M936 POW - R - FEED Application Guide – Speed & Feed (inch)

ISO Code	Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	Feed Rate Per Tooth (IPT)												
						1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4
K	Cast Iron- Gray ASTM-A48 Class 20, 25,30,35 & 40	Peripheral -Rough	1.5 x D	.3 x D	352	.00071	.00107	.0014	.0018	.0021	.0025	.0029	.0036	.0043	.0050	.0057	.0064	.0071
		Peripheral -Finish	3 x D	.015 x D	356	.00069	.00103	.0014	.0017	.0021	.0024	.0028	.0034	.0041	.0048	.0055	.0062	.0069
		Peripheral -HEM	3 x D	.08 x D	361	.00166	.00249	.0033	.0042	.0050	.0058	.0067	.0083	.0100	.0116	.0133	.0150	.0166
		Slotting -Traditional	.625 x D	1 x D	285	.00050	.00075	.0010	.0012	.0015	.0017	.0020	.0025	.0030	.0035	.0040	.0045	.0050
		Rough Facing	.375 x D	.7 x D	387	.00064	.00096	.0013	.0016	.0019	.0022	.0026	.0032	.0038	.0045	.0051	.0058	.0064
		Finish Facing	.020 x D	.7 x D	374	.00063	.00095	.0013	.0016	.0019	.0022	.0025	.0032	.0038	.0044	.0051	.0057	.0063
		Helical Entry	3 x D	18 deg	309	.00040	.00060	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0040
		Straight Line Ramp	.630 x D	11 deg	285	.00046	.00069	.0009	.0011	.0014	.0016	.0018	.0023	.0028	.0032	.0037	.0041	.0046
		Zig Zag Pocket	.625 x D	.625 x D	285	.00050	.00075	.0010	.0012	.0015	.0017	.0020	.0025	.0030	.0035	.0040	.0045	.0050
	Cast Iron- Ductile 15-25 HRc	Peripheral -Rough	1.5 x D	.32 x D	333	.00067	.00100	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Peripheral -Finish	3 x D	.015 x D	333	.00062	.00093	.0012	.0015	.0019	.0022	.0025	.0031	.0037	.0043	.0049	.0056	.0062
		Peripheral -HEM	3 x D	.08 x D	371	.00178	.00267	.0036	.0045	.0053	.0062	.0071	.0089	.0107	.0125	.0143	.0160	.0178
		Slotting -Traditional	.625 x D	1 x D	247	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Rough Facing	.375 x D	.7 x D	366	.00060	.00090	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0054	.0060
		Finish Facing	.020 x D	.7 x D	349	.00057	.00085	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0040	.0045	.0051	.0057
		Helical Entry	3 x D	20 deg	275	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Straight Line Ramp	.63 x D	14 deg	247	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Zig Zag Pocket	.625 x D	.625 x D	247	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
	Cast Iron- Malleable 15-25 HRc	Peripheral -Rough	1.5 x D	.32 x D	333	.00064	.00096	.0013	.0016	.0019	.0022	.0026	.0032	.0038	.0045	.0051	.0058	.0064
		Peripheral -Finish	3 x D	.015 x D	333	.00059	.00089	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Peripheral -HEM	3 x D	.08 x D	371	.00176	.00264	.0035	.0044	.0053	.0062	.0070	.0088	.0105	.0123	.0141	.0158	.0176
		Slotting -Traditional	.625 x D	1 x D	252	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	366	.00058	.00087	.0012	.0014	.0017	.0020	.0023	.0029	.0035	.0040	.0046	.0052	.0058
		Finish Facing	.02 x D	.7 x D	349	.00055	.00082	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Helical Entry	3 x D	20 deg	270	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Straight Line Ramp	.63 x D	14 deg	252	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Zig Zag Pocket	.625 x D	.625 x D	252	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
