The NEW
POW•R•FEED M936

Every element is optimized to give you the fastest, most aggressive, clog-free cutting to get your production higher than you ever thought possible.

Whether you're using low-horsepower equipment, high-speed machining centers or a 5-axis machine, POW-R-FEED M936 cutters give you the power to get more production out of every machine, every shift, every day.

Options

> Chip Management System
> Square end and corner radius
> Varying flute lengths
> Weldon flat

Exceptional Tool Life

> Super-tough-grade carbide
> Reinforced cutting edges
> Low chatter – variable helix and variable index
> Advanced AlTiSN coating

POW•R•FEED M936 FEATURES

1 Proprietary end geometries for extremely aggressive ramping and helical entry parameters

2 Variable helix angle for excellent chip evacuation, long tool life

3 Variable index for reduced chatter provides superior balance, super-stable performance

4 Extra-fine cutting edges with edge prep for prolonged life

5 Wiper flat for superior floor finishes

6 Unique flute and core geometries for amazing metal removal rates and the free-est cutting action in the toughest materials

7 Ultra-modern AlTiSN coating for super-lubricity and great chip evacuation

8 Super-tough carbide grade for incredible tool life

9 Second generation chip management system eliminates chip pollution, even in tight pockets and confined spaces

For use in:

P STEELS

S TITANIUM

M STAINLESS STEEL

K CAST IRON

H HARDENED STEELS

Virtually Impossible to Clog

Unique flute and core geometries make available extremely aggressive cutting parameters. The proprietary end face allows very aggressive ramping and helical entry tool paths.

Usually, these operations would result in faster tool wear and shorter tool life. But the M936's super-tough carbide core and slippery-smooth AlTiSN coating combine with cutting edges and geometries to keep the cutting zone clear for higher feeds and metal removal rates.

Regardless of your machine's horsepower, get maximized free cutting action, facilitate maximum speed, and get extended tool life in the metals you work with most.

The new POW-R-FEED M936 series end mills.

Aggressive roughing and pocketing in a wide variety of materials for much faster material removal. Aggressive flute and end face geometries make the tool virtually impossible to clog.

GET SPEEDS AND FEEDS *FAST ONLINE!*

Tool bot

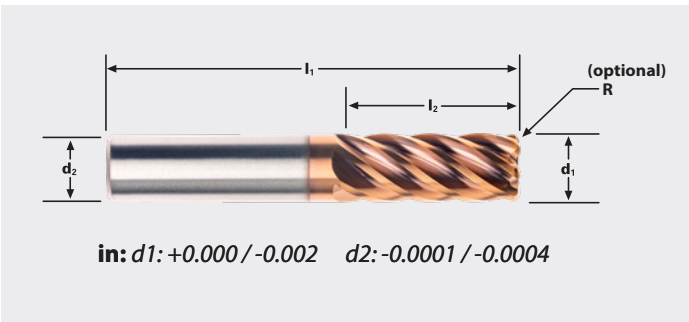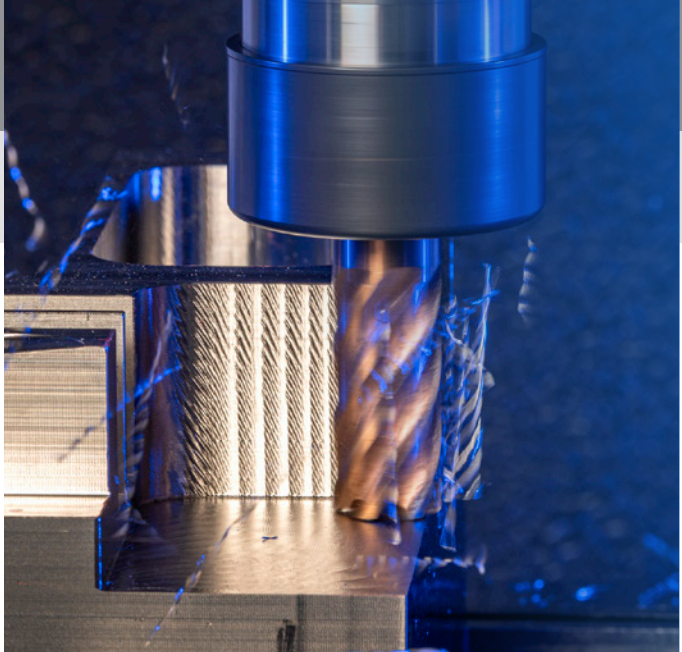IMCO'S EASY-TO-USE ONLINE TOOL FOR DYNAMIC SPEEDS AND FEEDS

Be sure to check it before you wreck it!

Simply input your part number or describe your tool, input select details about your application, confirm your machine details, and get ready to rock and roll with highly technical and in-depth speed and feed recommendations.

Scan the QR code to get started! ▶

| Z6 | SQ | CR | VARIABLE | AlTiSN | PLAIN |

in: d1: +0.000 / -0.002   d2: -0.0001 / -0.0004

For maximum performance in a wide variety of materials. Helical enter, ramp, slot and peripheral mill at fantastic feed rates. Maximize the output of your machines.

Designed for very aggressive traditional tool paths, stepovers and depths beyond the reach of legacy tools. It's IMCO's free-est cutting end mill to date. And with that amazing performance you also get long, long tool life.

FRACTIONAL / in

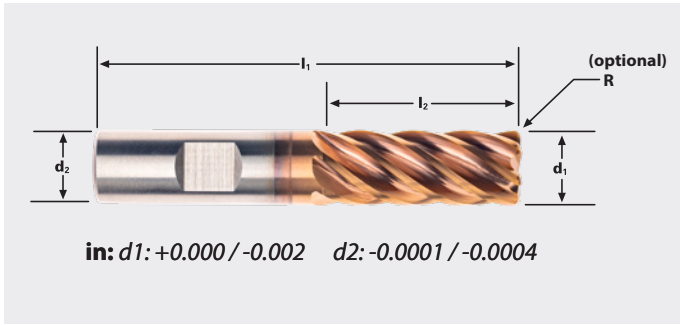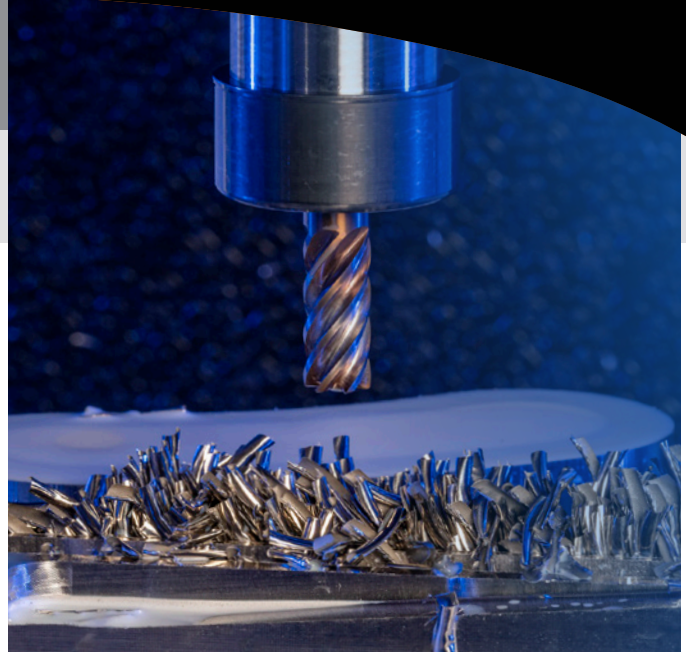| Cutter Dia d1	Shank Dia d2	Length of Cut l2	Overall Length l1	Order Code SQ	Order Code by Corner Radius			
					.010 CR	.015 CR	.030 CR	.060 CR
1/4	1/4	3/8	2	9174611	9175817	9175136	9175137	9175138
		1/2	2-1/2	9175639	9175818	9175140	9175141	-
		3/4	2-1/2	9175640	9175819	9175143	9175144	9175145
		1	3	9175641	9175820	9175146	9175147	-
5/16	5/16	7/16	2	9175642	-	-	-	-
		13/16	2-1/2	9175643	-	9175160	-	-
		1-1/4	3	9175644	-	-	-	-
3/8	3/8	1/2	2	9175645	9175821	9175166	9175167	-
		1	2-1/2	9175646	9175822	9175171	9175172	9175173
		1-1/4	3	9175647	9175831	9175176	9175177	9175178
		1-1/2	3-1/2	9175648	-	-	-	-
1/2	1/2	5/8	2-1/2	9175649	9175833	9175186	9175187	9175188
		1	3	9175650	9175834	9175191	9175192	9175193
		1-1/4	3	9175651	9175835	9175196	9174264	9175197
		1-1/2	3-1/2	9175652	-	-	9175202	-
		1-3/4	4	9175653	-	-	9175208	-
		2	4	9175654	-	-	9175213	9175214
5/8	5/8	3/4	3	-	-	-	-	-
		1-1/4	3-1/2	-	-	-	-	-
		1-5/8	3-1/2	9175657	-	-	9175227	-
		2-3/16	4	-	-	-	-	-
3/4	3/4	1	3	-	-	-	-	-
		1-5/8	4	9175660	-	-	9175242	9175243
		2-1/4	5	9175661	-	9175248	-	-

