ISO			Axial	Radial	Speed	Feed Ra	te Per Too	oth (IPT)										
Code	Work Material	Type of Cut	DOC	DOC	(SFM)	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8		1-1/8	1-1/4
		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
	1a] Cast Iron- Gray	Slotting -Traditional	.625 x D	1 x D	285	.00050	.00075	.0010	.0012	.0015	.0017	.0020	.0025	.0030	.0035	.0040	.0045	.0050
	ASTM-A48	Rough Facing	.375 x D	.7 x D	387	.00064	.00096	.0013	.0016	.0019	.0022	.0026	.0032	.0038	.0045	.0051	.0058	.0064
	Class 20, 25,30,35 & 40	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
		Peripheral -Rough	1.5 x D	.25 x D	333	.00068	.00101	.0014	.0017	.0020	.0024	.0027	.0034	.0041	.0047	.0054	.0061	.0068
		Peripheral -Finish	3 x D	.01 x D	338	.00065	.00098	.0013	.0016	.0020	.0023	.0026	.0033	.0039	.0046	.0052	.0059	.0065
		Peripheral -HEM	3 x D	.07 x D	342	.00158	.00236	.0032	.0039	.0047	.0055	.0063	.0079	.0095	.0110	.0126	.0142	.0158
	1b] Cast Iron- Gray	Slotting -Traditional	.5 x D	1 x D	270	.00047	.00071	.0009	.0012	.0014	.0017	.0019	.0024	.0028	.0033	.0038	.0043	.0047
	ASTM-A48 26-48 HRc Class 20, 25,30,35 & 40	Rough Facing	.35 x D	.65 x D	354	.00061	.00091	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0043	.0049	.0055	.0061
		Finish Facing	.020 x D	.65 x D	354	.00057	.00086	.0011	.0014	.0017	.0020	.0023	.0029	.0034	.0040	.0046	.0051	.0057
		Helical Entry Straight Line Ramp	2 x D	12 deg	292 270	.00037	.00055	.0007	.0009	.0011	.0013	.0015	.0018	.0022	.0026	.0029	.0033	.0037
		Zig Zag Pocket	.5 x D	10 deg .55 x D	270	.00046	.00069	.0009	.0011	.0014	.0016	.0018	.0023	.0028	.0032	.0037	.0041	.0046
		Peripheral -Rough	1.5 x D	.32 x D	333	.00047	.00071	.0009	.0012	.0014	.0017	.0019	.0024	.0028	.0033	.0058	.0043	.0047
		Peripheral -Finish	3 x D	.015 x D	333	.00062	.00093	.0013	.0017	.0019	.0023	.0027	.0033	.0040	.0047	.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
K	2a] Cast Iron- Ductile	Rough Facing	.375 x D	.7 x D	366	.00060	.00090	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0054	.0060
	15-25 HRc	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
		Peripheral -Rough	1.5 x D	.3 x D	315	.00063	.00095	.0013	.0016	.0019	.0022	.0025	.0032	.0038	.0044	.0050	.0057	.0063
		Peripheral -Finish	3 x D	.01 x D	315	.00061	.00091	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0043	.0049	.0055	.0061
		Peripheral -HEM	3 x D	.07 x D	351	.00169	.00253	.0034	.0042	.0051	.0059	.0068	.0084	.0101	.0118	.0135	.0152	.0169
	2h1 Cost Ivon Dustile	Slotting -Traditional	.5 x D	1 x D	234	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	2b] Cast Iron- Ductile 26-48 HRc	Rough Facing	.35 x D	.65 x D	347	.00057	.00085	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0040	.0045	.0051	.0057
		Finish Facing	.02 x D	.65 x D	331	.00051	.00077	.0010	.0013	.0015	.0018	.0020	.0026	.0031	.0036	.0041	.0046	.0051
		Helical Entry	3 x D	18 deg	260	.00042	.00062	.0008	.0010	.0012	.0015	.0017	.0021	.0025	.0029	.0033	.0037	.0042
		Straight Line Ramp	.5 x D	13 deg	234	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Zig Zag Pocket	.5 x D	.55 x D	234	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		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
	3a] Cast Iron- Malleable	Slotting -Traditional Rough Facing	.625 x D	1 x D	252	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	15-25 HRc	Finish Facing	.02 x D	.7 x D	366 349	.00058	.00087	.0012	.0014	.0017	.0020	.0023	.0029	.0033	.0040	.0046	.0052	.0058
