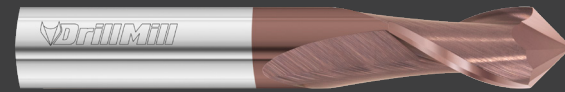


1215 DRILL MILL - IMPERIAL



1215 Series 2-Flute Drill Mill - 90°

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

	Low Si Aluminum (<10%) (1100-1500) SFM (ft/min)					Brass & Copper (400-600) SFM (ft/min)					Cast Iron (250-400) SFM (ft/min)				
	Slotting	Plunge Ramp	Rough Profile	HEM	Finish	Slotting	Plunge Ramp	Rough Profile	HEM	Finish	Slotting	Plunge Ramp	Rough Profile	HEM	Finish
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)
Radial Width	full	full	(.3-.5)xD	(.1-.15)xD	(.010-.015)	full	full	(.3-.5)xD	(.1-.15)xD	(.010-.015)	full	full	(.3-.5)xD	(.1-.15)xD	(.010-.015)
1/8"	.0039	.0051	.0039	.0039	.0051	.0004	.0006	.0004	.0004	.0006	.0004	.0008	.0004	.0004	.0008
1/4"	.0042	.0059	.0042	.0042	.0059	.0008	.0012	.0008	.0008	.0012	.0008	.0020	.0008	.0008	.0020
3/8"	.0046	.0068	.0046	.0046	.0068	.0020	.0025	.0020	.0020	.0025	.0018	.0036	.0018	.0018	.0036
1/2"	.0050	.0077	.0050	.0050	.0077	.0033	.0036	.0033	.0033	.0036	.0025	.0049	.0025	.0025	.0049
3/4"	.0055	.0088	.0055	.0055	.0088	.0045	.0049	.0045	.0045	.0049	.0033	.0060	.0033	.0033	.0060
1"	.0059	.0098	.0059	.0059	.0098	.0059	.0062	.0059	.0059	.0062	.0039	.0071	.0039	.0039	.0071

	Hardened Steels > 48 RC (80-130) SFM (ft/min)					Steels (230-350) SFM (ft/min)					Stainless Steels (130-260) SFM (ft/min)				
	Slotting	Plunge Ramp	Rough Profile	HEM	Finish	Slotting	Plunge Ramp	Rough Profile	HEM	Finish	Slotting	Plunge Ramp	Rough Profile	HEM	Finish
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)
Radial Width	full	full	(.3-.5)xD	(.1-.15)xD	(.010-.015)	full	full	(.3-.5)xD	(.1-.15)xD	(.010-.015)	full	full	(.3-.5)xD	(.1-.15)xD	(.010-.015)
1/8"	.0005	.0009	.0008	.0008	.0009	.0004	.0006	.0004	.0004	.0006	.0002	.0004	.0002	.0002	.0004
1/4"	.0015	.0016	.0015	.0015	.0016	.0012	.0017	.0012	.0012	.0018	.0006	.0008	.0006	.0006	.0008
3/8"	.0020	.0022	.0020	.0020	.0022	.0022	.0030	.0022	.0022	.0030	.0010	.0012	.0010	.0010	.0012
1/2"	.0025	.0025	.0025	.0025	.0025	.0030	.0045	.0030	.0030	.0045	.0014	.0018	.0014	.0014	.0018
3/4"	.0028	.0030	.0028	.0028	.0030	.0039	.0060	.0039	.0039	.0060	.0017	.0024	.0017	.0017	.0024
1"	.0030	.0035	.0030	.0030	.0035	.0047	.0071	.0047	.0047	.0071	.0020	.0031	.0020	.0020	.0031

DRILL MILL USES

Recommended For	Included Angle
Chamfering	Yes
Side Milling	Yes
Drilling	Non-Ferrous Only
Spotting	Limited



CHAMFERING

Use general milling speeds and feeds. Use tool diameter at top of part to determine chip load. (i.e.; if using 1/4" diameter, 90° point and depth is 1/8", calculate the chip load based on 1/8" diameter.) For finer finishes and improved aesthetics, increase SFM and reduce feed rate.