Use **Tool bot** to get dynamic speed and feed information by scanning the QR code

Access POW•R•FEED speed and feed charts by scanning the QR code

POW•R•FEED M936

| Z6 | SQ | CR | VARIABLE | AlTiSN | WELDON |

**in:** d1: +0.000 / -0.002   d2: -0.0001 / -0.0004

For maximum performance in a wide variety of materials. Helical enter, ramp, slot and peripheral mill at fantastic feed rates. Maximize the output of your machines. Order with flat for Weldon-style tool holders.

Designed for very aggressive traditional tool paths, stepovers and depths beyond the reach of legacy tools. It's IMCO's free-est cutting end mill to date. And with that amazing performance you also get long, long tool life.

FRACTIONAL / in

Cutter Dia d1	Shank Dia d2	Length of Cut l2	Overall Length l1	Order Code SQ	Order Code by Corner Radius			
					.010 CR	.015 CR	.030 CR	.060 CR
3/8	3/8	1/2	2	9175796	-		9175869	-
		1	2-1/2	9175797	9175840	9175850	9175870	-
		1-1/4	3	9175798	-	-	9175871	-
		1-1/2	3-1/2		-	-	-	-
1/2	1/2	5/8	2-1/2	9175800	-	-	-	-
		1	3	9175801	9175844	9175854	9175874	-
		1-1/4	3	9175802	9175845	9175855	9175875	9175895
		1-1/2	3-1/2	-	-	-	-	-
		1-3/4	4	-	-	-	-	-
		2	4	-	-	-	-	-
5/8	5/8	3/4	3	-	-	-	-	-
		1-1/4	3-1/2	-	-	-	-	-
		1-5/8	3-1/2	9175808	-	-	9175881	-
		2-3/16	4	-	-	-	-	-
3/4	3/4	1	3	-	-	-	-	-
		1-5/8	4	9175812	-	-	9175884	-
		2-1/4	5	-	-	-	-	-

TECH TALK | *FASTER CYCLE TIMES*

Use various tool path moves without slowing down, even when cutting odd shapes or narrow configurations. Whether you're running in advanced 5-axis machines, doing an HEM cut or using a more conventional tool path, the M936 will help you save time and money with clog-free cutting.
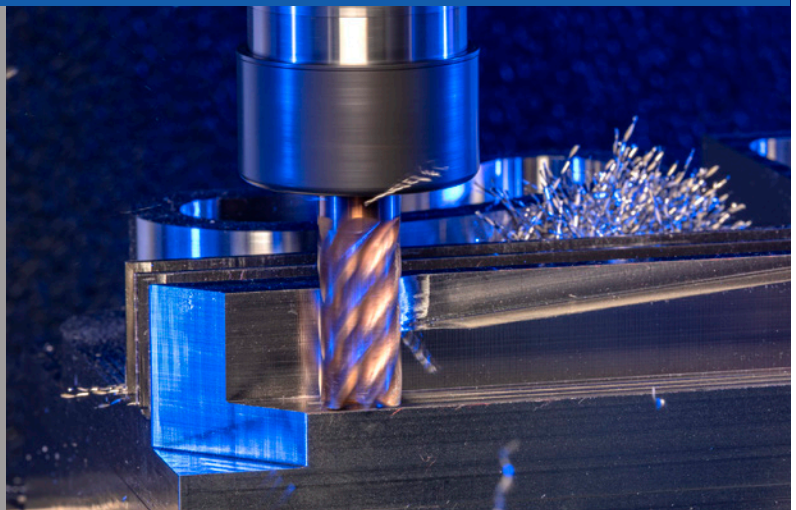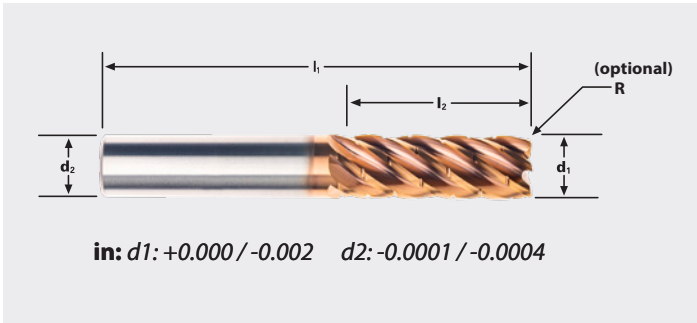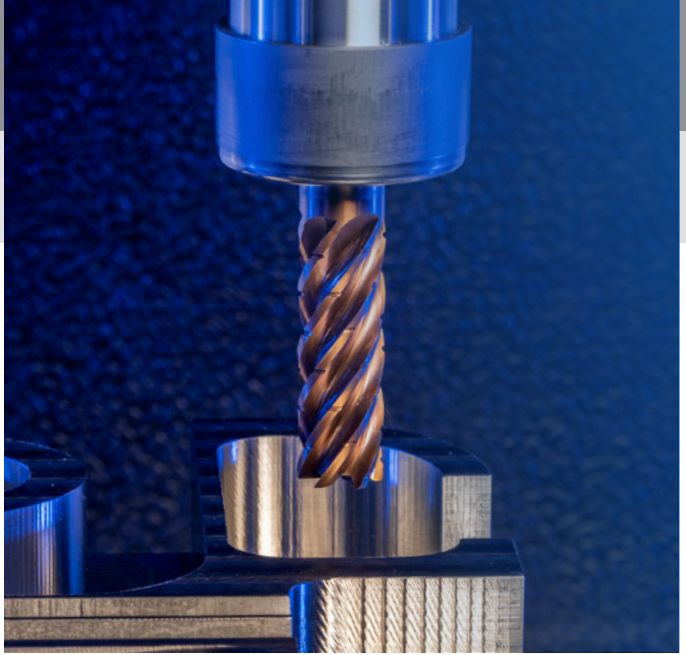
Z6 | CR | VARIABLE | CMS | AlTiSN | PLAIN

in: *d1: +0.000 / -0.002   d2: -0.0001 / -0.0004*

IMCO's second generation Chip Management System (CMS), combined with optimized cutting and flute geometries, reduces the risk of clogging, even with extremely aggressive cutting parameters. Precision notches in the cutting edges eliminate long chips that create chip pollution, eliminating evacuation issues and the recutting of chips. The ultra-modern AlTiSN slippery-smooth coating also helps eliminate chip buildup.