		Helical Entry	3 x D	20 deg	270	.00033	.00062	.0009	.0014	.0018	.0019	.0022	.0027	.0033	.0030	.0044	.0049	.0033
		Straight Line Ramp	.63 x D	14 deg	252	.00043	.00061	.0008	.0010	.0013	.0013	.0017	.0021	.0024	.0028	.0034	.0036	.0043
		Zig Zag Pocket	.625 x D	.625 x D	252	.00041	.00064	.0009	.0010	.0012	.0014	.0017	.0020	.0024	.0030	.0032	.0038	.0041
		Lig Lug i Ocket	.023 x D	.023 X D	232	.000-13	.0000-	.0007	.0011	.0013	.0013	.0017	.0021	.0020	.0050	.0054	.0030	.00.13

M936 POW-R-FEED

ISO Work Material Type of Cut																		
	Work Material	Type of Cut								3/8	7/16	1/2	5/8	3/4	7/8		1-1/8	1-1/4
		Peripheral -Rough	1.5 x D	.3 x D	315	.00061	.00091	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0043	.0049	.0055	.0061
		Peripheral -Finish	3 x D	.01 x D	315	.00059	.00088	.0012	.0015	.0018	.0020	.0023	.0029	.0035	.0041	.0047	.0053	.0059
		Peripheral -HEM	3 x D	.07 x D	351	.00167	.00250	.0033	.0042	.0050	.0058	.0067	.0083	.0100	.0117	.0133	.0150	.0167
		Slotting -Traditional	.5 x D	1 x D	239	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
K	3b] Cast Iron- Malleable	Rough Facing	.35 x D	.65 x D	347	.00055	.00082	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
	26-48 HRc	Finish Facing	.02 x D	.65 x D	331	.00049	.00074	.0010	.0012	.0015	.0017	.0020	.0025	.0030	.0034	.0039	.0044	.0049
		Helical Entry	3 x D	18 deg	256	.00039	.00059	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0035	.0039
		Straight Line Ramp	.5 x D	13 deg	239	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Zig Zag Pocket	.5 x D	.55 x D	239	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		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
	1a] Low Carbon Steel	Slotting -Traditional	1 x D	1 x D	309	.00059	.00089	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
	≤38 HRc	Rough Facing	.375 x D	.7 x D	397	.00073	.00109	.0015	.0018	.0022	.0025	.0029	.0036	.0044	.0051	.0058	.0065	.0073
	1018, 1020, 12L14, 5120, 8620	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
		Peripheral -Rough	1.5 x D	.52 x D	342	.00077	.00115	.0015	.0019	.0023	.0027	.0031	.0038	.0046	.0054	.0061	.0069	.0077
		Peripheral -Finish	3 x D	.012 x D	360	.00083	.00125	.0017	.0021	.0025	.0029	.0033	.0042	.0050	.0058	.0067	.0075	.0083
		Peripheral -HEM	3 x D	.07 x D	396	.00146	.00219	.0029	.0037	.0044	.0051	.0059	.0073	.0088	.0102	.0117	.0132	.0146
	1b] Low Carbon Steel	Slotting -Traditional	.75 x D	1 x D	293	.00056	.00084	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
	39-53 HRc	Rough Facing	.35 x D	.65 x D	376	.00069	.00103	.0014	.0017	.0021	.0024	.0028	.0034	.0041	.0048	.0055	.0062	.0069
	1018, 1020, 12L14, 5120, 8620	Finish Facing	.02 x D	.65 x D	378	.00077	.00115	.0015	.0019	.0023	.0027	.0031	.0038	.0046	.0054	.0062	.0069	.0077
		Helical Entry	3 x D	20 deg	350	.00042	.00064	.0008	.0011	.0013	.0015	.0017	.0021	.0025	.0030	.0034	.0038	.0042
		Straight Line Ramp	.75 x D	18 deg	360	.00038	.00056	.0008	.0009	.0011	.0013	.0015	.0019	.0023	.0026	.0030	.0034	.0038
_		Zig Zag Pocket	.75 x D	.55 x D	293	.00056	.00084	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
P		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
	2al Madium Carbon	Slotting -Traditional	1 x D	1 x D	285	.00055	.00082	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
	2a] Medium Carbon Steel ≤40 HRc	Rough Facing	.375 x D	.7 x D	392	.00068	.00103	.0014	.0017	.0021	.0024	.0027	.0034	.0041	.0048	.0055	.0062	.0068
	1045, 4140, 4340, 5140	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
