONms [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1875	0.1875	0.3750	2.1250	2.0000	976-000-097	\$39.68
0.2500	0.2500	0.5000	1.1250	2.0000	976-000-098	\$42.32
0.3125	0.3125	0.5000	1.1250	2.0000	976-000-099	\$56.53
0.3750	0.3750	0.6250	1.0000	2.0000	976-000-100	\$64.44
0.4375	0.4375	0.6250	1.5000	2.5000	976-000-101	\$84.05
0.5000	0.5000	0.7500	1.3750	2.5000	976-000-102	\$94.71
0.6250	0.6250	0.7500	1.8750	3.0000	976-000-103	\$145.62
0.7500	0.7500	1.0000	1.6250	3.0000	976-000-104	\$197.57

7-FLUTE, STANDARD LENGTH, SQUARE END



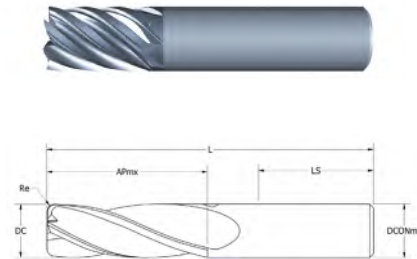
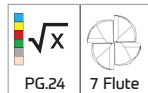
DC [in.]	DCONms [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1875	0.1875	0.6250	1.0000	2.0000	976-000-105	\$40.48
0.2500	0.2500	0.7500	1.3750	2.5000	976-000-106	\$45.29
0.2500	0.2500	1.0000	1.1250	2.5000	976-000-107	\$48.05
0.3125	0.3125	0.8125	1.3125	2.5000	976-000-108	\$61.94
0.3750	0.3750	0.8750	1.2500	2.5000	976-000-109	\$72.58
0.3750	0.3750	1.0000	1.1250	2.5000	976-000-110	\$74.76
0.4375	0.4375	1.0000	1.3750	2.7500	976-000-111	\$88.97
0.5000	0.5000	1.0000	1.6250	3.0000	976-000-112	\$103.89
0.5000	0.5000	1.2500	1.3750	3.0000	976-000-113	\$107.21
0.5000	0.5000	1.5000	1.6250	3.5000	976-000-114	\$124.52
0.5000	0.5000	1.7500	1.3750	3.5000	976-000-115	\$128.77
0.6250	0.6250	1.5000	1.6250	3.5000	976-000-116	\$156.75
0.7500	0.7500	1.7500	1.8750	4.0000	976-000-117	\$237.81
1.0000	1.0000	1.7500	1.8750	4.0000	976-000-118	\$370.54

**7-FLUTE, LONG LENGTH,
SQUARE END**



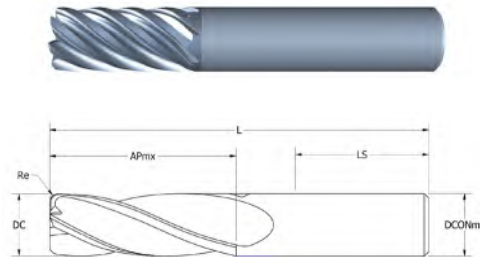
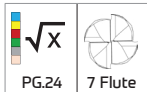
DC [in.]	DCONms [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1875	0.1875	0.7500	1.3750	2.5000	976-000-119	\$51.82
0.2500	0.2500	1.1250	1.5000	3.0000	976-000-120	\$59.05
0.3125	0.3125	1.1250	1.5000	3.0000	976-000-121	\$78.20
0.3750	0.3750	1.2500	1.3750	3.0000	976-000-122	\$91.73
0.4375	0.4375	2.0000	1.6250	4.0000	976-000-123	\$117.30
0.5000	0.5000	2.0000	1.6250	4.0000	976-000-124	\$143.22
0.6250	0.6250	2.2500	2.3750	5.0000	976-000-125	\$240.84
0.7500	0.7500	2.2500	2.3750	5.0000	976-000-126	\$274.02
1.0000	1.0000	2.2500	2.3750	5.0000	976-000-127	\$421.64