You get maximum free cutting action, maximum speed, maximum metal removal and maximum tool life in the toughest metals you work with most.

FRACTIONAL / in

| Cutter Dia d1	Shank Dia d2	Length of Cut l2	Overall Length l1	Order Code by Corner Radius		
				.015 CR	.030 CR	.060 CR
1/4	1/4	3/8	2	9175955	-	-
		1/2	2-1/2	9175956	-	-
		3/4	2-1/2	9175957	-	-
		1	3	9175958	-	-
3/8	3/8	1/2	2	9175959	9175969	-
		1	2-1/2	9175960	9175970	-
		1-1/4	3	9175961	9175971	-
		1-1/2	3-1/2	-	-	-
1/2	1/2	5/8	2-1/2	9175963	9175973	-
		1	3	9175964	9175974	-
		1-1/4	3	9175965	9175975	9175990
		1-1/2	3-1/2	-	9175976	-
		1-3/4	4	-	9175977	-
		2	4	-	9175978	-
5/8	5/8	3/4	3	-	-	-
		1-1/4	3-1/2	-	-	-
		1-5/8	3-1/2	-	9175981	9175996
		2-3/16	4	-	-	-
3/4	3/4	1	3	-	-	-
		1-5/8	4	-	9175984	9175999
		2-1/4	5	-	-	-

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POW•R•FEED M936C
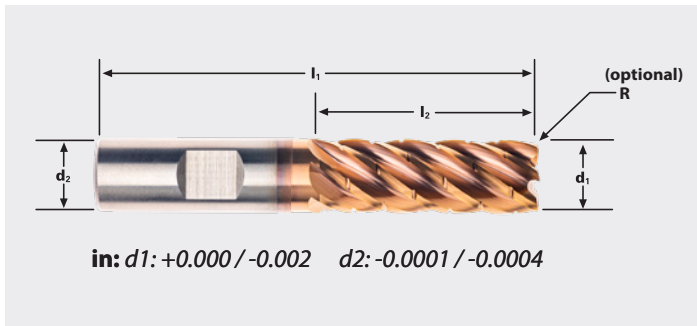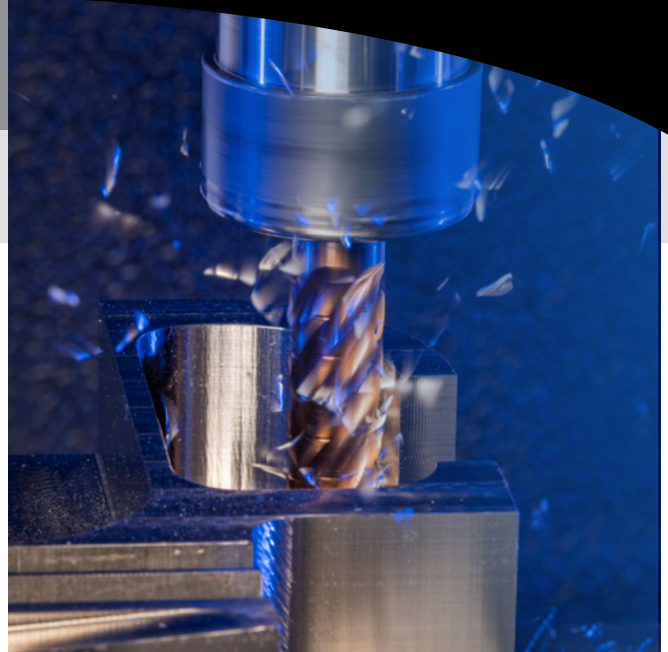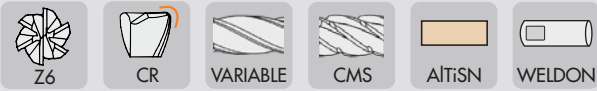
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FRACTIONAL / in

Cutter Dia d1	Shank Dia d2	Length of Cut l2	Overall Length l1	Order Code by Corner Radius		
				.015 CR	.030 CR	.060 CR
3/8	3/8	1/2	2	-	-	-
		1	2-1/2	9176005	9176015	-
		1-1/4	3	9176006	9176016	-
		1-1/2	3-1/2	-	-	-
1/2	1/2	5/8	2-1/2	-	-	-
		1	3	9176009	9176019	9176035
		1-1/4	3	9176010	9176020	9176036
		1-1/2	3-1/2	-	-	-
		1-3/4	4	-	-	-
		2	4	-	-	-
5/8	5/8	3/4	3	-	-	-
		1-1/4	3-1/2	-	-	-
		1-5/8	3-1/2	-	9176026	9176042
		2-3/16	4	-	-	-
3/4	3/4	1	3	-	-	-
		1-5/8	4	-	9176029	9176045
		2-1/4	5	-	-	-

TECH TALK | *AMAZING SPEEDS*

Create forms, pockets, slots and other irregular shapes. Perform ramping, helical entry or peripheral milling. It's all executed at astounding speeds with smooth walls and floors.