P	Low Carbon Steel ≤38 HRc 1018, 1020, 12L14, 5120, 8620	Peripheral -Rough	2 x D	.55 x D	361	.00081	.00121	.0016	.0020	.0024	.0028	.0032	.0040	.0048	.0057	.0065	.0073	.0081
		Peripheral -Finish	3 x D	.015 x D	380	.00088	.00132	.0018	.0022	.0026	.0031	.0035	.0044	.0053	.0062	.0070	.0079	.0088
		Peripheral -HEM	3 x D	.09 x D	418	.00154	.00232	.0031	.0039	.0046	.0054	.0062	.0077	.0093	.0108	.0124	.0139	.0154
		Slotting -Traditional	1 x D	1 x D	309	.00059	.00089	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Rough Facing	.375 x D	.7 x D	397	.00073	.00109	.0015	.0018	.0022	.0025	.0029	.0036	.0044	.0051	.0058	.0065	.0073
		Finish Facing	.02 x D	.7 x D	399	.00085	.00128	.0017	.0021	.0026	.0030	.0034	.0043	.0051	.0060	.0068	.0077	.0085
		Helical Entry	3 x D	25 deg	371	.00046	.00069	.0009	.0012	.0014	.0016	.0018	.0023	.0028	.0032	.0037	.0041	.0046
		Straight Line Ramp	1 x D	20 deg	380	.00038	.00056	.0008	.0009	.0011	.0013	.0015	.0019	.0023	.0026	.0030	.0034	.0038
		Zig Zag Pocket	1 x D	.625 x D	309	.00059	.00089	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
	Medium Carbon Steel ≤40 HRc 1045, 4140, 4340, 5140	Peripheral -Rough	2 x D	.55 x D	356	.00076	.00114	.0015	.0019	.0023	.0027	.0030	.0038	.0046	.0053	.0061	.0068	.0076
		Peripheral -Finish	3 x D	.015 x D	356	.00081	.00121	.0016	.0020	.0024	.0028	.0032	.0040	.0048	.0057	.0065	.0073	.0081
		Peripheral -HEM	3 x D	.09 x D	380	.00138	.00207	.0028	.0034	.0041	.0048	.0055	.0069	.0083	.0096	.0110	.0124	.0138
		Slotting -Traditional	1 x D	1 x D	285	.00055	.00082	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Rough Facing	.375 x D	.7 x D	392	.00068	.00103	.0014	.0017	.0021	.0024	.0027	.0034	.0041	.0048	.0055	.0062	.0068
		Finish Facing	.02 x D	.7 x D	374	.00078	.00117	.0016	.0020	.0023	.0027	.0031	.0039	.0047	.0055	.0063	.0070	.0078
		Helical Entry	3 x D	25 deg	356	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0025	.0029	.0033	.0037	.0041
		Straight Line Ramp	1 x D	20 deg	380	.00035	.00052	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0035
		Zig Zag Pocket	1 x D	.625 x D	285	.00055	.00082	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055

M936 POW - R - FEED
Application Guide – Speed & Feed (inch)

ISO Code	Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	Feed Rate Per Tooth (IPT)												
						1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4
P	Tool & Die Steels ≤34 HRc A2, D2, O1, S7, P20, H13	Peripheral -Rough	1.5 x D	.52 x D	333	.00064	.00096	.0013	.0016	.0019	.0022	.0026	.0032	.0038	.0045	.0051	.0058	.0064
		Peripheral -Finish	3 x D	.015 x D	333	.00069	.00103	.0014	.0017	.0021	.0024	.0028	.0034	.0041	.0048	.0055	.0062	.0069
		Peripheral -HEM	3 x D	.08 x D	371	.00114	.00171	.0023	.0029	.0034	.0040	.0046	.0057	.0068	.0080	.0091	.0103	.0114
		Slotting -Traditional	.75 x D	1 x D	261	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Rough Facing	.375 x D	.7 x D	366	.00058	.00087	.0012	.0014	.0017	.0020	.0023	.0029	.0035	.0040	.0046	.0052	.0058