**7-FLUTE, STUB LENGTH,
CORNER RADIUS**



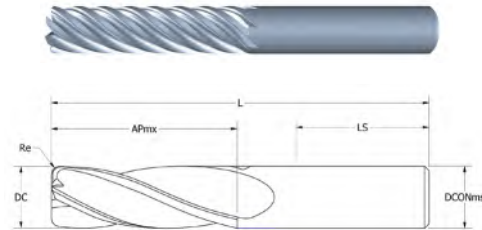
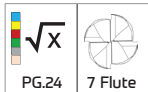
DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1875	0.1875	0.0100	0.3750	1.2500	2.0000	976-000-424	\$43.69
0.2500	0.2500	0.0200	0.5000	1.1250	2.0000	976-000-425	\$47.59
0.3125	0.3125	0.0200	0.5000	1.1250	2.0000	976-000-426	\$61.92
0.3750	0.3750	0.0200	0.6250	1.0000	2.0000	976-000-427	\$75.57
0.4375	0.4375	0.0300	0.6250	1.5000	2.5000	976-000-428	\$96.34
0.5000	0.5000	0.0300	0.7500	1.3750	2.5000	976-000-429	\$107.32
0.6250	0.6250	0.0400	0.7500	1.8750	3.0000	976-000-430	\$162.71
0.7500	0.7500	0.0400	1.0000	1.6250	3.0000	976-000-431	\$219.02

7-FLUTE, STANDARD LENGTH,
CORNER RADIUS



DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1875	0.1875	0.0150	0.6250	1.0000	2.0000	976-000-432	\$44.74
0.1875	0.1875	0.0300	0.6250	1.0000	2.0000	976-000-433	\$44.95
0.2500	0.2500	0.0150	0.7500	1.3750	2.5000	976-000-434	\$50.68
0.2500	0.2500	0.0300	0.7500	1.3750	2.5000	976-000-435	\$50.35
0.2500	0.2500	0.0150	1.0000	1.1250	2.5000	976-000-436	\$53.78
0.2500	0.2500	0.0300	1.0000	1.1250	2.5000	976-000-437	\$54.01
0.3125	0.3125	0.0150	0.8125	1.3125	2.5000	976-000-438	\$67.19
0.3125	0.3125	0.0300	0.8125	1.3125	2.5000	976-000-439	\$67.54
0.3750	0.3750	0.0150	0.8750	1.2500	2.5000	976-000-440	\$83.77
0.3750	0.3750	0.0300	0.8750	1.2500	2.5000	976-000-441	\$84.39
0.3750	0.3750	0.0600	0.8750	1.2500	2.5000	976-000-442	\$84.74
0.3750	0.3750	0.0150	1.0000	1.1250	2.5000	976-000-443	\$86.68
0.3750	0.3750	0.0300	1.0000	1.1250	2.5000	976-000-444	\$86.91
0.3750	0.3750	0.0600	1.0000	1.1250	2.5000	976-000-445	\$87.19
0.4375	0.4375	0.0150	1.0000	1.3750	2.7500	976-000-446	\$99.87
0.4375	0.4375	0.0300	1.0000	1.3750	2.7500	976-000-447	\$100.21
0.4375	0.4375	0.0600	1.0000	1.3750	2.7500	976-000-448	\$100.44
0.5000	0.5000	0.0150	1.0000	1.6250	3.0000	976-000-449	\$116.84
0.5000	0.5000	0.0300	1.0000	1.6250	3.0000	976-000-450	\$117.30
0.5000	0.5000	0.0600	1.0000	1.6250	3.0000	976-000-451	\$117.64
0.5000	0.5000	0.0150	1.2500	1.3750	3.0000	976-000-452	\$119.93
0.5000	0.5000	0.0300	1.2500	1.3750	3.0000	976-000-453	\$120.29
0.5000	0.5000	0.0600	1.2500	1.3750	3.0000	976-000-454	\$120.62
0.5000	0.5000	0.0150	1.5000	1.1250	3.0000	976-000-455	\$137.59
0.5000	0.5000	0.0300	1.5000	1.1250	3.0000	976-000-456	\$138.96
0.5000	0.5000	0.0600	1.5000	1.1250	3.0000	976-000-457	\$139.19
0.5000	0.5000	0.0150	1.7500	1.3750	3.5000	976-000-458	\$139.42
0.5000	0.5000	0.0300	1.7500	1.3750	3.5000	976-000-459	\$139.80
0.5000	0.5000	0.0600	1.7500	1.3750	3.5000	976-000-460	\$139.89
0.6250	0.6250	0.0300	1.5000	1.6250	3.5000	976-000-461	\$174.97
0.6250	0.6250	0.0600	1.5000	1.6250	3.5000	976-000-462	\$175.32
0.6250	0.6250	0.0900	1.5000	1.6250	3.5000	976-000-463	\$175.66
0.7500	0.7500	0.0300	1.7500	1.8750	4.0000	976-000-464	\$258.21
0.7500	0.7500	0.0600	1.7500	1.8750	4.0000	976-000-465	\$258.44
0.7500	0.7500	0.0900	1.7500	1.8750	4.0000	976-000-466	\$258.67
1.0000	1.0000	0.0300	1.7500	1.8750	4.0000	976-000-467	\$410.97
1.0000	1.0000	0.0600	1.7500	1.8750	4.0000	976-000-468	\$411.31
1.0000	1.0000	0.0900	1.7500	1.8750	4.0000	976-000-469	\$411.54