Price-to-performance ratio = *exceptional.*

M936 POW-R-FEED

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	1b] Cast Iron- Gray ASTM-A48 Class 20, 25,30,35 & 40	Peripheral -Rough	1.5 x D	.25 x D	333	.0007	.0010	.0014	.0017	.0020	.0024	.0027	.0034	.0041	.0047	.0054	.0061	.0068
		Peripheral -Finish	3 x D	.01 x D	338	.0007	.0010	.0013	.0016	.0020	.0023	.0026	.0033	.0039	.0046	.0052	.0059	.0065
		Peripheral -HEM	3	.07 x D	342	.0016	.0024	.0032	.0039	.0047	.0055	.0063	.0079	.0095	.0110	.0126	.0142	.0158
		Slotting -Traditional	.5 x D	1 x D	270	.0005	.0007	.0009	.0012	.0014	.0017	.0019	.0024	.0028	.0033	.0038	.0043	.0047
		Rough Facing	.35 x D	.65 x D	354	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0043	.0049	.0055	.0061
		Finish Facing	.02 x D	.65 x D	354	.0006	.0009	.0011	.0014	.0017	.0020	.0023	.0029	.0034	.0040	.0046	.0051	.0057
		Helical Entry	2 x D	12 deg.	292	.0004	.0006	.0007	.0009	.0011	.0013	.0015	.0018	.0022	.0026	.0029	.0033	.0037
		Straight Line Ramp	.5 x D	10 deg	270	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0028	.0032	.0037	.0041	.0046
		Zig Zag Pocket	.5 x D	.55 x D	270	.0005	.0007	.0009	.0012	.0014	.0017	.0019	.0024	.0028	.0033	.0038	.0043	.0047
	2a] Cast Iron- Ductile	Peripheral -Rough	1.5 x D	.32 x D	333	.0007	.0010	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Peripheral -Finish	3 x D	.015 x D	333	.0006	.0009	.0012	.0015	.0019	.0022	.0025	.0031	.0037	.0043	.0049	.0056	.0062
		Peripheral -HEM	3 x D	.08 x D	371	.0018	.0027	.0036	.0045	.0053	.0062	.0071	.0089	.0107	.0125	.0143	.0160	.0178
		Slotting -Traditional	.63 x D	1 x D	247	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Rough Facing	.375 x D	.7 x D	366	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0054	.0060
		Finish Facing	.02 x D	.7 x D	349	.0006	.0009	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0040	.0045	.0051	.0057
		Helical Entry	3 x D	20 deg.	275	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Straight Line Ramp	.63 x D	14 deg	247	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Zig Zag Pocket	.63 x D	.63 x D	247	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
	2b] Cast Iron- Ductile	Peripheral -Rough	1.5 x D	.3 x D	315	.0006	.0009	.0013	.0016	.0019	.0022	.0025	.0032	.0038	.0044	.0050	.0057	.0063
		Peripheral -Finish	3 x D	.01 x D	315	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0043	.0049	.0055	.0061
		Peripheral -HEM	3 x D	.07 x D	351	.0017	.0025	.0034	.0042	.0051	.0059	.0068	.0084	.0101	.0118	.0135	.0152	.0169
		Slotting -Traditional	.5 x D	1 x D	234	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.35 x D	.65 x D	347	.0006	.0009	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0040	.0045	.0051	.0057
		Finish Facing	.02 x D	.65 x D	331	.0005	.0008	.0010	.0013	.0015	.0018	.0020	.0026	.0031	.0036	.0041	.0046	.0051
		Helical Entry	3 x D	18 deg.	260	.0004	.0006	.0008	.0010	.0012	.0015	.0017	.0021	.0025	.0029	.0033	.0037	.0042
		Straight Line Ramp	.50 x D	13 deg	234	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Zig Zag Pocket	.50 x D	.55 x D	234	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	3a] Cast Iron- Malleable	Peripheral -Rough	1.5 x D	.32 x D	333	.0006	.0010	.0013	.0016	.0019	.0022	.0026	.0032	.0038	.0045	.0051	.0058	.0064
		Peripheral -Finish	3 x D	.015 x D	333	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Peripheral -HEM	3 x D	.08 x D	371	.0018	.0026	.0035	.0044	.0053	.0062	.0070	.0088	.0105	.0123	.0141	.0158	.0176
		Slotting -Traditional	.63 x D	1 x D	252	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	366	.0006	.0009	.0012	.0014	.0017	.0020	.0023	.0029	.0035	.0040	.0046	.0052	.0058
		Finish Facing	.02 x D	.7 x D	349	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Helical Entry	.02 x D	.7 x D	349	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Straight Line Ramp	3 x D	20 deg.	270	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Zig Zag Pocket	.63 x D	14 deg	252	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	3b] Cast Iron- Malleable	Peripheral -Rough	1.5 x D	.3 x D	315	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0043	.0049	.0055	.0061
		Peripheral -Finish	3 x D	.01 x D	315	.0006	.0009	.0012	.0015	.0018	.0020	.0023	.0029	.0035	.0041	.0047	.0053	.0059
		Peripheral -HEM	3 x D	.07 x D	351	.0017	.0025	.0033	.0042	.0050	.0058	.0067	.0083	.0100	.0117	.0133	.0150	.0167
		Slotting -Traditional	.5 x D	1 x D	239	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Rough Facing	.35 x D	.65 x D	347	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Finish Facing	.02 x D	.65 x D	331	.0005	.0007	.0010	.0012	.0015	.0017	.0020	.0025	.0030	.0034	.0039	.0044	.0049
		Helical Entry	3 x D	18 deg.	256	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0035	.0039
		Straight Line Ramp	.50 x D	13 deg	239	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Zig Zag Pocket	.50 x D	.55 x D	239	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041

M936
POW-R-FEED

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	1a] Low Carbon Steel ≤33 HRc 1018, 1020, 12L14, 5120, 8620	Peripheral -Rough	2 x D	.55 x D	361	.0008	.0012	.0016	.0020	.0024	.0028	.0032	.0040	.0048	.0057	.0065	.0073	.0081
		Peripheral -Finish	3 x D	.015 x D	380	.0009	.0013	.0018	.0022	.0026	.0031	.0035	.0044	.0053	.0062	.0070	.0079	.0088
		Peripheral -HEM	3 x D	.09 x D	418	.0015	.0023	.0031	.0039	.0046	.0054	.0062	.0077	.0093	.0108	.0124	.0139	.0154
		Slotting -Traditional	1 x D	1 x D	309	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Rough Facing	.375 x D	.7 x D	397	.0007	.0011	.0015	.0018	.0022	.0025	.0029	.0036	.0044	.0051	.0058	.0065	.0073
		Finish Facing	.02 x D	.7 x D	399	.0009	.0013	.0017	.0021	.0026	.0030	.0034	.0043	.0051	.0060	.0068	.0077	.0085
		Helical Entry	3 x D	25 deg.	371	.0005	.0007	.0009	.0012	.0014	.0016	.0018	.0023	.0028	.0032	.0037	.0041	.0046
		Straight Line Ramp	1 x D	20 deg	380	.0004	.0006	.0008	.0009	.0011	.0013	.0015	.0019	.0023	.0026	.0030	.0034	.0038
		Zig Zag Pocket	1 x D	.63 x D	309	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
	1b] Low Carbon Steel ≤48 HRc 1018, 1020, 12L14, 5120, 8620	Peripheral -Rough	1.5 x D	.52 x D	342	.0008	.0011	.0015	.0019	.0023	.0027	.0031	.0038	.0046	.0054	.0061	.0069	.0077
		Peripheral -Finish	3 x D	.012 x D	360	.0008	.0012	.0017	.0021	.0025	.0029	.0033	.0042	.0050	.0058	.0067	.0075	.0083
		Peripheral -HEM	3 x D	0.07 x D	396	.0015	.0022	.0029	.0037	.0044	.0051	.0059	.0073	.0088	.0102	.0117	.0132	.0146
		Slotting -Traditional	.75 x D	1 x D	293	.0006	.0008	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
		Rough Facing	.35 x D	.65 x D	376	.0007	.0010	.0014	.0017	.0021	.0024	.0028	.0034	.0041	.0048	.0055	.0062	.0069
		Finish Facing	.02 x D	.65 x D	378	.0008	.0012	.0015	.0019	.0023	.0027	.0031	.0038	.0046	.0054	.0062	.0069	.0077
		Helical Entry	3 x D	20 deg.	350	.0004	.0006	.0008	.0011	.0013	.0015	.0017	.0021	.0025	.0030	.0034	.0038	.0042
		Straight Line Ramp	.75 x D	18 deg	360	.0004	.0006	.0008	.0009	.0011	.0013	.0015	.0019	.0023	.0026	.0030	.0034	.0038
		Zig Zag Pocket	.75 x D	.55 x D	293	.0006	.0008	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
	2a] Medium Carbon Steel ≤32 HRc 1045, 4140, 4340, 5140	Peripheral -Rough	2 x D	.55 x D	356	.0008	.0011	.0015	.0019	.0023	.0027	.0030	.0038	.0046	.0053	.0061	.0068	.0076
		Peripheral -Finish	3 x D	.015 x D	356	.0008	.0012	.0016	.0020	.0024	.0028	.0032	.0040	.0048	.0057	.0065	.0073	.0081
		Peripheral -HEM	3 x D	.09 x D	380	.0014	.0021	.0028	.0034	.0041	.0048	.0055	.0069	.0083	.0096	.0110	.0124	.0138
		Slotting -Traditional	1 x D	1 x D	285	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Rough Facing	.375 x D	.7 x D	392	.0007	.0010	.0014	.0017	.0021	.0024	.0027	.0034	.0041	.0048	.0055	.0062	.0068
		Finish Facing	.02 x D	.7 x D	374	.0008	.0012	.0016	.0020	.0023	.0027	.0031	.0039	.0047	.0055	.0063	.0070	.0078
		Helical Entry	3 x D	25 deg.	356	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0025	.0029	.0033	.0037	.0041
		Straight Line Ramp	1 x D	20 deg	380	.0003	.0005	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0035
		Zig Zag Pocket	1 x D	.63 x D	285	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
	2b] Medium Carbon Steel ≤48 HRc 1045, 4140, 4340, 5140	Peripheral -Rough	1.5 x D	.52 x D	338	.0007	.0011	.0014	.0018	.0022	.0025	.0029	.0036	.0043	.0050	.0058	.0065	.0072
		Peripheral -Finish	3 x D	.012 x D	338	.0008	.0011	.0015	.0019	.0023	.0027	.0031	.0038	.0046	.0054	.0061	.0069	.0077
		Peripheral -HEM	3 x D	.07 x D	369	.0013	.0020	.0026	.0033	.0039	.0046	.0052	.0065	.0078	.0091	.0104	.0117	.0131
		Slotting -Traditional	.75 x D	1 x D	270	.0005	.0008	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0036	.0041	.0047	.0052
		Rough Facing	.35 x D	.65 x D	371	.0006	.0010	.0013	.0016	.0019	.0023	.0026	.0032	.0039	.0045	.0052	.0058	.0065
		Finish Facing	.02 x D	.65 x D	354	.0007	.0011	.0014	.0018	.0021	.0025	.0028	.0035	.0042	.0049	.0057	.0064	.0071
		Helical Entry	3 x D	20 deg.	338	.0004	.0006	.0008	.0009	.0011	.0013	.0015	.0019	.0023	.0026	.0030	.0034	.0038
		Straight Line Ramp	.75 x D	18 deg	351	.0003	.0005	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0035
		Zig Zag Pocket	.75 x D	.55 x D	270	.0005	.0008	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0036	.0041	.0047	.0052
	3a] Tool & Die Steels ≤28 HRc A2, D2, O1, S7, P20, H13	Peripheral -Rough	1.5 x D	.52 x D	333	.0006	.0010	.0013	.0016	.0019	.0022	.0026	.0032	.0038	.0045	.0051	.0058	.0064
		Peripheral -Finish	3 x D	.015 x D	333	.0007	.0010	.0014	.0017	.0021	.0024	.0028	.0034	.0041	.0048	.0055	.0062	.0069
		Peripheral -HEM	3 x D	.08 x D	371	.0011	.0017	.0023	.0029	.0034	.0040	.0046	.0057	.0068	.0080	.0091	.0103	.0114
		Slotting -Traditional	.75 x D	1 x D	261	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Rough Facing	.375 x D	.7 x D	366	.0006	.0009	.0012	.0014	.0017	.0020	.0023	.0029	.0035	.0040	.0046	.0052	.0058
		Finish Facing	.02 x D	.7 x D	349	.0007	.0010	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Helical Entry	3 x D	18 deg.	285	.0004	.0005	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0032	.0036
		Straight Line Ramp	.75 x D	18 deg	333	.0003	.0004	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0024	.0027	.0030
		Zig Zag Pocket	.75 x D	.63 x D	261	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045

