

ISO		Axial Radial Speed Feed Rate Per Tooth (IPT)															
Code	Work Material	Type of Cut	DOC	DOC	(SFM)	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4		1-1/4
		Peripheral -Rough	1.300 x D	.450 x D	390	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0075
		Peripheral -Finish	2.000 x D	.015 x D	375	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0075
		Peripheral -HEM	2.000 x D	.100 x D	380	.0019	.0028	.0038	.0047	.0056	.0066	.0075	.0084	.0094	.0113	.0150	.0188
	Cast iron- Gray	Slotting -Traditional	1.500 x D	1.000 x D	340	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.0030	.0036	.0048	.0060
	ASTM-A48 Class 20, 25,30,	Rough Facing	.375 x D	.700 x D	468	.0007	.0010	.0014	.0017	.0020	.0024	.0027	.0030	.0034	.0041	.0054	.0068
	35 & 40	Finish Facing	.020 x D	.700 x D	408	.0007	.0010	.0014	.0017	.0020	.0024	.0027	.0030	.0034	.0041	.0054	.0068
		Helical Entry	2.000 x D	15 deg	359	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0020	.0023	.0027	.0036	.0045
		Straight Line Ramp	1.500 x D	15 deg	340	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0024	.0027	.0032	.0043	.0054
		Trad. Style Pocket	1.500 x D	.625 x D	340	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.0030	.0036	.0048	.0060
		Peripheral -Rough	1.300 x D	.450 x D	360	.0007	.0011	.0014	.0018	.0021	.0025	.0028	.0032	.0035	.0042	.0056	.0070
		Peripheral -Finish	2.000 x D	.015 x D	360	.0007	.0011	.0014	.0018	.0021	.0025	.0028	.0032	.0035	.0042	.0056	.0070
		Peripheral -HEM	2.000 x D	.070 x D	395	.0021	.0032	.0043	.0053	.0064	.0074	.0085	.0096	.0106	.0128	.0170	.0213
		Slotting -Traditional	1.500 x D	1.000 x D	330	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.0055
K	Cast iron- Ductile 15-25 HRc	Rough Facing	.375 x D	.700 x D	432	.0006	.0009	.0013	.0016	.0019	.0022	.0025	.0028	.0032	.0038	.0050	.0063
	13-23 FINC	Finish Facing	.020 x D	.700 x D	391	.0007	.0010	.0014	.0017	.0020	.0024	.0027	.0031	.0034	.0041	.0055	.0068
		Helical Entry	2.000 x D	18 deg	368	.0005	.0007	.0009	.0012	.0014	.0016	.0019	.0021	.0023	.0028	.0037	.0047
		Straight Line Ramp	1.500 x D	16 deg	330	.0005	.0007	.0010	.0012	.0015	.0017	.0020	.0022	.0025	.0030	.0040	.0050
		Trad. Style Pocket	1.500 x D	.625 x D	330	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.0055
	Cast iron- Malleable 15-25 HRC	Peripheral -Rough	1.300 x D	.450 x D	340	.0007	.0010	.0014	.0017	.0020	.0024	.0027	.0030	.0034	.0041	.0054	.0068
		Peripheral -Finish	3.000 x D	.015 x D	360	.0007	.0010	.0014	.0017	.0020	.0024	.0027	.0030	.0034	.0041	.0054	.0068
		Peripheral -HEM	2.000 x D	.070 x D	395	.0021	.0031	.0042	.0052	.0062	.0073	.0083	.0093	.0104	.0125	.0166	.0208
		Slotting -Traditional	1.500 x D	1.000 x D	335	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.0055
		Rough Facing	.375 x D	.700 x D	408	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.0030	.0036	.0049	.0061
		Finish Facing	.020 x D	.700 x D	391	.0007	.0010	.0013	.0016	.0020	.0023	.0026	.0030	.0033	.0039	.0053	.0066
		Helical Entry	2.000 x D	18 deg	374	.0005	.0007	.0009	.0012	.0014	.0016	.0019	.0021	.0023	.0028	.0037	.0047
		Straight Line Ramp	1.500 x D	16 deg	335	.0005	.0007	.0010	.0012	.0015	.0017	.0020	.0022	.0025	.0030	.0040	.0050