		Finish Facing	.02 x D	.7 x D	349	.00067	.00100	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Helical Entry	3 x D	18 deg	285	.00036	.00054	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0032	.0036
		Straight Line Ramp	.75 x D	18 deg	333	.00030	.00045	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0024	.0027	.0030
		Zig Zag Pocket	.75 x D	.625 x D	261	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
H	Tool & Die Steels 40-48- HRc	Peripheral -Rough	1 x D	.25 x D	290	.00048	.00071	.0010	.0012	.0014	.0017	.0019	.0024	.0029	.0033	.0038	.0043	.0048
		Peripheral -Finish	3 x D	.01 x D	285	.00050	.00075	.0010	.0012	.0015	.0017	.0020	.0025	.0030	.0035	.0040	.0045	.0050
		Peripheral -HEM	3 x D	.05 x D	337	.00132	.00197	.0026	.0033	.0039	.0046	.0053	.0066	.0079	.0092	.0105	.0118	.0132
		Slotting -Traditional	.45 x D	1 x D	238	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Rough Facing	.35 x D	.65 x D	319	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Finish Facing	.02 x D	.65 x D	298	.00045	.00067	.0009	.0011	.0013	.0016	.0018	.0022	.0027	.0031	.0036	.0040	.0045
		Helical Entry	.88 x D	12 deg	238	.00035	.00052	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0035
		Straight Line Ramp	.5 x D	8 deg	257	.00024	.00037	.0005	.0006	.0007	.0009	.0010	.0012	.0015	.0017	.0020	.0022	.0024
		Zig Zag Pocket	.45 x D	.4 x D	238	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
M	Martensitic & Ferritic Stainless Steels 15-29 HRc 410, 416, 440	Peripheral -Rough	2.5 x D	.3 x D	347	.00072	.00108	.0014	.0018	.0022	.0025	.0029	.0036	.0043	.0050	.0058	.0065	.0072
		Peripheral -Finish	3 x D	.015 x D	356	.00081	.00121	.0016	.0020	.0024	.0028	.0032	.0040	.0048	.0057	.0065	.0073	.0081
		Peripheral -HEM	3 x D	.2 x D	380	.00102	.00153	.0020	.0026	.0031	.0036	.0041	.0051	.0061	.0071	.0082	.0092	.0102
		Slotting -Traditional	1 x D	1 x D	261	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	381	.00068	.00103	.0014	.0017	.0021	.0024	.0027	.0034	.0041	.0048	.0055	.0062	.0068
		Finish Facing	.02 x D	.7 x D	374	.00069	.00103	.0014	.0017	.0021	.0024	.0027	.0034	.0041	.0048	.0055	.0062	.0069
		Helical Entry	3 x D	7 deg	314	.00027	.00041	.0005	.0007	.0008	.0010	.0011	.0014	.0016	.0019	.0022	.0025	.0027
		Straight Line Ramp	.75 x D	5 deg	261	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
		Zig Zag Pocket	1 x D	.625 x D	261	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	Austenitic Stainless Steels 15-29 HRc FeNi Alloys 303, 304, 316, Invar, Kovar	Peripheral -Rough	2 x D	.3 x D	365	.00083	.00125	.0017	.0021	.0025	.0029	.0033	.0042	.0050	.0058	.0067	.0075	.0083
		Peripheral -Finish	3 x D	.015 x D	333	.00074	.00110	.0015	.0018	.0022	.0026	.0029	.0037	.0044	.0052	.0059	.0066	.0074
		Peripheral -HEM	3 x D	.2 x D	375	.00100	.00150	.0020	.0025	.0030	.0035	.0040	.0050	.0060	.0070	.0080	.0090	.0100
		Slotting -Traditional	1.25 x D	1 x D	261	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	381	.00075	.00112	.0015	.0019	.0022	.0026	.0030	.0037	.0045	.0052	.0060	.0067	.0075
