

# 3800 TWISTER - IMPERIAL



3800 Series Twister End Mill provides high shear and chip clearing benefits.

Not Recommended for High Si Aluminum (>10%), Low Si Aluminum (<10%), Composites, Plastics, Graphite, Cast Iron, or Steels. Brass & Copper, Hardened Steels >48RC, and Stainless Steels Recommended in Unique Situations. The parameters listed for tool series that are stocked uncoated are based on running an uncoated tool. If a coating is applied to the tools, the SFM can be increased by approximately 25%. All speed and feed recommendations should be considered only as a starting point. Start with conservative speeds and feeds while analyzing the rigidity of the process. Then cautiously progress incrementally to achieve optimum performance.

**FULLERTON®**  
**SPEEDS / FEEDS**

	Hardened Steels > 48 RC					Steels					Stainless 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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Axial Depth	< (1xD)	full	< (2xD)	< (2xD)	< (2xD)	< (1xD)	full	< (2xD)	< (2xD)	< (2xD)	< (1xD)	full	< (2xD)	< (2xD)	< (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"	.0008	.0009	.0008	.0008	.0009	.0006	.0008	.0006	.0006	.0008	.0006	.0008	.0006	.0006	.0008
1/4"	.0015	.0016	.0015	.0015	.0016	.0014	.0014	.0014	.0014	.0014	.0014	.0014	.0014	.0014	.0014
3/8"	.0020	.0022	.0020	.0020	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022	.0022
1/2"	.0025	.0025	.0025	.0025	.0025	.0025	.0025	.0025	.0025	.0025	.0023	.0023	.0023	.0023	.0023
3/4"	.0028	.0030	.0028	.0028	.0030	.0028	.0028	.0028	.0028	.0028	.0025	.0025	.0025	.0025	.0025
1"	.0030	.0035	.0030	.0030	.0035	.0035	.0035	.0035	.0035	.0035	.0027	.0027	.0027	.0027	.0027

	Super Alloys (Nickel Based, Inconel)					Titanium				
	Slotting	Plunge/Ramp	Rough/Profile	HEM	Finish	Slotting	Plunge/Ramp	Rough/Profile	HEM	Finish
SFM (ft/min)	-	-	-	-	-	-	-	-	-	-
Axial Depth	< (1xD)	full	< (2xD)	< (2xD)	< (2xD)	< (1xD)	full	< (2xD)	< (2xD)	< (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
1/8"	.0003	.0005	.0003	.0003	.0005	.0003	.0006	.0003	.0003	.0006
1/4"	.0007	.0009	.0007	.0007	.0009	.0007	.0012	.0007	.0007	.0012
3/8"	.0011	.0014	.0011	.0011	.0014	.0011	.0017	.0011	.0011	.0017
1/2"	.0014	.0019	.0014	.0014	.0019	.0015	.0023	.0015	.0015	.0023
3/4"	.0022	.0028	.0022	.0022	.0028	.0022	.0034	.0022	.0022	.0034
1"	.0028	.0038	.0028	.0028	.0038	.0030	.0046	.0030	.0030	.0046

# 3800 TWISTER - METRIC



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**FULLERTON®**  
**SPEEDS / FEEDS**

	Hardened Steels > 48 RC					Steels					Stainless 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)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Axial Depth	< (1xD)	Full	< (2xD)	< (2xD)	< (2xD)	< (1xD)	Full	< (2xD)	< (2xD)	< (2xD)	< (1xD)	Full	< (2xD)	< (2xD)	< (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	.0203	.0229	.0203	.0203	.0229	.0152	.0203	.0152	.0152	.0203	.0152	.0203	.0152	.0152	.0203
6	.0381	.0406	.0381	.0381	.0406	.0356	.0356	.0356	.0356	.0356	.0356	.0356	.0356	.0356	.0356
10	.0508	.0559	.0508	.0508	.0559	.0559	.0559	.0559	.0559	.0559	.0559	.0559	.0559	.0559	.0559
12	.0635	.0635	.0635	.0635	.0635	.0635	.0635	.0635	.0635	.0635	.0584	.0584	.0584	.0584	.0584
20	.0711	.0762	.0711	.0711	.0762	.0711	.0711	.0711	.0711	.0711	.0635	.0635	.0635	.0635	.0635
25	.0762	.0889	.0762	.0762	.0889	.0889	.0889	.0889	.0889	.0889	.0686	.0686	.0686	.0686	.0686
	Super Alloys (Nickel Based, Inconel)					Titanium									
	Slotting	Plunge/Ramp	Rough/Profile	HEM	Finish	Slotting	Plunge/Ramp	Rough/Profile	HEM	Finish					
SMM (m/min)	-	-	-	-	-	-	-	-	-	-					
Axial Depth	< (1xD)	Full	< (2xD)	< (2xD)	< (2xD)	< (1xD)	Full	< (2xD)	< (2xD)	< (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					
3	.0076	.0127	.0076	.0076	.0127	.0076	.0152	.0076	.0076	.0152					
6	.0178	.0229	.0178	.0178	.0229	.0178	.0305	.0178	.0178	.0305					
10	.0279	.0356	.0279	.0279	.0356	.0279	.0432	.0279	.0279	.0432					
12	.0356	.0483	.0356	.0356	.0483	.0381	.0584	.0381	.0381	.0584					
20	.0559	.0711	.0559	.0559	.0711	.0559	.0864	.0559	.0559	.0864					
25	.0711	.0965	.0711	.0711	.0965	.0762	.1168	.0762	.0762	.1168					