

ADVANCED PERFORMANCE

End Mills For Titanium Alloys



INTRO

MILLING

SPECIALTY

HOLEMAKING

THREADING

INSERTS



FEATURES/DESCRIPTION		APPLICATION	FEATURES																																							
<p>PERFORMANCE Ti</p> <p>High Helix For Titanium Alloys</p> <ul style="list-style-type: none"> Premium sub-micron grade carbide substrate for wear resistance 8-10 flute design distributes heat to reduce wear FX3 coating adds heat resistance and lubricity High helix with increased flute counts for improved heat control Ideal for 6Al4V Available with & without neck for extended reach SafeLock® shank available upon request 			<p>CARBIDE</p> <p>40°</p> <p>SQ</p> <p>RAD</p> <p>h6</p> <p>P193</p> <p>FX3</p>																																							
<table border="1"> <thead> <tr> <th colspan="3">STEEL</th> <th colspan="2">STAINLESS</th> <th colspan="2">CAST IRON</th> <th colspan="2">NON-FERROUS</th> <th colspan="2">HBSA</th> <th colspan="2">HARDENED STEEL</th> </tr> <tr> <th>P1</th> <th>P2</th> <th>P3</th> <th>M1</th> <th>M2</th> <th>K1</th> <th>K2</th> <th>N1</th> <th>N2</th> <th>S1</th> <th>S2</th> <th>H1</th> <th>H2</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td>○</td> <td>○</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> </tr> </tbody> </table>		STEEL			STAINLESS		CAST IRON		NON-FERROUS		HBSA		HARDENED STEEL		P1	P2	P3	M1	M2	K1	K2	N1	N2	S1	S2	H1	H2				○	○						●				
STEEL			STAINLESS		CAST IRON		NON-FERROUS		HBSA		HARDENED STEEL																															
P1	P2	P3	M1	M2	K1	K2	N1	N2	S1	S2	H1	H2																														
			○	○						●																																

● Best ○ Good

Series 280 840 | Multi Flute | Square and Radius | Titanium

Diameter(D ₁)	LOC(L ₁)	LBS(L ₂)	OAL(L)	Shank(D)	Radius(R)	Flutes	EDP
1/2	5/8	-	3	1/2	-	8	317204
1/2	5/8	1-1/8	3	1/2	-	8	317321
1/2	5/8	-	3	1/2	0.030	8	317208
1/2	5/8	1-1/8	3	1/2	0.030	8	317324
1/2	5/8	-	3	1/2	0.060	8	317212
1/2	5/8	1-1/8	3	1/2	0.060	8	317326
1/2	5/8	2 1/8	4	1/2	-	8	317329
1/2	5/8	2 1/8	4	1/2	0.030	8	317331
1/2	5/8	2 1/8	4	1/2	0.060	8	317335
1/2	5/8	3 1/8	6	1/2	-	8	317339
1/2	5/8	3 1/8	6	1/2	0.030	8	317343
1/2	5/8	3 1/8	6	1/2	0.060	8	317345
1/2	1-1/4	-	3	1/2	-	8	317216
1/2	1-1/4	-	3	1/2	0.030	8	317218
1/2	1-1/4	-	3	1/2	0.060	8	317221
5/8	3/4	-	3	5/8	-	8	317225
5/8	3/4	-	3	5/8	0.030	8	317228
5/8	3/4	-	3	5/8	0.060	8	317232
5/8	3/4	-	3	5/8	0.090	8	317236
5/8	3/4	1 5/8	4	5/8	-	8	317349
5/8	3/4	1 5/8	4	5/8	0.030	8	317352
5/8	3/4	1 5/8	4	5/8	0.060	8	317354
5/8	3/4	1 5/8	4	5/8	0.090	8	317358
5/8	3/4	2 5/8	5	5/8	-	8	317362
5/8	3/4	2 5/8	5	5/8	0.030	8	317364
5/8	3/4	2 5/8	5	5/8	0.060	8	317368
5/8	3/4	2 5/8	5	5/8	0.090	8	317370
5/8	3/4	3 5/8	6	5/8	-	8	317374
5/8	3/4	3 5/8	6	5/8	0.030	8	317376
5/8	3/4	3 5/8	6	5/8	0.060	8	317378
5/8	3/4	3 5/8	6	5/8	0.090	8	317381
5/8	1-5/8	-	3-1/2	5/8	-	8	317238
5/8	1-5/8	-	3-1/2	5/8	0.030	8	317240
5/8	1-5/8	-	3-1/2	5/8	0.060	8	317243
5/8	1-5/8	-	3-1/2	5/8	0.090	8	317245
3/4	1	-	4	3/4	-	10	317247
3/4	1	1 7/8	4	3/4	-	10	317385
3/4	1	-	4	3/4	0.030	10	317249
3/4	1	1 7/8	4	3/4	0.030	10	317388
3/4	1	-	4	3/4	0.060	10	317253
3/4	1	1 7/8	4	3/4	0.060	10	317391
3/4	1	-	4	3/4	0.090	10	317257
3/4	1	1 7/8	4	3/4	0.090	10	317395
3/4	1	-	4	3/4	0.120	10	317260
3/4	1	1 7/8	4	3/4	0.120	10	317398