		Finish Facing	.02 x D	.7 x D	349	.00064	.00097	.0013	.0016	.0019	.0023	.0026	.0032	.0039	.0045	.0052	.0058	.0064
		Helical Entry	3 x D	7 deg	308	.00026	.00039	.0005	.0007	.0008	.0009	.0010	.0013	.0016	.0018	.0021	.0023	.0026
		Straight Line Ramp	.75 x D	5 deg	270	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
		Zig Zag Pocket	1.25 x D	.625 x D	261	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	Precipitation Hardening Stainless Steel 15-38 HRc 17-4, 15-5, 13-8	Peripheral -Rough	2 x D	.28 x D	351	.00067	.00101	.0013	.0017	.0020	.0023	.0027	.0034	.0040	.0047	.0054	.0060	.0067
		Peripheral -Finish	3 x D	.015 x D	309	.00062	.00093	.0012	.0015	.0019	.0022	.0025	.0031	.0037	.0043	.0049	.0056	.0062
		Peripheral -HEM	3 x D	.2 x D	347	.00083	.00125	.0017	.0021	.0025	.0029	.0033	.0042	.0050	.0058	.0067	.0075	.0083
		Slotting -Traditional	.75 x D	1 x D	238	.00040	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0040
		Rough Facing	.375 x D	.7 x D	376	.00062	.00093	.0012	.0015	.0019	.0022	.0025	.0031	.0037	.0043	.0050	.0056	.0062
		Finish Facing	.02 x D	.7 x D	324	.00054	.00081	.0011	.0014	.0016	.0019	.0022	.0027	.0032	.0038	.0043	.0049	.0054
		Helical Entry	3 x D	7 deg	285	.00025	.00037	.0005	.0006	.0007	.0009	.0010	.0012	.0015	.0017	.0020	.0022	.0025
		Straight Line Ramp	.63 x D	5 deg	243	.00035	.00053	.0007	.0009	.0011	.0012	.0014	.0018	.0021	.0025	.0028	.0032	.0035
		Zig Zag Pocket	.75 x D	.625 x D	238	.00040	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0040

M936 POW - R - FEED Application Guide – Speed & Feed (inch)

ISO Code	Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	Feed Rate Per Tooth (IPT)												
						1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4
S	Titanium Alloys 6AL-4V, 6-2-4 18-31 HRc	Peripheral -Rough	2 x D	.3 x D	261	.00059	.00089	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Peripheral -Finish	3 x D	.015 x D	285	.00059	.00089	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Peripheral -HEM	3 x D	.25 x D	390	.00095	.00143	.0019	.0024	.0029	.0033	.0038	.0048	.0057	.0067	.0076	.0086	.0095
		Slotting -Traditional	1 x D	1 x D	238	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	287	.00053	.00080	.0011	.0013	.0016	.0019	.0021	.0027	.0032	.0037	.0043	.0048	.0053
		Finish Facing	.02 x D	.7 x D	314	.00053	.00080	.0011	.0013	.0016	.0019	.0021	.0027	.0032	.0037	.0043	.0048	.0053
		Helical Entry	3 x D	20 deg	380	.00033	.00050	.0007	.0008	.0010	.0012	.0013	.0017	.0020	.0023	.0026	.0030	.0033
		Straight Line Ramp	1 x D	25 deg.	380	.00037	.00056	.0007	.0009	.0011	.0013	.0015	.0019	.0022	.0026	.0030	.0033	.0037
		Zig Zag Pocket	1 x D	.625 x D	238	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	Difficult to machine Titanium Alloys 10-2-3 18-31 HRc	Peripheral -Rough	1.5 x D	.25 x D	233	.00048	.00071	.0010	.0012	.0014	.0017	.0019	.0024	.0029	.0033	.0038	.0043	.0048
		Peripheral -Finish	3 x D	.01 x D	238	.00050	.00075	.0010	.0012	.0015	.0017	.0020	.0025	.0030	.0035	.0040	.0045	.0050
