

# SPEEDS & FEEDS - IMPERIAL UNITS 3300, 2003 JIT General Purpose 3 Flute End Mill



3300 Series 3-Flute End Mill is offered in an extensive variety of configurations.

	Hi Si Aluminum (>10%) Recommended in Unique Situations					Low Si Aluminum (<10%) (1000-1600) SFM (ft/min)					Brass & Copper (400-600) SFM (ft/min)				
	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)
Radial Width	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD
1/8"	-	-	-	-	-	.0010	.0015	.0010	.0015	.0010	.0008	.0010	.0008	.0010	.0008
1/4"	-	-	-	-	-	.0030	.0035	.0030	.0035	.0030	.0015	.0020	.0015	.0020	.0015
3/8"	-	-	-	-	-	.0045	.0050	.0045	.0050	.0045	.0025	.0030	.0025	.0030	.0025
1/2"	-	-	-	-	-	.0065	.0070	.0065	.0070	.0065	.0030	.0035	.0030	.0035	.0030
3/4"	-	-	-	-	-	.0085	.0090	.0085	.0090	.0085	.0035	.0040	.0035	.0040	.0035
1"	-	-	-	-	-	.0100	.0110	.0100	.0110	.0100	.0040	.0045	.0040	.0045	.0040

	Cast Iron (250-400) SFM (ft/min)					Steels (200-500) SFM (ft/min)					Stainless Steels (130-300) SFM (ft/min)				
	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)
Radial Width	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD
1/8"	.0007	.0009	.0007	.0009	.0007	.0007	.0009	.0007	.0009	.0007	.0006	.0008	.0006	.0008	.0006
1/4"	.0014	.0020	.0014	.0020	.0014	.0015	.0020	.0015	.0020	.0015	.0014	.0017	.0014	.0017	.0014
3/8"	.0022	.0026	.0022	.0026	.0022	.0023	.0026	.0023	.0026	.0023	.0022	.0022	.0022	.0022	.0022
1/2"	.0025	.0034	.0025	.0034	.0025	.0026	.0034	.0026	.0034	.0026	.0023	.0029	.0023	.0029	.0023
3/4"	.0028	.0045	.0028	.0045	.0028	.0030	.0045	.0030	.0045	.0030	.0025	.0040	.0025	.0040	.0025
1"	.0035	.0050	.0035	.0050	.0035	.0040	.0050	.0040	.0050	.0040	.0030	.0045	.0030	.0045	.0030

			(Nickel Bas 30) SMM (ft	sed, Inconel) /min)	Titanium (120-210) SMM (ft/min)						
	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket	
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	
Radial Width	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD	
1/8"	.0004	.0005	.0004	.0005	.0004	.0004	.0006	.0004	.0006	.0004	
1/4"	.0008	.0009	.0008	.0009	.0008	.0008	.0012	.0008	.0012	.0008	
3/8"	.0011	.0011	.0011	.0011	.0011	.0012	.0016	.0012	.0016	.0012	
1/2"	.0014	.0015	.0014	.0015	.0014	.0016	.0022	.0016	.0022	.0016	
3/4"	.0020	.0021	.0020	.0021	.0020	.0020	.0029	.0020	.0029	.0020	
1"	.0023	.0025	.0023	.0025	.0023	.0028	.0035	.0028	.0035	.0028	

## NORMEK

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#### Not Recommended for Composites, Plastics, Graphite, or Hardened Steels > 48 RC.

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 analyizing the rigidity of the process. Then cautiously progress incrementally to achieve optimum performance.

Contact Engineering at 800.248.8315 or engineering@fullertontool.com



### SPEEDS & FEEDS - METRIC UNITS

3300, 2003 JIT General Purpose 3 Flute End Mill



### 3300 Series 3-Flute End Mill is offered in an extensive variety of configurations.

	Hi Si Aluminum (>10%) Recommended in Unique Situations					Low Si Aluminum (<10%) (304-487) SMM (m/min)					Brass & Copper (121-182) SMM (m/min)				
	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)
Radial Width	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD
3	-	-	-	-	-	.0254	.0381	.0254	.0381	.0254	.0203	.0254	.0203	.0254	.0203
6	-	-	-	-	-	.0762	.0889	.0762	.0889	.0762	.0381	.0508	.0381	.0508	.0381
10	-	-	-	-	-	.1143	.1270	.1143	.1270	.1143	.0635	.0762	.0635	.0762	.0635
12	-	-	-	-	-	.1651	.1778	.1651	.1778	.1651	.0762	.0889	.0762	.0889	.0762
20	-	-	-	-	-	.2159	.2286	.2159	.2286	.2159	.0889	.1016	.0889	.1016	.0889
25	-	-	-	-	-	.2540	.2794	.2540	.2794	.2540	.1016	.1143	.1016	.1143	.1016

	Cast Iron (76-121)SMM (m/min)					Steels (60-152) SMM (m/min)					Stainless Steels (39-91) SMM (m/min)				
	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)
Radial Width	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD
3	.0178	.0229	.0178	.0229	.0178	.0178	.0229	.0178	.0229	.0178	.0152	.0203	.0152	.0203	.0152
6	.0356	.0508	.0356	.0508	.0356	.0381	.0508	.0381	.0508	.0381	.0356	.0432	.0356	.0432	.0356
10	.0559	.0660	.0559	.0660	.0559	.0584	.0660	.0584	.0660	.0584	.0559	.0559	.0559	.0559	.0559
12	.0635	.0864	.0635	.0864	.0635	.0660	.0864	.0660	.0864	.0660	.0584	.0737	.0584	.0737	.0584
20	.0711	.1143	.0711	.1143	.0711	.0762	.1143	.0762	.1143	.0762	.0635	.1016	.0635	.1016	.0635
25	.0889	.1270	.0889	.1270	.0889	.1016	.1270	.1016	.1270	.1016	.0762	.1143	.0762	.1143	.0762

			(Nickel Bas 9) SMM (m <sub>/</sub>	sed, Inconel) /min)		Titanium (36-64) SMM (m/min)						
	Slotting	Plunge	Rough	Finish	Pocket	Slotting	Plunge	Rough	Finish	Pocket		
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)		
Radial Width	full	full	(.35)xD	(.010015)	(.35)xD	full	full	(.35)xD	(.010015)	(.35)xD		
3	.0102	.0127	.0102	.0127	.0102	.0102	.0152	.0102	.0152	.0102		
6	.0203	.0229	.0203	.0229	.0203	.0203	.0305	.0203	.0305	.0203		
10	.0279	.0279	.0279	.0279	.0279	.0305	.0406	.0305	.0406	.0305		
12	.0356	.0381	.0356	.0381	.0356	.0406	.0559	.0406	.0559	.0406		
20	.0508	.0533	.0508	.0533	.0508	.0508	.0737	.0508	.0737	.0508		
25	.0584	.0635	.0584	.0635	.0584	.0711	.0889	.0711	.0889	.0711		

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