		Trad. Style Pocket	1.500 x D	.625 x D	335	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.0055
		Peripheral -Rough	1.500 x D	.400 x D	425	.0008	.0012	.0017	.0021	.0025	.0029	.0033	.0037	.0041	.0050	.0066	.0083
		Peripheral -Finish	2.000 x D	.015 x D	434	.0010	.0015	.0019	.0024	.0029	.0034	.0039	.0044	.0048	.0058	.0078	.0097
		Peripheral -HEM	2.000 x D	.080 x D	435	.0030	.0045	.0060	.0075	.0090	.0105	.0120	.0135	.0150	.0180	.0240	.0300
	Low carbon steel	Slotting -Traditional	1.500 x D	1.000 x D	375	.0005	.0008	.0011	.0013	.0016	.0018	.0021	.0024	.0026	.0032	.0042	.0053
	≤38 HRc	Rough Facing	.375 x D	.700 x D	502	.0007	.0011	.0015	.0019	.0022	.0026	.0030	.0033	.0037	.0045	.0059	.0074
	1018, 1020, 12L14, 5120, 8620	Finish Facing	.020 x D	.700 x D	446	.0009	.0014	.0018	.0023	.0027	.0032	.0036	.0041	.0045	.0054	.0073	.0091
		Helical Entry	2.000 x D	18 deg	405	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0019	.0021	.0026	.0034	.0043
		Straight Line Ramp	1.500 x D	15 deg	413	.0003	.0005	.0007	.0008	.0010	.0011	.0013	.0015	.0016	.0020	.0026	.0033
		Trad. Style Pocket	1.500 x D	.625 x D	375	.0005	.0008	.0011	.0013	.0016	.0018	.0021	.0024	.0026	.0032	.0042	.0053
P		Peripheral -Rough	1.500 x D	.350 x D	420	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0075
		Peripheral -Finish	2.000 x D	.015 x D	400	.0009	.0013	.0018	.0022	.0026	.0031	.0035	.0039	.0044	.0053	.0070	.0088
		Peripheral -HEM	2.000 x D	.080 x D	415	.0027	.0040	.0054	.0067	.0080	.0094	.0107	.0120	.0134	.0161	.0214	.0268
	Medium carbon	Slotting -Traditional	1.500 x D	1.000 x D	370	.0005	.0008	.0010	.0013	.0015	.0018	.0020	.0023	.0025	.0030	.0040	.0050
	Steel ≤40 HRc	Rough Facing	.375 x D	.700 x D	496	.0007	.0010	.0014	.0017	.0020	.0024	.0027	.0030	.0034	.0041	.0054	.0068
	1045, 4140, 4340, 5140	Finish Facing	.020 x D	.700 x D	420	.0008	.0012	.0017	.0021	.0025	.0029	.0033	.0037	.0042	.0050	.0067	.0083
		Helical Entry	2.000 x D	18 deg	410	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0019	.0021	.0026	.0034	.0043
		Straight Line Ramp	1.500 x D	15 deg	407	.0003	.0005	.0007	.0008	.0010	.0011	.0013	.0015	.0016	.0020	.0026	.0033
		Trad. Style Pocket	1.500 x D	.625 x D	370	.0005	.0008	.0010	.0013	.0015	.0018	.0020	.0023	.0025	.0030	.0040	.0050
		iiuu. Style i Otket	1.500 x D	.023 x D	3,0												



ISO	Work Material		Axial	Radial	Speed		Feed Rate Per Tooth (IPT)										
Code		Type of Cut	DOC	DOC	(SFM)	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4		1-1/4
		Peripheral -Rough	1.500 x D	.325 x D	380	.0007	.0010	.0014	.0017	.0020	.0024	.0027	.0030	.0034	.0041	.0054	.0068
		Peripheral -Finish	2.000 x D	.015 x D	375	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0075
		Peripheral -HEM	2.000 x D	.080 x D	395	.0022	.0033	.0044	.0055	.0066	.0077	.0088	.0099	.0110	.0132	.0176	.0220
	Tool & die steels	Slotting -Traditional	1.250 x D	1.000 x D	360	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0020	.0023	.0027	.0036	.0045
Р	≤34 HRc A2, D2, O1, S7,	Rough Facing	.375 x D	.700 x D	448	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.0030	.0036	.0049	.0061
	P20, H13	Finish Facing	.020 x D	.700 x D	394	.0007	.0011	.0014	.0018	.0021	.0025	.0029	.0032	.0036	.0043	.0057	.0071