		Peripheral -HEM	3 x D	.12 x D	328	.00076	.00114	.0015	.0019	.0023	.0027	.0030	.0038	.0046	.0053	.0061	.0068	.0076
		Slotting -Traditional	.75 x D	1 x D	214	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
		Rough Facing	.3 x D	.7 x D	256	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Finish Facing	.02 x D	.7 x D	261	.00046	.00069	.0009	.0011	.0014	.0016	.0018	.0023	.0028	.0032	.0037	.0041	.0046
		Helical Entry	3 x D	20 deg	324	.00029	.00044	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0024	.0026	.0029
		Straight Line Ramp	.63 x D	22 deg.	214	.00036	.00055	.0007	.0009	.0011	.0013	.0015	.0018	.0022	.0025	.0029	.0033	.0036
		Zig Zag Pocket	.75 x D	.625 x D	214	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
	Nickel Based Super Alloys Hastalloy, Waspalloy 15-30 HRc	Peripheral -Rough	1.25 x D	.25 x D	86	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
		Peripheral -Finish	3 x D	.01 x D	190	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Peripheral -HEM	2 x D	.075 x D	105	.00143	.00214	.0029	.0036	.0043	.0050	.0057	.0071	.0086	.0100	.0114	.0128	.0143
		Slotting -Traditional	.25 x D	1 x D	57	.00032	.00048	.0006	.0008	.0010	.0011	.0013	.0016	.0019	.0022	.0026	.0029	.0032
		Rough Facing	.3 x D	.7 x D	94	.00034	.00051	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0027	.0031	.0034
		Finish Facing	.02 x D	.7 x D	199	.00037	.00056	.0007	.0009	.0011	.0013	.0015	.0019	.0022	.0026	.0030	.0034	.0037
		Helical Entry	2 x D	12 deg	114	.00045	.00067	.0009	.0011	.0013	.0016	.0018	.0022	.0027	.0031	.0036	.0040	.0045
		Straight Line Ramp	.5 x D	3 deg	54	.00029	.00044	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0023	.0026	.0029
		Zig Zag Pocket	.25 x D	.55 x D	57	.00032	.00048	.0006	.0008	.0010	.0011	.0013	.0016	.0019	.0022	.0026	.0029	.0032
	Nickel Chromium based Super Alloys Inconel 718, Rene 88 10-25 HRc	Peripheral -Rough	1.25 x D	.25 x D	71	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
		Peripheral -Finish	3 x D	.01 x D	86	.00078	.00118	.0016	.0020	.0024	.0027	.0031	.0039	.0047	.0055	.0063	.0071	.0078
		Peripheral -HEM	2 x D	.08 x D	86	.00185	.00278	.0037	.0046	.0056	.0065	.0074	.0093	.0111	.0130	.0148	.0167	.0185
		Slotting -Traditional	.25 x D	1 x D	48	.00029	.00043	.0006	.0007	.0009	.0010	.0011	.0014	.0017	.0020	.0023	.0026	.0029
		Rough Facing	.28 x D	.7 x D	78	.00034	.00051	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0027	.0031	.0034
		Finish Facing	.02 x D	.65 x D	94	.00067	.00100	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Helical Entry	2 x D	12 deg	119	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Straight Line Ramp	.37 x D	3 deg	50	.00029	.00043	.0006	.0007	.0009	.0010	.0011	.0014	.0017	.0020	.0023	.0026	.0029
		Zig Zag Pocket	.25 x D	.5 x D	48	.00029	.00043	.0006	.0007	.0009	.0010	.0011	.0014	.0017	.0020	.0023	.0026	.0029
N	Aluminum Alloys O-T6 2024, 6061, 7075	Peripheral -Rough	2 x D	.28 x D	351	.00067	.00101	.0013	.0017	.0020	.0023	.0027	.0034	.0040	.0047	.0054	.0060	.0067
		Peripheral -Finish	3 x D	.015 x D	309	.00062	.00093	.0012	.0015	.0019	.0022	.0025	.0031	.0037	.0043	.0049	.0056	.0062