M936 POW-R-FEED

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	3b] Tool & Die Steels ≤42 HRc A2, D2, O1, S7, P20, H13	Peripheral -Rough	1.25 x D	.4 x D	315	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0054	.0060
		Peripheral -Finish	3 x D	.012 x D	315	.0007	.0010	.0013	.0016	.0020	.0023	.0026	.0033	.0039	.0046	.0052	.0059	.0065
		Peripheral -HEM	3 x D	.07 x D	347	.0011	.0016	.0022	.0027	.0032	.0038	.0043	.0054	.0065	.0076	.0086	.0097	.0108
		Slotting -Traditional	.63 x D	1 x D	248	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.35 x D	.65 x D	347	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Finish Facing	.02 x D	.65 x D	331	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0054	.0060
		Helical Entry	2 x D	12 deg.	270	.0003	.0005	.0007	.0008	.0010	.0012	.0013	.0017	.0020	.0023	.0027	.0030	.0033
		Straight Line Ramp	.63 x D	16 deg	285	.0003	.0004	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0024	.0027	.0030
		Zig Zag Pocket	.63 x D	.55 x D	248	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
H	1a] Tool & Die Steels 42-52 HRc	Peripheral -Rough	1 x D	.25 x D	290	.0005	.0007	.0010	.0012	.0014	.0017	.0019	.0024	.0029	.0033	.0038	.0043	.0048
		Peripheral -Finish	3 x D	.01 x D	285	.0005	.0007	.0010	.0012	.0015	.0017	.0020	.0025	.0030	.0035	.0040	.0045	.0050
		Peripheral -HEM	3 x D	.05 x D	337	.0014	.0020	.0027	.0034	.0041	.0047	.0054	.0068	.0081	.0095	.0108	.0122	.0135
		Slotting -Traditional	.45 x D	1 x D	238	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Rough Facing	.35 x D	.65 x D	319	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Finish Facing	.02 x D	.65 x D	298	.0004	.0007	.0009	.0011	.0013	.0016	.0018	.0022	.0027	.0031	.0036	.0040	.0045
		Helical Entry	.88 x D	12 deg.	238	.0003	.0005	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0035
		Straight Line Ramp	.5 x D	8 deg	257	.0002	.0004	.0005	.0006	.0007	.0009	.0010	.0012	.0015	.0017	.0020	.0022	.0024
		Zig Zag Pocket	.45 x D	.4 x D	238	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
M	1a] Martensitic & Ferritic Stainless Steels 410, 416, 440	Peripheral -Rough	2 x D	.25 x D	375	.0007	.0010	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Peripheral -Finish	3 x D	.015 x D	356	.0008	.0012	.0016	.0020	.0024	.0028	.0032	.0040	.0048	.0057	.0065	.0073	.0081
		Peripheral -HEM	3 x D	.2 x D	380	.0007	.0010	.0014	.0017	.0021	.0024	.0028	.0034	.0041	.0048	.0055	.0062	.0069
		Slotting -Traditional	1 x D	1 x D	261	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	413	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0054	.0060
		Finish Facing	.02 x D	.7 x D	374	.0007	.0010	.0014	.0017	.0021	.0024	.0027	.0034	.0041	.0048	.0055	.0062	.0069
		Helical Entry	3 x D	7 deg.	314	.0003	.0004	.0005	.0007	.0008	.0010	.0011	.0014	.0016	.0019	.0022	.0025	.0027
		Straight Line Ramp	.75 x D	5 deg	261	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
		Zig Zag Pocket	1 x D	.63 x D	261	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	1b] Martensitic & Ferritic Stainless Steels 410, 416, 440	Peripheral -Rough	1.75 x D	.2 x D	356	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0043	.0049	.0055	.0061
		Peripheral -Finish	3 x D	.012 x D	338	.0008	.0011	.0015	.0019	.0023	.0027	.0031	.0038	.0046	.0054	.0061	.0069	.0077
		Peripheral -HEM	3 x D	.2 x D	360	.0007	.0010	.0013	.0016	.0020	.0023	.0026	.0033	.0039	.0046	.0052	.0059	.0065
		Slotting -Traditional	.75 x D	1 x D	248	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Rough Facing	.35 x D	.65 x D	391	.0006	.0009	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0040	.0045	.0051	.0057
		Finish Facing	.02 x D	.65 x D	345	.0006	.0009	.0013	.0016	.0019	.0022	.0025	.0032	.0038	.0044	.0051	.0057	.0063
		Helical Entry	3 x D	7 deg.	297	.0002	.0004	.0005	.0006	.0007	.0008	.0009	.0012	.0014	.0017	.0019	.0021	.0024
		Straight Line Ramp	.63 x D	4 deg	248	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
		Zig Zag Pocket	.75 x D	.55 x D	248	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	2a] Austenitic Stainless Steels FeNi Alloys 303, 304, 316, Invar, Kovar	Peripheral -Rough	2 x D	.25 x D	371	.0006	.0010	.0013	.0016	.0019	.0022	.0026	.0032	.0038	.0045	.0051	.0058	.0064
		Peripheral -Finish	3 x D	.015 x D	333	.0007	.0011	.0015	.0018	.0022	.0026	.0029	.0037	.0044	.0052	.0059	.0066	.0074
		Peripheral -HEM	3 x D	.2 x D	371	.0007	.0010	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Slotting -Traditional	1 x D	1 x D	261	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	408	.0006	.0009	.0012	.0014	.0017	.0020	.0023	.0029	.0035	.0040	.0046	.0052	.0058
		Finish Facing	.02 x D	.7 x D	349	.0006	.0010	.0013	.0016	.0019	.0023	.0026	.0032	.0039	.0045	.0052	.0058	.0064
		Helical Entry	3 x D	7 deg.	308	.0003	.0004	.0005	.0007	.0008	.0009	.0010	.0013	.0016	.0018	.0021	.0023	.0026
		Straight Line Ramp	.75 x D	5 deg	270	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
		Zig Zag Pocket	1 x D	.63 x D	261	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043

