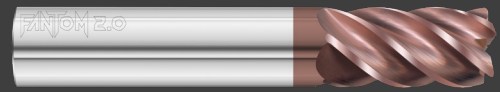
3412 FANTOM 2.0 - IMPERIAL



3412 Series Fantom 2.0 End Mill designed to excel in difficult to machine materials.

Not Recommended for High Si Aluminum (>10%), Low Si Aluminum (<10%), Composites, Plastics, Brass & Copper, or Graphite.

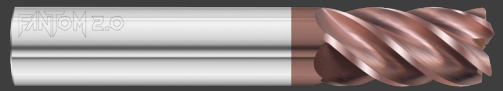
FULLERTON® SPEEDS / FEEDS

	Cast Iron					Hardened Steels > 48 RC					Steels				
	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish
SFM (ft/min)	525	525	525	525	525	100	100	125	170	170	400	400	500	700	700
Axial Depth	< (1xD)	full	< (2xD)	full	< (2xD)	< (1xD)	full	< (2xD)	full	< (2xD)	< (1xD)	full	< (2xD)	full	< (2xD)
Radial Width	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD
1/8”	.0010	.0012	.0010	.0010	.0012	.0006	.0006	.0007	.0007	.0009	.0007	.0008	.0005	.0005	.0010
1/4”	.0018	.0018	.0018	.0018	.0018	.0012	.0012	.0015	.0015	.0018	.0014	.0014	.0010	.0010	.0015
3/8”	.0027	.0027	.0027	.0027	.0027	.0018	.0018	.0020	.0020	.0022	.0020	.0026	.0020	.0020	.0026
1/2”	.0035	.0035	.0035	.0035	.0035	.0020	.0020	.0022	.0022	.0024	.0026	.0030	.0025	.0025	.0030
3/4”	.0043	.0043	.0043	.0043	.0043	.0022	.0022	.0026	.0026	.0028	.0033	.0033	.0030	.0030	.0033
1”	.0050	.0050	.0050	.0050	.0050	.0025	.0025	.0028	.0028	.0030	.0039	.0039	.0040	.0040	.0045

	Stainless Steels					Super Alloys (Nickel Based, Inconel)					Titanium				
	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish
SFM (ft/min)	325	325	350	500	500	90	90	110	170	170	200	200	240	300	300
Axial Depth	< (1xD)	full	< (2xD)	full	< (2xD)	< (1xD)	full	< (2xD)	full	< (2xD)	< (1xD)	full	< (2xD)	full	< (2xD)
Radial Width	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD
1/8”	.0004	.0008	.0004	.0004	.0008	.0006	.0007	.0006	.0006	.0007	.0003	.0004	.0003	.0003	.0004
1/4”	.0010	.0014	.0010	.0010	.0014	.0008	.0010	.0008	.0008	.0010	.0008	.0010	.0008	.0008	.0010
3/8”	.0012	.0022	.0012	.0012	.0022	.0010	.0015	.0010	.0010	.0015	.0010	.0015	.0010	.0010	.0015
1/2”	.0015	.0030	.0015	.0015	.0030	.0015	.0020	.0015	.0015	.0020	.0015	.0020	.0015	.0015	.0020
3/4”	.0030	.0035	.0030	.0030	.0035	.0025	.0030	.0025	.0025	.0030	.0020	.0025	.0020	.0020	.0025
1”	.0040	.0045	.0040	.0040	.0045	.0035	.0040	.0035	.0035	.0040	.0032	.0035	.0032	.0032	.0035

IPT (in/tooth)

3412 FANTOM 2.0 - METRIC



3412 Series Fantom 2.0 End Mill designed to excel in difficult to machine materials.

Not Recommended for High Si Aluminum (>10%), Low Si Aluminum (<10%), Composites, Plastics, Brass & Copper, or Graphite.

FULLERTON® SPEEDS / FEEDS

	Cast Iron					Hardened Steels > 48 RC					Steels				
	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish
SMM (m/min)	160	160	160	160	160	30	30	38	51	51	121	121	152	213	213
Axial Depth	< (1xD)	full	< (2xD)	full	< (2xD)	< (1xD)	full	< (2xD)	full	< (2xD)	< (1xD)	full	< (2xD)	full	< (2xD)
Radial Width	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD
3	.0254	.0305	.0254	.0254	.0305	.0152	.0152	.0178	.0178	.0229	.0178	.0203	.0127	.0127	.0254
6	.0457	.0457	.0457	.0457	.0457	.0305	.0305	.0381	.0381	.0457	.0356	.0356	.0254	.0254	.0381
10	.0686	.0686	.0686	.0686	.0686	.0457	.0457	.0508	.0508	.0559	.0508	.0660	.0508	.0508	.0660
12	.0889	.0889	.0889	.0889	.0889	.0508	.0508	.0559	.0559	.0610	.0660	.0762	.0635	.0635	.0762
20	.1092	.1092	.1092	.1092	.1092	.0559	.0559	.0660	.0660	.0711	.0838	.0838	.0762	.0762	.0838
25	.1270	.1270	.1270	.1270	.1270	.0635	.0635	.0711	.0711	.0762	.0991	.0991	.1016	.1016	.1143

	Stainless Steels					Super Alloys (Nickel Based, Inconel)					Titanium				
	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish	Slotting	Plunge/ Ramp	Rough/ Profile	HEM	Finish
SMM (m/min)	99	99	106	152	152	27	27	33	51	51	60	60	73	91	91
Axial Depth	< (1xD)	full	< (2xD)	full	< (2xD)	< (1xD)	full	< (2xD)	full	< (2xD)	< (1xD)	full	< (2xD)	full	< (2xD)
Radial Width	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD	full	full	(.25-.3)xD	(.1-.25)xD	(.05-.08)xD
3	.0102	.0203	.0102	.0102	.0203	.0152	.0178	.0152	.0152	.0178	.0076	.0102	.0076	.0076	.0102
6	.0254	.0356	.0254	.0254	.0356	.0203	.0254	.0203	.0203	.0254	.0203	.0254	.0203	.0203	.0254
10	.0305	.0559	.0305	.0305	.0559	.0254	.0381	.0254	.0254	.0381	.0254	.0381	.0254	.0254	.0381
12	.0381	.0762	.0381	.0381	.0762	.0381	.0508	.0381	.0381	.0508	.0381	.0508	.0381	.0381	.0508
20	.0762	.0889	.0762	.0762	.0889	.0635	.0762	.0635	.0635	.0762	.0508	.0635	.0508	.0508	.0635
25	.1016	.1143	.1016	.1016	.1143	.0889	.1016	.0889	.0889	.1016	.0813	.0889	.0813	.0813	.0889

MMPT (mm/tooth)