		Peripheral -Rough	1.5 x D	.52 x D	338	.00072	.00108	.0014	.0018	.0022	.0025	.0029	.0036	.0043	.0050	.0058	.0065	.0072
		Peripheral -Finish	3 x D	.012 x D	338	.00077	.00115	.0015	.0019	.0023	.0027	.0031	.0038	.0046	.0054	.0061	.0069	.0077
		Peripheral -HEM	3 x D	.07 x D	315	.00131	.00196	.0026	.0033	.0039	.0046	.0052	.0065	.0078	.0091	.0104	.0117	.0131
	2b] Medium Carbon	Slotting -Traditional	.75 x D	1 x D	270	.00052	.00078	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0036	.0041	.0047	.0052
	Steel 41-48 HRc	Rough Facing	.35 x D	.65 x D	371	.00065	.00097	.0013	.0016	.0019	.0023	.0026	.0032	.0039	.0045	.0052	.0058	.0065
	1045, 4140, 4340, 5140	Finish Facing	.02 x D	.65 x D	354	.00071	.00106	.0014	.0018	.0021	.0025	.0028	.0035	.0042	.0049	.0057	.0064	.0071
		Helical Entry	3 x D	20 deg	338	.00038	.00057	.0008	.0009	.0011	.0013	.0015	.0019	.0023	.0026	.0030	.0034	.0038
		Straight Line Ramp	.75 x D	18 deg	351	.00035	.00052	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0035
		Zig Zag Pocket	.75 x D	.55 x D	270	.00052	.00078	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0036	.0041	.0047	.0052

M936 POW-R-FEED

ISO			Avial	Dadial	Speed	Feed Ra	te Per To	oth (IPT										
ISO Code	Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8		1-1/8	1-1/4
		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
	3a] Tool & Die Steels ≤34 HRc	Rough Facing	.375 x D	.7 x D	366	.00058	.00087	.0012	.0014	.0017	.0020	.0023	.0029	.0035	.0040	.0046	.0052	.0058
	A2, D2, O1, S7, P20, H13	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
Р		Peripheral -Rough	1.25 x D	.4 x D	315	.00060	.00089	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0054	.0060
		Peripheral -Finish	3 x D	.012 x D	315	.00065	.00098	.0013	.0016	.0020	.0023	.0026	.0033	.0039	.0046	.0052	.0059	.0065
		Peripheral -HEM	3 x D	.07 x D	347	.00108	.00162	.0022	.0027	.0032	.0038	.0043	.0054	.0065	.0076	.0086	.0097	.0108
		Slotting -Traditional	.625 x D	1 x D	248	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	3b] Tool & Die Steels 35-42 HRc	Rough Facing	.35 x D	.65 x D	347	.00055	.00082	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
	A2, D2, O1, S7, P20, H13	Finish Facing	.02 x D	.65 x D	331	.00060	.00090	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0054	.0060
		Helical Entry	2 x D	12 deg	270	.00033	.00050	.0007	.0008	.0010	.0012	.0013	.0017	.0020	.0023	.0027	.0030	.0033
		Straight Line Ramp	.63 x D	16 deg	285	.00030	.00045	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0024	.0027	.0030
		Zig Zag Pocket	.625 x D	.55 x D	248	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		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
	1a] Tool & Die Steels	Rough Facing	.35 x D	.65 x D	319	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
	40-48- HRc	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
		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
	1a] Martensitic & Ferrit-	Slotting -Traditional	1 x D	1 x D	261	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	ic Stainless Steels	Rough Facing	.375 x D	.7 x D	381	.00068	.00103	.0014	.0017	.0021	.0024	.0027	.0034	.0041	.0048	.0055	.0062	.0068
	15-29 HRc 410, 416, 440	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
M		Peripheral -Rough	2.25 x D	.25 x D	329	.00072	.00108	.0014	.0018	.0022	.0025	.0029	.0036	.0043	.0050	.0058	.0065	.0072
		Peripheral -Finish	3 x D	.012 x D	338	.00077	.00115	.0015	.0019	.0023	.0027	.0031	.0038	.0046	.0054	.0061	.0069	.0077