**7-FLUTE, LONG LENGTH,
CORNER RADIUS**



DC [in.]	DCONms [in.]	RE [in.]	APmx [in.]	LS [in.]	L [in.]	PRODUCT #	Price
0.1875	0.1875	0.0150	0.7500	1.3750	2.5000	976-000-470	\$56.87
0.1875	0.1875	0.0300	0.7500	1.3750	2.5000	976-000-471	\$57.34
0.2500	0.2500	0.0150	1.1250	1.5000	3.0000	976-000-472	\$64.11
0.2500	0.2500	0.0300	1.1250	1.5000	3.0000	976-000-473	\$64.44
0.3125	0.3125	0.0150	1.1250	1.5000	3.0000	976-000-474	\$85.54
0.3125	0.3125	0.0300	1.1250	1.5000	3.0000	976-000-475	\$85.88
0.3750	0.3750	0.0300	1.2500	1.3750	3.0000	976-000-476	\$104.69
0.3750	0.3750	0.0600	1.2500	1.3750	3.0000	976-000-477	\$105.03
0.4375	0.4375	0.0300	2.0000	1.6250	4.0000	976-000-478	\$129.11
0.4375	0.4375	0.0600	2.0000	1.6250	4.0000	976-000-479	\$129.46
0.5000	0.5000	0.0300	2.0000	1.6250	4.0000	976-000-480	\$155.94
0.5000	0.5000	0.0600	2.0000	1.6250	4.0000	976-000-481	\$156.17
0.6250	0.6250	0.0300	2.2500	2.3750	5.0000	976-000-482	\$262.46
0.6250	0.6250	0.0600	2.2500	2.3750	5.0000	976-000-483	\$294.57
0.7500	0.7500	0.0300	2.2500	2.3750	5.0000	976-000-484	\$295.15
0.7500	0.7500	0.0600	2.2500	2.3750	5.0000	976-000-485	\$295.48
1.0000	1.0000	0.0300	2.2500	2.3750	5.0000	976-000-486	\$464.45
1.0000	1.0000	0.0600	2.2500	2.3750	5.0000	976-000-487	\$464.90