		Peripheral -HEM	3 x D	.2 x D	347	.00083	.00125	.0017	.0021	.0025	.0029	.0033	.0042	.0050	.0058	.0067	.0075	.0083
		Slotting -Traditional	.75 x D	1 x D	238	.00040	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0040
		Rough Facing	.375 x D	.7 x D	376	.00062	.00093	.0012	.0015	.0019	.0022	.0025	.0031	.0037	.0043	.0050	.0056	.0062
		Finish Facing	.02 x D	.7 x D	324	.00054	.00081	.0011	.0014	.0016	.0019	.0022	.0027	.0032	.0038	.0043	.0049	.0054
		Helical Entry	3 x D	7 deg	285	.00025	.00037	.0005	.0006	.0007	.0009	.0010	.0012	.0015	.0017	.0020	.0022	.0025
		Straight Line Ramp	.63 x D	5 deg	243	.00035	.00053	.0007	.0009	.0011	.0012	.0014	.0018	.0021	.0025	.0028	.0032	.0035
		Zig Zag Pocket	.75 x D	.625 x D	238	.00040	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0040

M936 POW - R - FEED Application Guide – Speed & Feed (inch)

ISO Code	Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	Feed Rate Per Tooth (IPT)												
						1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4
N	High Silicon Aluminum Alloys A380, A390 45-75 Bhn	Peripheral -Rough	2.25 x D	.55 x D	495	.00150	.00225	.0030	.0038	.0045	.0053	.0060	.0075	.0090	.0105	.0120	.0135	.0150
		Peripheral -Finish	3 x D	.02 x D	725	.00063	.00094	.0013	.0016	.0019	.0022	.0025	.0031	.0038	.0044	.0050	.0056	.0063
		Peripheral -HEM	3 x D	.25 x D	600	.00163	.00244	.0033	.0041	.0049	.0057	.0065	.0081	.0098	.0114	.0130	.0146	.0163
		Slotting -Traditional	1 x D	1 x D	347	.00074	.00110	.0015	.0018	.0022	.0026	.0029	.0037	.0044	.0052	.0059	.0066	.0074
		Rough Facing	.375 x D	.7 x D	545	.00124	.00186	.0025	.0031	.0037	.0043	.0049	.0062	.0074	.0087	.0099	.0111	.0124
		Finish Facing	.02 x D	.7 x D	758	.00050	.00076	.0010	.0013	.0015	.0018	.0020	.0025	.0030	.0035	.0040	.0045	.0050
		Helical Entry	3 x D	10 deg	486	.00061	.00092	.0012	.0015	.0018	.0021	.0024	.0031	.0037	.0043	.0049	.0055	.0061
		Straight Line Ramp	.5 x D	10 deg	394	.00061	.00092	.0012	.0015	.0018	.0021	.0024	.0031	.0037	.0043	.0049	.0055	.0061
		Zig Zag Pocket	1 x D	.45 x D	365	.00078	.00116	.0016	.0019	.0023	.0027	.0031	.0039	.0047	.0054	.0062	.0070	.0078
	Magnesium Alloys 47-140 Bhn	Peripheral -Rough	2.25 x D	.6 x D	500	.00175	.00263	.0035	.0044	.0053	.0061	.0070	.0088	.0105	.0123	.0140	.0158	.0175
		Peripheral -Finish	3 x D	.02 x D	750	.00063	.00094	.0013	.0016	.0019	.0022	.0025	.0031	.0038	.0044	.0050	.0056	.0063
		Peripheral -HEM	3 x D	.25 x D	665	.00166	.00249	.0033	.0042	.0050	.0058	.0067	.0083	.0100	.0116	.0133	.0150	.0166
		Slotting -Traditional	1 x D	1 x D	375	.00080	.00120	.0016	.0020	.0024	.0028	.0032	.0040	.0048	.0056	.0064	.0072	.0080
		Rough Facing	.375 x D	.7 x D	550	.00144	.00216	.0029	.0036	.0043	.0051	.0058	.0072	.0087	.0101	.0115	.0130	.0144
		Finish Facing	.02 x D	.7 x D	784	.00050	.00076	.0010	.0013	.0015	.0018	.0020	.0025	.0030	.0035	.0040	.0045	.0050
		Helical Entry	3 x D	10 deg	500	.00063	.00095	.0013	.0016	.0019	.0022	.0025	.0032	.0038	.0044	.0051	.0057	.0063
		Straight Line Ramp	.5 x D	10 deg	488	.00062	.00094	.0012	.0016	.0019	.0022	.0025	.0031	.0037	.0044	.0050	.0056	.0062