		Peripheral -HEM	3 x D	.2 x D	360	.00097	.00145	.0019	.0024	.0029	.0034	.0039	.0048	.0058	.0068	.0077	.0087	.0097
	1b] Martensitic & Ferrit-	Slotting -Traditional	.75 x D	1 x D	248	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	ic Stainless Steels 30-48 HRc	Rough Facing	.35 x D	.65 x D	361	.00065	.00097	.0013	.0016	.0019	.0023	.0026	.0032	.0039	.0045	.0052	.0058	.0065
	410, 416, 440	Finish Facing	.02 x D	.65 x D	345	.00063	.00095	.0013	.0016	.0019	.0022	.0025	.0032	.0038	.0044	.0051	.0057	.0063
		Helical Entry	3 x D	7 deg	297	.00024	.00035	.0005	.0006	.0007	.0008	.0009	.0012	.0014	.0017	.0019	.0021	.0024
		Straight Line Ramp	.63 x D	4 deg	248	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
		Zig Zag Pocket	.75 x D	.55 x D	248	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041

ISO			Avial	Radial	Spood	Feed Ra	te Per To	oth (IPT)										
Code	Work Material	Type of Cut	Axial DOC	DOC	Speed (SFM)	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8		1-1/8	1-1/4
		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
	2a] Austenitic Stainless	Slotting -Traditional	1.25 x D	1 x D	261	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	Steels 15-29 HRc FeNi Alloys	Rough Facing	.375 x D	.7 x D	381	.00075	.00112	.0015	.0019	.0022	.0026	.0030	.0037	.0045	.0052	.0060	.0067	.0075
	303, 304, 316, Invar, Kovar	Finish Facing	.02 x D	.7 x D	349	.00064	.00097	.0013	.0016	.0019	.0023	.0026	.0032	.0039	.0045	.0052	.0058	.0064
	Novai	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
		Peripheral -Rough	2 x D	.25 x D	356	.00074	.00112	.0015	.0019	.0022	.0026	.0030	.0037	.0045	.0052	.0060	.0067	.0074
		Peripheral -Finish	3 x D	.012 x D	315	.00070	.00105	.0014	.0017	.0021	.0024	.0028	.0035	.0042	.0049	.0056	.0063	.0070
		Peripheral -HEM	3 x D	.2 x D	356	.00095	.00142	.0019	.0024	.0028	.0033	.0038	.0047	.0057	.0066	.0076	.0085	.0095
	2b] Austenitic Stainless Steels 30-48 HRc	Slotting -Traditional	.75 x D	1 x D	248	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	FeNi Alloys	Rough Facing	.35 x D	.65 x D	361	.00071	.00106	.0014	.0018	.0021	.0025	.0028	.0035	.0043	.0050	.0057	.0064	.0071
	303, 304, 316,Invar, Kovar	Finish Facing	.02 x D	.65 x D	331	.00058	.00086	.0012	.0014	.0017	.0020	.0023	.0029	.0035	.0040	.0046	.0052	.0058
		Helical Entry	3 x D	7 deg	292	.00024	.00036	.0005	.0006	.0007	.0008	.0010	.0012	.0014	.0017	.0019	.0022	.0024
		Straight Line Ramp	.63 x D	4 deg	248	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
M		Zig Zag Pocket	.75 x D	.55 x D	248	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		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
	3a] Precipitation Hard-	Slotting -Traditional	.75 x D	1 x D	238	.00040	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0040
	ening Stainless Steel 15-38 HRc	Rough Facing	.375 x D	.7 x D	376	.00062	.00093	.0012	.0015	.0019	.0022	.0025	.0031	.0037	.0043	.0050	.0056	.0062
	17-4, 15-5, 13-8	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
		Peripheral -Rough	2 x D	.28 x D	337	.00061	.00092	.0012	.0015	.0018	.0021	.0025	.0031	.0037	.0043	.0049	.0055	.0061
		Peripheral -Finish	3 x D	.012 x D	293	.00059	.00088	.0012	.0015	.0018	.0020	.0023	.0029	.0035	.0041	.0047	.0053	.0059
		Peripheral -HEM	3 x D	.18 x D	329	.00079	.00118	.0016	.0020	.0024	.0028	.0032	.0039	.0047	.0055	.0063	.0071	.0079
	3b] Precipitation Hard- ening Stainless Steel	Slotting -Traditional	.625 x D	1 x D	225	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