Recommended Starting Speeds & Feeds

				END MILL DIAMETER									
				1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"	1"
ISO	MATERIAL	HARDNESS	Vc (SFM)*	Fz (INCH PER TOOTH)*									
P	CARBON STEELS 1018, 1040, 1080, 1090, 10L50, 1140, 1212, 12L15, 1525, 1536	≤ 275 BHN or ≤ 28 HRC	320-750	.0009 - .0017	.0011 - .0019	.0020 - .0028	.0024 - .0033	.0025 - .0038	.0025 - .0041	.0027 - .0046	.0035 - .0052	.0040 - .0066	.0042 - .0090
	ALLOY STEELS 4140, 4150, 4320, 5120, 5150, 8630, 86L20, 17-4 PH	≤ 375 BHN or ≤ 40 HRC	230-670	.0006 - .0013	.0011 - .0017	.0014 - .0022	.0017 - .0024	.0019 - .0028	.0020 - .0035	.0023 - .0040	.0030 - .0050	.0038 - .0057	.0040 - .0085
M	STAINLESS STEELS (FREE MACHINING) 303, 416, 420F, 430F, 440F	≤ 275 BHN or ≤ 28 HRC	250-600	.0004 - .0013	.0008 - .0017	.0013 - .0020	.0016 - .0023	.0020 - .0026	.0022 - .0030	.0026 - .0034	.0032 - .0039	.0035 - .0047	.0035 - .0068
	STAINLESS STEELS (DIFFICULT) 304, 304L, 316, 316L	≤ 275 BHN or ≤ 28 HRC	180-520	.0005 - .0017	.0010 - .0020	.0013 - .0023	.0017 - .0027	.0021 - .0030	.0025 - .0035	.0028 - .0040	.0030 - .0048	.0033 - .0060	.0033 - .0078
K	GRAY IRONS Class 20, 30, 40, 50, 60, G3000, G3500	≤ 220 BHN or ≤ 19 HRC	320-830	.0007 - .0020	.0011 - .0032	.0014 - .0041	.0019 - .0052	.0022 - .0061	.0025 - .0070	.0028 - .0080	.0031 - .0086	.0032 - .0095	.0036 - .0110
	DUCTILE IRONS D&M series, 250, 300, 350, 400, 60-40-18, 65-45-12	≤ 260 BHN or ≤ 26 HRC	220-670	.0005 - .0014	.0009 - .0023	.0012 - .0032	.0016 - .0038	.0018 - .0041	.0020 - .0047	.0022 - .0053	.0024 - .0062	.0028 - .0070	.0030 - .0090
H	TOOL STEELS A2, D2, H13, L2, M2, P20, S7, T15, W2	≤ 555 BHN or ≤ 55 HRC	115-270	.0004 - .0017	.0008 - .0017	.0013 - .0020	.0016 - .0024	.0020 - .0030	.0022 - .0035	.0028 - .0045	.0032 - .0053	.0036 - .0062	.0040 - .0078
S	HR SUPER ALLOYS Inconel 718, Waspaloy, Hastelloy, Inconel 625, Stellite 31, Haynes 25, Rene 41	≤ 275 BHN or ≤ 28 HRC	70-180	.0005 - .0018	.0008 - .0022	.0010 - .0028	.0012 - .0032	.0015 - .0036	.0017 - .0042	.0018 - .0047	.0019 - .0050	.0022 - .0055	.0025 - .0065
	TITANIUM 6AL-4V, ASTM 1, 2, 3, 6AL-2S	≤ 275 BHN or ≤ 28 HRC	140-400	.0007 - .0013	.0011 - .0016	.0013 - .0018	.0015 - .0021	.0019 - .0026	.0022 - .0031	.0024 - .0035	.0025 - .0044	.0030 - .0053	.0031 - .0075

*LOWER Vc AND Fz APPLY TO HEAVY/ROUGHING ENGAGEMENT

*HIGHER Vc AND Fz APPLY TO LIGHT/PROFILING ENGAGEMENT

Ap = Axial depth of cut
 Ae = Radial depth of cut

*Speeds & feeds are starting recommendations only.
 Factors such as machine type, fixture, tooling rigidity,
 available horsepower, coolant delivery method and others
 will affect the performance significantly.

h_{ex}	%Radial Engagement	Thinning Multiplier
	100%	1
	50%	1
	30%	1.091
	25%	1.212
	20%	1.641
	15%	2.1
	10%	4.375
	5%	6.882







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