		Zig Zag Pocket	1 x D	.45 x D	375	.00080	.00120	.0016	.0020	.0024	.0028	.0032	.0040	.0048	.0056	.0064	.0072	.0080
	Copper, Brass 111-170 Bhn	Peripheral -Rough	2 x D	.3 x D	361	.00059	.00089	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Peripheral -Finish	3 x D	.015 x D	366	.00055	.00082	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Peripheral -HEM	2.25 x D	.1 x D	380	.00107	.00160	.0021	.0027	.0032	.0037	.0043	.0053	.0064	.0075	.0086	.0096	.0107
		Slotting -Traditional	.75 x D	1 x D	276	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	418	.00049	.00073	.0010	.0012	.0015	.0017	.0019	.0024	.0029	.0034	.0039	.0044	.0049
		Finish Facing	.02 x D	.7 x D	402	.00046	.00070	.0009	.0012	.0014	.0016	.0019	.0023	.0028	.0033	.0037	.0042	.0046
		Helical Entry	3 x D	12 deg	304	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Straight Line Ramp	1 x D	20 deg	300	.00044	.00066	.0009	.0011	.0013	.0015	.0018	.0022	.0026	.0031	.0035	.0039	.0044
		Zig Zag Pocket	.75 x D	.625 x D	290	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
	Bronze 111-201 Bhn	Peripheral -Rough	2 x D	.3 x D	356	.00057	.00086	.0011	.0014	.0017	.0020	.0023	.0029	.0034	.0040	.0046	.0051	.0057
		Peripheral -Finish	3 x D	.015 x D	361	.00055	.00082	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Peripheral -HEM	2.25 x D	.1 x D	390	.00113	.00169	.0023	.0028	.0034	.0039	.0045	.0056	.0068	.0079	.0090	.0101	.0113
		Slotting -Traditional	.75 x D	1 x D	266	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	413	.00047	.00070	.0009	.0012	.0014	.0016	.0019	.0023	.0028	.0033	.0037	.0042	.0047
		Finish Facing	.02 x D	.7 x D	397	.00046	.00070	.0009	.0012	.0014	.0016	.0019	.0023	.0028	.0033	.0037	.0042	.0046
		Helical Entry	3 x D	12 deg	315	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Straight Line Ramp	1 x D	20 deg	295	.00044	.00066	.0009	.0011	.0013	.0015	.0018	.0022	.0026	.0031	.0035	.0039	.0044
		Zig Zag Pocket	.75 x D	.625 x D	280	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
	Composites, Plastics, Fiberglass	Peripheral -Rough	1.5 x D	.5 x D	428	.00071	.00107	.0014	.0018	.0021	.0025	.0029	.0036	.0043	.0050	.0057	.0064	.0071
		Peripheral -Finish	3 x D	.015 x D	447	.00069	.00103	.0014	.0017	.0021	.0024	.0028	.0034	.0041	.0048	.0055	.0062	.0069
		Peripheral -HEM	2.25 x D	.12 x D	475	.00119	.00178	.0024	.0030	.0036	.0042	.0048	.0059	.0071	.0083	.0095	.0107	.0119
		Slotting -Traditional	1 x D	1 x D	380	.00067	.00100	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Rough Facing	.375 x D	.7 x D	495	.00058	.00087	.0012	.0015	.0017	.0020	.0023	.0029	.0035	.0041	.0047	.0052	.0058
		Finish Facing	.02 x D	.7 x D	491	.00059	.00088	.0012	.0015	.0018	.0020	.0023	.0029	.0035	.0041	.0047	.0053	.0059
		Helical Entry	3 x D	20 deg	400	.00067	.00100	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Straight Line Ramp	1 x D	25 deg.	400	.00063	.00095	.0013	.0016	.0019	.0022	.0025	.0032	.0038	.0044	.0051	.0057	.0063
		Zig Zag Pocket	1 x D	.625 x D	400	.00070	.00105	.0014	.0018	.0021	.0025	.0028	.0035	.0042	.0049	.0056	.0063	.0070