	39-47 HRc	Rough Facing	.35 x D	.65 x D	356	.00057	.00085	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0040	.0045	.0051	.0057
	17-4, 15-5, 13-8	Finish Facing	.02 x D	.65 x D	316	.00051	.00077	.0010	.0013	.0015	.0018	.0020	.0026	.0031	.0036	.0041	.0046	.0051
		Helical Entry	3 x D	6 deg	270	.00023	.00034	.0005	.0006	.0007	.0008	.0009	.0011	.0014	.0016	.0018	.0021	.0023
		Straight Line Ramp Zig Zag Pocket	.5 x D	4 deg .55 x D	225 225	.00036	.00054	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0033	.0036
		Peripheral -Rough	2 x D	.3 x D	261	.00059	.00037	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0054	.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	.0012	.0013	.0029	.0033	.0038	.0048	.0057	.0042	.0076	.0033	.0095
		Slotting -Traditional	1 x D	1 x D	238	.00093	.00064	.0009	.0024	.0023	.0033	.0038	.0021	.0026	.0030	.0034	.0038	.0043
S	1a] Titanium Alloys 6AL-4V, 6-2-4	Rough Facing	.375 x D	.7 x D	287	.00053	.00080	.0011	.0013	.0016	.0019	.0021	.0027	.0032	.0037	.0043	.0048	.0053
	18-31 HRc	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

ISO Avial Radial Speed Feed Rate Per Tooth (IPT)																		
ISO Code	Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	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
		Peripheral -Rough	1.5 x D	.25 x D	248	.00056	.00084	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
		Peripheral -Finish	3 x D	.012 x D	270	.00056	.00084	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
		Peripheral -HEM	3 x D	.2 x D	365	.00090	.00135	.0018	.0023	.0027	.0032	.0036	.0045	.0054	.0063	.0072	.0081	.0090
		Slotting -Traditional	.75 x D	1 x D	225	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	1b] Titanium Alloys 6AL-4V, 6-2-4	Rough Facing	.35 x D	.65 x D	272	.00051	.00076	.0010	.0013	.0015	.0018	.0020	.0025	.0030	.0035	.0041	.0046	.0051
	32-46 HRc	Finish Facing	.02 x D	.65 x D	290	.00049	.00074	.0010	.0012	.0015	.0017	.0020	.0025	.0029	.0034	.0039	.0044	.0049
		Helical Entry	3 x D	18 deg	360	.00033	.00050	.0007	.0008	.0010	.0012	.0013	.0017	.0020	.0023	.0026	.0030	.0033
		Straight Line Ramp	.75 x D	22 deg.	338	.00037	.00056	.0007	.0009	.0011	.0013	.0015	.0019	.0022	.0026	.0030	.0033	.0037
		Zig Zag Pocket	.75 x D	.55 x D	225	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		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
	2a] Difficult to machine	Slotting -Traditional	.75 x D	1 x D	214	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
	titanium alloys 10-2-3	Rough Facing	.3 x D	.7 x D	256	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	18-31 HRc	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
		Peripheral -Rough	1.25 x D	.2 x D	221	.00045	.00068	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Peripheral -Finish	3 x D	.01 x D	225	.00047	.00071	.0009	.0012	.0014	.0017	.0019	.0024	.0028	.0033	.0038	.0043	.0047
		Peripheral -HEM	3 x D	.1 x D	306	.00072	.00108	.0014	.0018	.0022	.0025	.0029	.0036	.0043	.0050	.0058	.0065	.0072
C	2b] Difficult to machine titanium alloys	Slotting -Traditional	.625 x D	1 x D	203	.00036	.00054	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0032	.0036
2	10-2-3	Rough Facing	.28 x D	.65 x D	243	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	32-46 HRc	Finish Facing	.02 x D	.65 x D	242	.00041	.00062	.0008	.0010	.0012	.0014	.0017	.0021	.0025	.0029	.0033	.0037	.0041
		Helical Entry	3 x D	20 deg	324	.00029	.00044	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0024	.0026	.0029
		Straight Line Ramp	.5 x D	18 deg.	203	.00035	.00052	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0035