		Helical Entry	2.000 x D	16 deg	392	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0018	.0020	.0024	.0032	.0040
		Straight Line Ramp	1.250 x D	14 deg	396	.0003	.0004	.0006	.0007	.0009	.0010	.0012	.0013	.0015	.0018	.0024	.0030
		Trad. Style Pocket	1.250 x D	.625 x D	360	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0020	.0023	.0027	.0036	.0045
		Peripheral -Rough	1.250 x D	.250 x D	325	.0006	.0009	.0012	.0014	.0017	.0020	.0023	.0026	.0029	.0035	.0046	.0058
		Peripheral -Finish	2.000 x D	.012 x D	310	.0006	.0009	.0012	.0014	.0017	.0020	.0023	.0026	.0029	.0035	.0046	.0058
		Peripheral -HEM	2.000 x D	.060 x D	350	.0021	.0031	.0041	.0051	.0062	.0072	.0082	.0092	.0103	.0123	.0164	.0205
		Slotting -Traditional	.750 x D	1.000 x D	300	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0019	.0021	.0026	.0034	.0043
Н	Tool & die steels 40-48- HRc	Rough Facing	.350 x D	.700 x D	358	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0025	.0027	.0033	.0044	.0055
		Finish Facing	.020 x D	.650 x D	324	.0005	.0008	.0011	.0014	.0016	.0019	.0022	.0025	.0027	.0033	.0044	.0055
		Helical Entry	1.000 x D	12 deg	300	.0004	.0006	.0008	.0009	.0011	.0013	.0015	.0017	.0019	.0023	.0030	.0038
		Straight Line Ramp	.750 x D	6 deg	324	.0002	.0004	.0005	.0006	.0007	.0008	.0010	.0011	.0012	.0015	.0019	.0024
		Trad. Style Pocket	.750 x D	.400 x D	300	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0019	.0021	.0026	.0034	.0043
	Martensitic & ferritic stainless steels 15-29 HRc 410, 416, 440	Peripheral -Rough	1.250 x D	.350 x D	380	.0009	.0013	.0017	.0021	.0026	.0030	.0034	.0038	.0043	.0051	.0068	.0085
		Peripheral -Finish	2.000 x D	.015 x D	385	.0009	.0013	.0018	.0022	.0026	.0031	.0035	.0040	.0044	.0053	.0070	.0088
		Peripheral -HEM	2.000 x D	.070 x D	415	.0026	.0039	.0053	.0066	.0079	.0092	.0105	.0118	.0131	.0158	.0210	.0263
		Slotting -Traditional	1.500 x D	1.000 x D	315	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.0055
		Rough Facing	.375 x D	.700 x D	456	.0008	.0011	.0015	.0019	.0023	.0027	.0031	.0034	.0038	.0046	.0061	.0077
		Finish Facing	.020 x D	.700 x D	404	.0008	.0012	.0016	.0020	.0024	.0028	.0032	.0036	.0040	.0048	.0064	.0081
		Helical Entry	2.000 x D	14 deg	408	.0003	.0005	.0007	.0009	.0010	.0012	.0014	.0015	.0017	.0021	.0027	.0034
		Straight Line Ramp	1.500 x D	14 deg	315	.0005	.0008	.0010	.0013	.0016	.0018	.0021	.0024	.0026	.0031	.0042	.0052
		Trad. Style Pocket	1.500 x D	.625 x D	315	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.0055
		Peripheral -Rough	1.250 x D	.350 x D	365	.0008	.0012	.0016	.0020	.0024	.0028	.0032	.0036	.0040	.0048	.0064	.0080
		Peripheral -Finish	2.000 x D	.015 x D	365	.0008	.0012	.0016	.0020	.0024	.0028	.0032	.0036	.0040	.0048	.0064	.0080
	Austenitic	Peripheral -HEM	2.000 x D	.070 x D	395	.0025	.0038	.0050	.0063	.0075	.0088	.0100	.0113	.0125	.0150	.0200	.0250
	stainless steels 15-29 HRc	Slotting -Traditional	1.500 x D	1.000 x D	305	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.0055
M	FeNi alloys	Rough Facing	.375 x D	.700 x D	438	.0007	.0011	.0014	.0018	.0022	.0025	.0029	.0032	.0036	.0043	.0058	.0072