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
M	2b] Austenitic Stainless Steels FeNi Alloys 303, 304, 316,Invar, Kovar	Peripheral -Rough	1.75 x D	.2 x D	351	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0043	.0049	.0055	.0061
		Peripheral -Finish	3 x D	.012 x D	315	.0007	.0010	.0014	.0017	.0021	.0024	.0028	.0035	.0042	.0049	.0056	.0063	.0070
		Peripheral -HEM	3 x D	.2 x D	351	.0006	.0009	.0013	.0016	.0019	.0022	.0025	.0032	.0038	.0044	.0050	.0057	.0063
		Slotting -Traditional	.75 x D	1 x D	248	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Rough Facing	.35 x D	.65 x D	386	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Finish Facing	.02 x D	.65 x D	331	.0006	.0009	.0012	.0014	.0017	.0020	.0023	.0029	.0035	.0040	.0046	.0052	.0058
		Helical Entry	3 x D	7 deg.	292	.0002	.0004	.0005	.0006	.0007	.0008	.0010	.0012	.0014	.0017	.0019	.0022	.0024
		Straight Line Ramp	.63 x D	4 deg	248	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
		Zig Zag Pocket	.75 x D	.55 x D	248	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	3a] Precipitation Hardening Stainless Steel 17-4, 15-5, 13-8	Peripheral -Rough	1.5 x D	.22 x D	333	.0005	.0008	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0037	.0042	.0047	.0052
		Peripheral -Finish	3 x D	.015 x D	309	.0006	.0009	.0012	.0015	.0019	.0022	.0025	.0031	.0037	.0043	.0049	.0056	.0062
		Peripheral -HEM	3 x D	.2 x D	347	.0005	.0008	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0037	.0042	.0047	.0052
		Slotting -Traditional	.63 x D	1 x D	238	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0040
		Rough Facing	.375 x D	.7 x D	366	.0005	.0007	.0009	.0012	.0014	.0016	.0019	.0024	.0028	.0033	.0038	.0042	.0047
		Finish Facing	.02 x D	.7 x D	324	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0032	.0038	.0043	.0049	.0054
		Helical Entry	3 x D	7 deg.	285	.0002	.0004	.0005	.0006	.0007	.0009	.0010	.0012	.0015	.0017	.0020	.0022	.0025
		Straight Line Ramp	.63 x D	5 deg	243	.0004	.0005	.0007	.0009	.0011	.0012	.0014	.0018	.0021	.0025	.0028	.0032	.0035
		Zig Zag Pocket	.63 x D	.63 x D	238	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0040
	3b] Precipitation Hardening Stainless Steel 17-4, 15-5, 13-8	Peripheral -Rough	1.25 x D	.2 x D	306	.0005	.0007	.0010	.0012	.0014	.0017	.0019	.0024	.0029	.0034	.0039	.0043	.0048
		Peripheral -Finish	3 x D	.012 x D	293	.0006	.0009	.0012	.0015	.0018	.0020	.0023	.0029	.0035	.0041	.0047	.0053	.0059
		Peripheral -HEM	3 x D	.18 x D	329	.0005	.0007	.0009	.0012	.0014	.0017	.0019	.0024	.0028	.0033	.0038	.0043	.0047
		Slotting -Traditional	.50 x D	1 x D	225	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
		Rough Facing	.35 x D	.65 x D	347	.0004	.0007	.0009	.0011	.0013	.0016	.0018	.0022	.0027	.0031	.0036	.0040	.0045
		Finish Facing	.02 x D	.65 x D	316	.0005	.0008	.0010	.0013	.0015	.0018	.0020	.0026	.0031	.0036	.0041	.0046	.0051
		Helical Entry	3 x D	6 deg.	270	.0002	.0003	.0005	.0006	.0007	.0008	.0009	.0011	.0014	.0016	.0018	.0021	.0023
		Straight Line Ramp	.5 x D	4 deg	225	.0004	.0005	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0033	.0036
		Zig Zag Pocket	.5 x D	.55 x D	225	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0031	.0034	.0038
S	1a] Titanium Alloys 6AL-4V, 6-2-4	Peripheral -Rough	2 x D	.3 x D	261	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Peripheral -Finish	3 x D	.015 x D	285	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Peripheral -HEM	3 x D	.12 x D	390	.0010	.0014	.0019	.0024	.0029	.0033	.0038	.0048	.0057	.0067	.0076	.0086	.0095
		Slotting -Traditional	1 x D	1 x D	238	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	287	.0005	.0008	.0011	.0013	.0016	.0019	.0021	.0027	.0032	.0037	.0043	.0048	.0053
		Finish Facing	.02 x D	.7 x D	314	.0005	.0008	.0011	.0013	.0016	.0019	.0021	.0027	.0032	.0037	.0043	.0048	.0053
		Helical Entry	3 x D	20 deg.	380	.0003	.0005	.0007	.0008	.0010	.0012	.0013	.0017	.0020	.0023	.0026	.0030	.0033
		Straight Line Ramp	1 x D	25 deg.	380	.0004	.0006	.0007	.0009	.0011	.0013	.0015	.0019	.0022	.0026	.0030	.0033	.0037
		Zig Zag Pocket	1 x D	.63 x D	214	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
	1b] Titanium Alloys 6AL-4V, 6-2-4	Peripheral -Rough	1.5 x D	.25 x D	248	.0006	.0008	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
		Peripheral -Finish	3 x D	.012 x D	270	.0006	.0008	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
		Peripheral -HEM	3 x D	.1 x D	365	.0009	.0014	.0018	.0023	.0027	.0032	.0036	.0045	.0054	.0063	.0072	.0081	.0090
		Slotting -Traditional	.75 x D	1 x D	225	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Rough Facing	.35 x D	.65 x D	272	.0005	.0008	.0010	.0013	.0015	.0018	.0020	.0025	.0030	.0035	.0041	.0046	.0051
		Finish Facing	.02 x D	.65 x D	290	.0005	.0007	.0010	.0012	.0015	.0017	.0020	.0025	.0029	.0034	.0039	.0044	.0049
		Helical Entry	3 x D	18 deg.	360	.0003	.0005	.0007	.0008	.0010	.0012	.0013	.0017	.0020	.0023	.0026	.0030	.0033
		Straight Line Ramp	.75 x D	22 deg.	338	.0004	.0006	.0007	.0009	.0011	.0013	.0015	.0019	.0022	.0026	.0030	.0033	.0037
		Zig Zag Pocket	.75 x D	.55 x D	203	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041