		Zig Zag Pocket	.625 x D	.55 x D	203	.00036	.00054	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0032	.0036
		Peripheral Finish	1.25 x D	.25 x D	86 190	.00038	.00057	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
		Peripheral -Finish Peripheral -HEM	2 x D	.075 x D	105	.00043	.00004	.0009	.0036	.0013	.0013	.0017	.0021	.0026	.0100	.0034	.0128	.0043
	3a] Nickel Based Super	Slotting -Traditional	.25 x D	1 x D	57	.00032	.00048	.0006	.0008	.0010	.0011	.0037	.0016	.0019	.0022	.0026	.0029	.0032
	Alloys	Rough Facing	.3 x D	.7 x D	94	.00032	.00051	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0027	.0031	.0034
	Hastalloy, Waspalloy 15-30 HRc	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
		Peripheral -Rough	1 x D	.2 x D	81	.00036	.00054	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0032	.0036
		Peripheral -Finish	3 x D	.01 x D	180	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Peripheral -HEM	2 x D	.075 x D	99	.00135	.00203	.0027	.0034	.0041	.0047	.0054	.0068	.0081	.0095	.0108	.0122	.0135
	3b] Nickel Based Super	Slotting -Traditional	.25 x D	1 x D	54	.00030	.00046	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0024	.0027	.0030
	Alloys Hastalloy, Waspalloy	Rough Facing	.28 x D	.65 x D	89	.00032	.00049	.0006	.0008	.0010	.0011	.0013	.0016	.0019	.0023	.0026	.0029	.0032
	31-42 HRc	Finish Facing	.02 x D	.7 x D	188	.00034	.00052	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0034
		Helical Entry	2.5 x D	10 deg	108	.00045	.00067	.0009	.0011	.0013	.0016	.0018	.0022	.0027	.0031	.0036	.0040	.0045
		Straight Line Ramp	.5 x D	3 deg	52	.00030	.00045	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0024	.0027	.0030
		Zig Zag Pocket	.25 x D	.55 x D	54	.00030	.00046	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0024	.0027	.0030

						Food Re	te Per Too	oth (IDT)										
ISO Code	Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	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
		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	.00038	.00037	.0016	.0020	.0024	.0013	.0013	.0019	.0023	.0027	.0063	.0034	.0038
		Peripheral -HEM	2 x D	.01 x D	86	.00078	.00278	.0010	.0020	.0024	.0027	.0074	.0039	.0047	.0130	.0148	.0167	.0078
	4a] Nickel Chromium	Slotting -Traditional	.25 x D	1 x D	48	.00029	.00043	.0006	.0007	.0009	.0010	.0011	.0014	.0017	.0020	.0023	.0026	.0029
	based Super Alloys	Rough Facing	.28 x D	.7 x D	78	.00029	.00043	.0007	.0007	.0010	.0010	.0014	.0014	.0021	.0020	.0023	.0020	.0029
	Inconel 718, Rene 88 10-25 HRc	Finish Facing	.02 x D	.65 x D	94	.00034	.00100	.0007	.0009	.0020	.0012	.0014	.0017	.0021	.0024	.0027	.0060	.0034
		Helical Entry	2 x D	12 deg	119	.00045	.00068	.0009	.0017	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Straight Line Ramp	.37 x D	3 deg	50	.00029	.00043	.0006	.0007	.0009	.0010	.0010	.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
S		Peripheral -Rough	1 x D	.2 x D	68	.00029	.00054	.0007	.0007	.0011	.0013	.0014	.0014	.0022	.0025	.0023	.0020	.0029
		Peripheral -Finish	3 x D	.01 x D	81	.00030	.00034	.0015	.0019	.0022	.0026	.0030	.0018	.0022	.0023	.0029	.0067	.0074
		Peripheral -HEM	2 x D	.01 x D	81	.00074	.00263	.0013	.0019	.0022	.0020	.0030	.0037	.0105	.0123	.0140	.0158	.0176
	4b1 Nickel Chromium	Slotting -Traditional	.25 x D	1 x D	45	.00176	.00203	.0005	.0007	.0003	.0001	.0070	.0014	.0016	.0019	.0022	.0024	.0027
	based Super Alloys		.28 x D	.65 x D	74	.00027	.00041	.0006	.0007	.0010	.0011	.0011	.0014	.0019	.0023	.0022	.0024	.0032