*bold numbers are EDPs for ordering

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Series 280		840 Multi Flute Square and Radius Titanium					
Diameter(D ₁)	LOC(L ₁)	LBS(L ₂)	OAL(L)	Shank(D)	Radius(R)	Flutes	EDP
3/4	1	2 7/8	5	3/4	-	10	317402
3/4	1	2 7/8	5	3/4	0.030	10	317406
3/4	1	2 7/8	5	3/4	0.060	10	317409
3/4	1	2 7/8	5	3/4	0.090	10	317412
3/4	1	2 7/8	5	3/4	0.120	10	317414
3/4	1	3 7/8	6	3/4	-	10	317416
3/4	1	3 7/8	6	3/4	0.030	10	317420
3/4	1	3 7/8	6	3/4	0.060	10	317423
3/4	1	3 7/8	6	3/4	0.090	10	317427
3/4	1	3 7/8	6	3/4	0.120	10	317430
3/4	1-5/8	-	4	3/4	-	10	317262
3/4	1-5/8	-	4	3/4	0.030	10	317264
3/4	1-5/8	-	4	3/4	0.060	10	317267
3/4	1-5/8	-	4	3/4	0.090	10	317269
3/4	1-5/8	-	4	3/4	0.120	10	317272
1	1-1/4	-	4	1	-	10	317275
1	1-1/4	-	4	1	-	10	317433
1	1-1/4	-	4	1	0.030	10	317277
1	1-1/4	-	4	1	0.030	10	317435
1	1-1/4	-	4	1	0.060	10	317279
1	1-1/4	1 5/8	4	1	0.060	10	317439
1	1-1/4	-	4	1	0.090	10	317282
1	1-1/4	1 5/8	4	1	0.090	10	317441
1	1-1/4	-	4	1	0.120	10	317286
1	1-1/4	1 5/8	4	1	0.120	10	317444
1	1-1/4	2 5/8	5	1	-	10	317447
1	1-1/4	2 5/8	5	1	0.030	10	317449
1	1-1/4	2 5/8	5	1	0.060	10	317452
1	1-1/4	2 5/8	5	1	0.090	10	317454
1	1-1/4	2 5/8	5	1	0.120	10	317458
1	1-1/4	3 5/8	6	1	-	10	317461
1	1-1/4	3 5/8	6	1	0.030	10	317464
1	1-1/4	3 5/8	6	1	0.060	10	317467
1	1-1/4	3 5/8	6	1	0.090	10	317470
1	1-1/4	3 5/8	6	1	0.120	10	317474
1	2	-	4	1	-	10	317288
1	2	-	4	1	0.030	10	317291
1	2	-	4	1	0.060	10	317295
1	2	-	4	1	0.090	10	317299
1	2	-	4	1	0.120	10	317302
1	3-1/4	-	6	1	-	10	317305
1	3-1/4	-	6	1	0.030	10	317309
1	3-1/4	-	6	1	0.060	10	317311
1	3-1/4	-	6	1	0.090	10	317314
1	3-1/4	-	6	1	0.120	10	317317

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840 | Multi Flute | Square & Radius | Titanium

Material		Axial ↓	Radial →	SFM	1/2		5/8		3/4	
					RPM	IPM	RPM	IPM	RPM	IPM
P	Carbon Steel 10XX, 11XX, 12XX, 13XX	1 x D	.5 x D	220	1681	32	1345	31	1121	35
		1.25 x D	.3 x D	264	2017	46	1614	45	1345	51
		1.5 X D	.1 x D	343	2622	100	2098	96	1748	110
		1.5 x D	.07 x D	378	2884	155	2307	148	1923	170
M	SS 300 & 400 Series 303, 304, 316, 420, 416	.75 x D	.5 x D	140	1070	18	856	17	713	19
		1.25 x D	.3 x D	185	1413	28	1131	27	942	31
		1.5 x D	.1 x D	230	1760	43	1408	41	1173	47
		1.5 x D	.07 x D	276	2112	68	1689	65	1408	75
S	High Temp Alloys Ti-6Al4V Grades (5-38)	.75 x D	.5 x D	180	1375	28	1100	27	917	30
		1.25 x D	.3 x D	225	1719	42	1375	40	1146	46
		1.5 x D	.1 x D	275	2101	85	1681	81	1401	93
		1.5 x D	.07 x D	303	2311	130	1849	125	1541	144

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