SIDE MILLING

Use general milling speeds and feeds. All the benefits of our 3215 series end mills with additional reduction in machine carousel requirements. Designed for all tool room applications limiting tool changes and increasing productivity.

Contact Engineering at 800.248.8315 or engineering@fullertontool.com

1215 DRILL MILL - METRIC



1215 Series 2-Flute Drill Mill - 90°

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

	Low Si Aluminum (<10%) (335-457) SMM (m/min)					Brass & Copper (121-182) SMM (m/min)					Cast Iron (76-121)SMM (m/min)				
	Slotting	Plunge Ramp	Rough Profile	HEM	Finish	Slotting	Plunge Ramp	Rough Profile	HEM	Finish	Slotting	Plunge Ramp	Rough Profile	HEM	Finish
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)
Radial Width	full	full	(.3-.5)xD	(.1-.15)xD	(.25-.40)	full	full	(.3-.5)xD	(.1-.15)xD	(.25-.40)	full	full	(.3-.5)xD	(.1-.15)xD	(.25-.40)
3	.0991	.1295	.0991	.0991	.1295	.0102	.0152	.0102	.0102	.0152	.0102	.0203	.0102	.0102	.0203
6	.1067	.1499	.1067	.1067	.1499	.0203	.0305	.0203	.0203	.0305	.0203	.0508	.0203	.0203	.0508
10	.1168	.1727	.1168	.1168	.1727	.0508	.0635	.0508	.0508	.0635	.0457	.0914	.0457	.0457	.0914
12	.1270	.1956	.1270	.1270	.1956	.0838	.0914	.0838	.0838	.0914	.0635	.1245	.0635	.0635	.1245
20	.1397	.2235	.1397	.1397	.2235	.1143	.1245	.1143	.1143	.1245	.0838	.1524	.0838	.0838	.1524
25	.1499	.2489	.1499	.1499	.2489	.1499	.1575	.1499	.1499	.1575	.0991	.1803	.0991	.0991	.1803
	Hardened Steels > 48 RC (24-39) SMM (m/min)					Steels (70-106) SMM (m/min)					Stainless Steels (39-85) SMM (m/min)				
	Slotting	Plunge Ramp	Rough Profile	HEM	Finish	Slotting	Plunge Ramp	Rough Profile	HEM	Finish	Slotting	Plunge Ramp	Rough Profile	HEM	Finish
Axial Depth	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)	< (1xD)	< (1xD)	1.5xD	1xD	< (1xD)
Radial Width	full	full	(.3-.5)xD	(.1-.15)xD	(.25-.40)	full	full	(.3-.5)xD	(.1-.15)xD	(.25-.40)	full	full	(.3-.5)xD	(.1-.15)xD	(.25-.40)
3	.0127	.0229	.0203	.0203	.0229	.0102	.0152	.0102	.0102	.0152	.0051	.0102	.0051	.0051	.0102
6	.0381	.0406	.0381	.0381	.0406	.0305	.0432	.0305	.0305	.0457	.0152	.0203	.0152	.0152	.0203
10	.0508	.0559	.0508	.0508	.0559	.0559	.0762	.0559	.0559	.0762	.0254	.0305	.0254	.0254	.0305
12	.0635	.0635	.0635	.0635	.0635	.0762	.1143	.0762	.0762	.1143	.0356	.0457	.0356	.0356	.0457
20	.0711	.0762	.0711	.0711	.0762	.0991	.1524	.0991	.0991	.1524	.0432	.0610	.0432	.0432	.0610
25	.0762	.0889	.0762	.0762	.0889	.1194	.1803	.1194	.1194	.1803	.0508	.0787	.0508	.0508	.0787

DRILL MILL USES

Recommended For	Included Angle
	90°
Chamfering	Yes
Side Milling	Yes
Drilling	Non-Ferrous Only
Spotting	Limited



CHAMFERING

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