	Inconel 718, Rene 88 26-39 HRc	Rough Facing	.02 x D	.6 x D	85	.00052		.0006	.0008	.0010	.0011	.0013	.0016	.0019	.0023	.0028	.0029	
	20-391IIIC	Finish Facing Helical Entry	2.5 x D	8 deg	113	.00039	.00089	.0012	.0013	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0033	.0059
		,					.00062				.0014	.0017	.0021	.0023		.0050	.0057	
		Straight Line Ramp	.5 x D	10 deg	500	.00062		.0012	.0016	.0019	.0022		.0031		.0044		.0056	.0062
		Zig Zag Pocket	.25 x D	.5 x D	45		.00041	.0005		.0008		.0011		.0016	.0019	.0022		.0027
		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	700	.00175	.00263	.0035	.0044	.0053	.0061	.0070	.0088	.0105	.0123	.0140	.0158	.0175
	1a] Aluminum Alloys	Slotting -Traditional	1 x D	1 x D	375	.00080	.00120	.0016	.0020	.0024	.0028	.0032	.0040	.0048	.0056	.0064	.0072	.0080
	O-T6 2024, 6061, 7075	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	463	.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
		Peripheral -Rough	2.25 x D	.6 x D	475	.00166	.00249	.0033	.0042	.0050	.0058	.0067	.0083	.0100	.0116	.0133	.0150	.0166
		Peripheral -Finish	3 x D	.02 x D	713	.00052	.00078	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0037	.0042	.0047	.0052
		Peripheral -HEM	3 x D	.25 x D	665	.00166	.00249	.0033	.0042	.0050	.0058	.0067	.0083	.0100	.0116	.0133	.0150	.0166
	1b] Aluminum Alloys	Slotting -Traditional	1 x D	1 x D	347	.00074	.00111	.0015	.0019	.0022	.0026	.0030	.0037	.0044	.0052	.0059	.0067	.0074
N	2024, 6061, 7075 96-175 Bhn	Rough Facing	.35 x D	.65 x D	495	.00130	.00195	.0026	.0033	.0039	.0046	.0052	.0065	.0078	.0091	.0104	.0117	.0130
		Finish Facing	.02 x D	.7 x D	743	.00046	.00070	.0009	.0012	.0014	.0016	.0019	.0023	.0028	.0033	.0037	.0042	.0046
		Helical Entry	3 x D	10 deg	450	.00057	.00085	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0040	.0046	.0051	.0057
		Straight Line Ramp	.5 x D	10 deg	438	.00061	.00092	.0012	.0015	.0018	.0021	.0024	.0031	.0037	.0043	.0049	.0055	.0061
		Zig Zag Pocket	1 x D	.45 x D	338	.00072	.00108	.0014	.0018	.0022	.0025	.0029	.0036	.0043	.0050	.0058	.0065	.0072
		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
	2a] High Silicon Aluminum Alloys	Slotting -Traditional	1 x D	1 x D	347	.00074	.00110	.0015	.0018	.0022	.0026	.0029	.0037	.0044	.0052	.0059	.0066	.0074
	A380, A390	Rough Facing	.375 x D	.7 x D	545	.00124	.00186	.0025	.0031	.0037	.0043	.0049	.0062	.0074	.0087	.0099	.0111	.0124
	45-75 Bhn	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

lee-				0 11		Feed Pa	te Per Too	oth (IPT)										
ISO Code	Work Material	Type of Cut	Axial DOC	Radial DOC	Speed (SFM)	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
		Peripheral -Rough	2.25 x D	.55 x D	470	.00143	.00214	.0029	.0036	.0043	.0050	.0057	.0071	.0086	.0100	.0114	.0128	.0143
		Peripheral -Finish	3 x D	.02 x D	689	.00052	.00078	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0037	.0042	.0047	.0052
		Peripheral -HEM	3 x D	.25 x D	570	.00152	.00228	.0030	.0038	.0046	.0053	.0061	.0076	.0091	.0106	.0122	.0137	.0152
	2b] High Silicon	Slotting -Traditional	1 x D	1 x D	329	.00070	.00105	.0014	.0017	.0021	.0024	.0028	.0035	.0042	.0049	.0056	.0063	.0070
	Aluminum Alloys	Rough Facing	.35 x D	.65 x D	490	.00112	.00167	.0022	.0028	.0033	.0039	.0045	.0056	.0067	.0078	.0089	.0100	.0112
	A380, A390 76-195 Bhn	Finish Facing	.02 x D	.7 x D	718	.00046	.00070	.0009	.0012	.0014	.0016	.0019	.0023	.0028	.0033	.0037	.0042	.0046
		Helical Entry	3 x D	10 deg	438	.00055	.00083	.0011	.0014	.0017	.0019	.0022	.0028	.0033	.0039	.0044	.0050	.0055