M936 POW-R-FEED

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	2a] Difficult to machine titanium alloys 10-2-3	Peripheral -Rough	1.5 x D	.25 x D	233	.0005	.0007	.0010	.0012	.0014	.0017	.0019	.0024	.0029	.0033	.0038	.0043	.0048
		Peripheral -Finish	3 x D	.01 x D	238	.0005	.0007	.0010	.0012	.0015	.0017	.0020	.0025	.0030	.0035	.0040	.0045	.0050
		Peripheral -HEM	3 x D	.12 x D	328	.0008	.0011	.0015	.0019	.0023	.0027	.0030	.0038	.0046	.0053	.0061	.0068	.0076
		Slotting -Traditional	.75 x D	1 x D	214	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
		Rough Facing	.3 x D	.7 x D	256	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Finish Facing	.02 x D	.7 x D	261	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0028	.0032	.0037	.0041	.0046
		Helical Entry	3 x D	20 deg.	342	.0003	.0004	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0024	.0026	.0029
		Straight Line Ramp	.63 x D	22 deg.	214	.0004	.0005	.0007	.0009	.0011	.0013	.0015	.0018	.0022	.0025	.0029	.0033	.0036
		Zig Zag Pocket	.75 x D	.63 x D	214	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
	2b] Difficult to machine titanium alloys 10-2-3	Peripheral -Rough	1.25 x D	.2 x D	221	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Peripheral -Finish	3 x D	.01 x D	225	.0005	.0007	.0009	.0012	.0014	.0017	.0019	.0024	.0028	.0033	.0038	.0043	.0047
		Peripheral -HEM	3 x D	.1 x D	306	.0007	.0011	.0014	.0018	.0022	.0025	.0029	.0036	.0043	.0050	.0058	.0065	.0072
		Slotting -Traditional	.63 x D	1 x D	203	.0004	.0005	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0032	.0036
		Rough Facing	.28 x D	.65 x D	243	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Finish Facing	.02 x D	.65 x D	242	.0004	.0006	.0008	.0010	.0012	.0014	.0017	.0021	.0025	.0029	.0033	.0037	.0041
		Helical Entry	3 x D	18 deg.	324	.0003	.0004	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0024	.0026	.0029
		Straight Line Ramp	.5 x D	18 deg.	203	.0003	.0005	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0035
		Zig Zag Pocket	.63 x D	.55 x D	203	.0004	.0005	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0032	.0036
	3a] Nickel Based Super Alloys Hastalloy, Waspalloy	Peripheral -Rough	1.25 x D	.25 x D	86	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
		Peripheral -Finish	3 x D	.01 x D	190	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Peripheral -HEM	2 x D	.075 x D	105	.0014	.0021	.0029	.0036	.0043	.0050	.0057	.0071	.0086	.0100	.0114	.0128	.0143
		Slotting -Traditional	.25 x D	1 x D	57	.0003	.0005	.0006	.0008	.0010	.0011	.0013	.0016	.0019	.0022	.0026	.0029	.0032
		Rough Facing	.3 x D	.7 x D	94	.0003	.0005	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0027	.0031	.0034
		Finish Facing	.02 x D	.7 x D	199	.0004	.0006	.0007	.0009	.0011	.0013	.0015	.0019	.0022	.0026	.0030	.0034	.0037
		Helical Entry	2 x D	12 deg.	114	.0004	.0007	.0009	.0011	.0013	.0016	.0018	.0022	.0027	.0031	.0036	.0040	.0045
		Straight Line Ramp	.5 x D	4 deg	57	.0003	.0005	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0025	.0028	.0031
		Zig Zag Pocket	.25 x D	.55 x D	57	.0003	.0005	.0006	.0008	.0010	.0011	.0013	.0016	.0019	.0022	.0026	.0029	.0032
	3b] Nickel Based Super Alloys Hastalloy, Waspalloy	Peripheral -Rough	1 x D	.2 x D	81	.0004	.0005	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0032	.0036
		Peripheral -Finish	3 x D	.01 x D	180	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Peripheral -HEM	2 x D	.075 x D	99	.0014	.0020	.0027	.0034	.0041	.0047	.0054	.0068	.0081	.0095	.0108	.0122	.0135
		Slotting -Traditional	.25 x D	1 x D	54	.0003	.0005	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0024	.0027	.0030
		Rough Facing	.28 x D	.65 x D	89	.0003	.0005	.0006	.0008	.0010	.0011	.0013	.0016	.0019	.0023	.0026	.0029	.0032
		Finish Facing	.02 x D	.7 x D	188	.0003	.0005	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0028	.0031	.0034
		Helical Entry	2.5 x D	10 deg.	108	.0004	.0007	.0009	.0011	.0013	.0016	.0018	.0022	.0027	.0031	.0036	.0040	.0045
		Straight Line Ramp	.5 x D	3 deg	54	.0003	.0004	.0006	.0007	.0009	.0010	.0012	.0015	.0018	.0021	.0023	.0026	.0029
		Zig Zag Pocket	.25 x D	.55 x D	54	.0003	.0005	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0024	.0027	.0030
	4a] Nickel Chromium based Super Alloys Inconel 718, Rene 88	Peripheral -Rough	1.25 x D	.25 x D	71	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0019	.0023	.0027	.0030	.0034	.0038
		Peripheral -Finish	3 x D	.01 x D	86	.0008	.0012	.0016	.0020	.0024	.0027	.0031	.0039	.0047	.0055	.0063	.0071	.0078
		Peripheral -HEM	2 x D	.08 x D	86	.0019	.0028	.0037	.0046	.0056	.0065	.0074	.0093	.0111	.0130	.0148	.0167	.0185
		Slotting -Traditional	.25 x D	1 x D	48	.0003	.0004	.0006	.0007	.0009	.0010	.0011	.0014	.0017	.0020	.0023	.0026	.0029
		Rough Facing	.28 x D	.7 x D	78	.0003	.0005	.0007	.0009	.0010	.0012	.0014	.0017	.0021	.0024	.0027	.0031	.0034
		Finish Facing	.02 x D	.65 x D	94	.0007	.0010	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Helical Entry	2 x D	12 deg.	119	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
		Straight Line Ramp	.50 x D	3 deg	52	.0003	.0005	.0006	.0008	.0009	.0011	.0012	.0015	.0018	.0021	.0024	.0027	.0030
		Zig Zag Pocket	.25 x D	.5 x D	48	.0003	.0004	.0006	.0007	.0009	.0010	.0011	.0014	.0017	.0020	.0023	.0026	.0029