		Straight Line Ramp	.5 x D	4 deg	57	.00031	.00046	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0025	.0028	.0031
		Zig Zag Pocket	1 x D	.45 x D	329	.00070	.00105	.0014	.0017	.0021	.0024	.0028	.0035	.0042	.0049	.0056	.0063	.0070
		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
	3a] Magnesium Alloys	Rough Facing	.375 x D	.7 x D	550	.00144	.00216	.0029	.0036	.0043	.0051	.0058	.0072	.0087	.0101	.0115	.0130	.0144
	47-140 Bhn	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
		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
NI	4a] Copper, Brass 111-170 Bhn	Rough Facing	.375 x D	.7 x D	418	.00049	.00073	.0010	.0012	.0015	.0017	.0019	.0024	.0029	.0034	.0039	.0044	.0049
IN		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
		Peripheral -Rough	1.5 x D	.3 x D	342	.00056	.00084	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
		Peripheral -Finish	3 x D	.012 x D	347	.00052	.00078	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0036	.0041	.0047	.0052
		Peripheral -HEM	2.25 x D	.1 x D	360	.00095	.00142	.0019	.0024	.0028	.0033	.0038	.0047	.0057	.0066	.0076	.0085	.0095
	4b] Copper Alloys,	Slotting -Traditional	.7 x D	1 x D	261	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	Brass Alloys 171-250 Bhn	Rough Facing	.35 x D	.65 x D	376	.00044	.00066	.0009	.0011	.0013	.0015	.0018	.0022	.0026	.0031	.0035	.0039	.0044
	171 230 DIIII	Finish Facing	.02 x D	.7 x D	381	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Helical Entry	2.5 x D	10 deg	274	.00038	.00058	.0008	.0010	.0012	.0013	.0015	.0019	.0023	.0027	.0031	.0035	.0038
		Straight Line Ramp	.75 x D	18 deg	270	.00038	.00058	.0008	.0010	.0012	.0013	.0015	.0019	.0023	.0027	.0031	.0035	.0038
		Zig Zag Pocket	.7 x D	.55 x D	261	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		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
	5a] Bronze	Slotting -Traditional	.75 x D	1 x D	266	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	111-201 Bhn	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

M936 POW-R-FEED

ISO			Axial	Radial	Speed	Feed Ra	te Per To	oth (IPT))									
Code	Work Material	Type of Cut	DOC	DOC	(SFM)	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8		1-1/8	1-1/4
		Peripheral -Rough	1.5 x D	.3 x D	338	.00054	.00081	.0011	.0014	.0016	.0019	.0022	.0027	.0032	.0038	.0043	.0049	.0054
		Peripheral -Finish	3 x D	.012 x D	342	.00052	.00078	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0036	.0041	.0047	.0052
		Peripheral -HEM	2.25 x D	.1 x D	351	.00095	.00142	.0019	.0024	.0028	.0033	.0038	.0047	.0057	.0066	.0076	.0085	.0095
	5b] Bronze, High Tin Bronze, Manganese	Slotting -Traditional	.7 x D	1 x D	252	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	Bronze, Work Hardened	Rough Facing	.35 x D	.65 x D	371	.00042	.00063	.0008	.0011	.0013	.0015	.0017	.0021	.0025	.0029	.0034	.0038	.0042
	Bronze 201-277 Bhn	Finish Facing	.02 x D	.7 x D	376	.00043	.00064	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Helical Entry	2.5 x D	10 deg	270	.00038	.00058	.0008	.0010	.0012	.0013	.0015	.0019	.0023	.0027	.0031	.0035	.0038
-		Straight Line Ramp	.75 x D	18 deg	269	.00039	.00059	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0039
N		Zig Zag Pocket	.7 x D	.55 x D	252	.00041	.00061	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		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
	6a] Composites, Plastics, Fiberglass	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