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	4b] Nickel Chromium based Super Alloys Inconel 718, Rene 88	Peripheral -Rough	1 x D	.2 x D	68	.0004	.0005	.0007	.0009	.0011	.0013	.0014	.0018	.0022	.0025	.0029	.0032	.0036
		Peripheral -Finish	3 x D	.01 x D	81	.0007	.0011	.0015	.0019	.0022	.0026	.0030	.0037	.0045	.0052	.0059	.0067	.0074
		Peripheral -HEM	2 x D	.05 x D	81	.0018	.0026	.0035	.0044	.0053	.0061	.0070	.0088	.0105	.0123	.0140	.0158	.0176
		Slotting -Traditional	.25 x D	1 x D	45	.0003	.0004	.0005	.0007	.0008	.0009	.0011	.0014	.0016	.0019	.0022	.0024	.0027
		Rough Facing	.35 x D	.65 x D	74	.0003	.0005	.0006	.0008	.0010	.0011	.0013	.0016	.0019	.0023	.0026	.0029	.0032
		Finish Facing	.02 x D	.6 x D	85	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Helical Entry	2.5 x D	8 deg.	113	.0004	.0006	.0008	.0010	.0012	.0014	.0017	.0021	.0025	.0029	.0033	.0037	.0041
		Straight Line Ramp	.37 x D	3 deg	50	.0003	.0004	.0006	.0007	.0009	.0010	.0011	.0014	.0017	.0020	.0023	.0026	.0029
		Zig Zag Pocket	.25 x D	.5 x D	45	.0003	.0004	.0005	.0007	.0008	.0009	.0011	.0014	.0016	.0019	.0022	.0024	.0027
N	4a] Copper alloys, Brass	Peripheral -Rough	2 x D	.3 x D	361	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0030	.0036	.0042	.0048	.0053	.0059
		Peripheral -Finish	3 x D	.015 x D	366	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Peripheral -HEM	2.25 x D	.1 x D	380	.0011	.0016	.0021	.0027	.0032	.0037	.0043	.0053	.0064	.0075	.0086	.0096	.0107
		Slotting -Traditional	.75 x D	1 x D	276	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	418	.0005	.0007	.0010	.0012	.0015	.0017	.0019	.0024	.0029	.0034	.0039	.0044	.0049
		Finish Facing	.02 x D	.7 x D	402	.0005	.0007	.0009	.0012	.0014	.0016	.0019	.0023	.0028	.0033	.0037	.0042	.0046
		Helical Entry	3 x D	12 deg.	304	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Straight Line Ramp	1 x D	20 deg	300	.0004	.0007	.0009	.0011	.0013	.0015	.0018	.0022	.0026	.0031	.0035	.0039	.0044
		Zig Zag Pocket	.75 x D	.63 x D	290	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
	4b] Copper alloys, Brass	Peripheral -Rough	1.5 x D	.3 x D	342	.0006	.0008	.0011	.0014	.0017	.0020	.0023	.0028	.0034	.0039	.0045	.0051	.0056
		Peripheral -Finish	3 x D	.012 x D	347	.0005	.0008	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0036	.0041	.0047	.0052
		Peripheral -HEM	2.25 x D	.1 x D	360	.0009	.0014	.0019	.0024	.0028	.0033	.0038	.0047	.0057	.0066	.0076	.0085	.0095
		Slotting -Traditional	.7 x D	1 x D	261	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Rough Facing	.35 x D	.65 x D	376	.0004	.0007	.0009	.0011	.0013	.0015	.0018	.0022	.0026	.0031	.0035	.0039	.0044
		Finish Facing	.02 x D	.7 x D	381	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Helical Entry	2.5 x D	10 deg.	274	.0004	.0006	.0008	.0010	.0012	.0013	.0015	.0019	.0023	.0027	.0031	.0035	.0038
		Straight Line Ramp	.75 x D	18 deg	270	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Zig Zag Pocket	.7 x D	.55 x D	261	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
	5a] Bronze	Peripheral -Rough	2 x D	.3 x D	356	.0006	.0009	.0011	.0014	.0017	.0020	.0023	.0029	.0034	.0040	.0046	.0051	.0057
		Peripheral -Finish	3 x D	.015 x D	361	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0033	.0038	.0044	.0049	.0055
		Peripheral -HEM	2.25 x D	.1 x D	390	.0011	.0017	.0023	.0028	.0034	.0039	.0045	.0056	.0068	.0079	.0090	.0101	.0113
		Slotting -Traditional	.75 x D	1 x D	266	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Rough Facing	.375 x D	.7 x D	413	.0005	.0007	.0009	.0012	.0014	.0016	.0019	.0023	.0028	.0033	.0037	.0042	.0047
		Finish Facing	.02 x D	.7 x D	397	.0005	.0007	.0009	.0012	.0014	.0016	.0019	.0023	.0028	.0033	.0037	.0042	.0046
		Helical Entry	3 x D	12 deg.	315	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Straight Line Ramp	1 x D	20 deg	295	.0004	.0007	.0009	.0011	.0013	.0015	.0018	.0022	.0026	.0031	.0035	.0039	.0044
		Zig Zag Pocket	.75 x D	.63 x D	280	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0023	.0027	.0032	.0036	.0041	.0045
	5b] Bronze	Peripheral -Rough	1.5 x D	.3 x D	338	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0027	.0032	.0038	.0043	.0049	.0054
		Peripheral -Finish	3 x D	.012 x D	342	.0005	.0008	.0010	.0013	.0016	.0018	.0021	.0026	.0031	.0036	.0041	.0047	.0052
		Peripheral -HEM	2.25 x D	.1 x D	351	.0009	.0014	.0019	.0024	.0028	.0033	.0038	.0047	.0057	.0066	.0076	.0085	.0095
		Slotting -Traditional	.7 x D	1 x D	252	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Rough Facing	.35 x D	.65 x D	371	.0004	.0006	.0008	.0011	.0013	.0015	.0017	.0021	.0025	.0029	.0034	.0038	.0042
		Finish Facing	.02 x D	.7 x D	376	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0021	.0026	.0030	.0034	.0038	.0043
		Helical Entry	2.5 x D	10 deg.	270	.0004	.0006	.0008	.0010	.0012	.0013	.0015	.0019	.0023	.0027	.0031	.0035	.0038
		Straight Line Ramp	.75 x D	18 deg	270	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041
		Zig Zag Pocket	.7 x D	.55 x D	252	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0020	.0024	.0028	.0032	.0036	.0041

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	6a] Composites, Plastics, Fiberglass	Peripheral -Rough	1.5 x D	.5 x D	428	.0007	.0011	.0014	.0018	.0021	.0025	.0029	.0036	.0043	.0050	.0057	.0064	.0071
		Peripheral -Finish	3 x D	.015 x D	447	.0007	.0010	.0014	.0017	.0021	.0024	.0028	.0034	.0041	.0048	.0055	.0062	.0069
		Peripheral -HEM	2.25 x D	.12 x D	475	.0012	.0018	.0024	.0030	.0036	.0042	.0048	.0059	.0071	.0083	.0095	.0107	.0119
		Slotting -Traditional	1 x D	1 x D	380	.0007	.0010	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Rough Facing	.375 x D	.7 x D	495	.0006	.0009	.0012	.0015	.0017	.0020	.0023	.0029	.0035	.0041	.0047	.0052	.0058
		Finish Facing	.02 x D	.7 x D	491	.0006	.0009	.0012	.0015	.0018	.0020	.0023	.0029	.0035	.0041	.0047	.0053	.0059
		Helical Entry	3 x D	20 deg.	400	.0007	.0010	.0013	.0017	.0020	.0023	.0027	.0033	.0040	.0047	.0053	.0060	.0067
		Straight Line Ramp	1 x D	25 deg.	400	.0006	.0010	.0013	.0016	.0019	.0023	.0026	.0032	.0039	.0045	.0052	.0058	.0065
		Zig Zag Pocket	1 x D	.63 x D	400	.0007	.0011	.0014	.0018	.0021	.0025	.0028	.0035	.0042	.0049	.0056	.0063	.0070