	303, 304, 316, Invar, Kovar	Finish Facing	.020 x D	.700 x D	383	.0007	.0011	.0014	.0018	.0021	.0025	.0028	.0032	.0035	.0042	.0056	.0070
	ilivai, kovai	Helical Entry	2.000 x D	14 deg	408	.0003	.0005	.0007	.0009	.0010	.0012	.0014	.0015	.0017	.0021	.0027	.0034
		Straight Line Ramp	1.500 x D	14 deg	305	.0005	.0008	.0010	.0013	.0016	.0018	.0021	.0024	.0026	.0031	.0042	.0052
		Trad. Style Pocket	1.500 x D	.625 x D	305	.0006		.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033		
		Peripheral -Rough	1.250 x D	.375 x D	350	.0007	.0011	.0015	.0018	.0022	.0025	.0029	.0033	.0036	.0044	.0058	.0073
		Peripheral -Finish	2.000 x D	.012 x D	321	.0007	.0010	.0013	.0016	.0020	.0023	.0026	.0029	.0033	.0039	.0052	.0065
	Precipitation	Peripheral -HEM	2.000 x D	.070 x D	365	.0020	.0030	.0041	.0051	.0061	.0071	.0081	.0091	.0101	.0122	.0162	.0203
	hardening	Slotting -Traditional	1.000 x D	1.000 x D	295	.0005	.0008	.0010	.0013	.0015	.0018	.0020	.0023	.0025	.0030	.0040	.0050
	stainless steel 15-38 HRc	Rough Facing	.375 x D	.700 x D	420	.0007	.0010	.0013	.0016	.0020	.0023	.0026	.0029	.0033	.0039	.0052	.0065
	17-4, 15-5, 13-8	Finish Facing	.020 x D	.700 x D	357	.0006	.0009	.0012	.0016	.0019	.0022	.0025	.0028	.0031	.0037	.0050	.0062
		Helical Entry	2.000 x D	12 deg	354	.0003	.0005	.0006	.0008	.0010	.0011	.0013	.0014	.0016	.0019	.0026	.0032
		Straight Line Ramp	1.000 x D	12 deg	295	.0005	.0007	.0010	.0012	.0014	.0017	.0019	.0021	.0024	.0029	.0038	.0048
		Trad. Style Pocket	1.000 x D	.625 x D	295	.0005	.0008	.0010	.0013	.0015	.0018	.0020	.0023	.0025	.0030	.0040	.0050



0			Axial	Radial	Speed				CHONAL / III								
de	Work Material	Type of Cut	DOC	DOC	(SFM)	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4		1-1/
		Peripheral -Rough	1.500 x D	.400 x D	355	.0007	.0011	.0014	.0018	.0021	.0025	.0028	.0032	.0035	.0042	.0056	.00
		Peripheral -Finish	2.000 x D	.020 x D	385	.0005	.0008	.0011	.0013	.0016	.0018	.0021	.0024	.0026	.0032	.0042	.00
		Peripheral -HEM	2.000 x D	.080 x D	400	.0016	.0024	.0033	.0041	.0049	.0057	.0065	.0073	.0081	.0098	.0130	.01
	Titanium alloys	Slotting -Traditional	1.500 x D	1.000 x D	300	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.00
	6AL-4V, 6-2-4	Rough Facing	.375 x D	.700 x D	391	.0006	.0009	.0013	.0016	.0019	.0022	.0025	.0028	.0032	.0038	.0050	.00
	18-31 HRc	Finish Facing	.020 x D	.700 x D	402	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0021	.0023	.0028	.0037	.00
		Helical Entry	2.000 x D	16 deg	425	.0004	.0006	.0008	.0011	.0013	.0015	.0017	.0019	.0021	.0025	.0034	.00
		Straight Line Ramp	1.500 x D	15 deg	315	.0005	.0007	.0010	.0012	.0015	.0017	.0020	.0022	.0025	.0030	.0040	.00
		Trad. Style Pocket	1.500 x D	.625 x D	300	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.0
		Peripheral -Rough	1.500 x D	.375 x D	295	.0005	.0008	.0010	.0013	.0015	.0018	.0020	.0023	.0025	.0030	.0040	.0
		Peripheral -Finish	2.000 x D	.010 x D	300	.0005	.0008	.0011	.0013	.0016	.0018	.0021	.0024	.0026	.0032	.0042	.0
		Peripheral -HEM	2.000 x D	.075 x D	375	.0014	.0021	.0028	.0034	.0041	.0048	.0055	.0062	.0069	.0083	.0110	.0
	Difficult-to- machine titanium	Slotting -Traditional	1.250 x D	1.000 x D	275	.0005	.0008	.0011	.0013	.0016	.0018	.0021	.0024	.0026	.0032	.0042	.00
	alloys	Rough Facing	.300 x D	.700 x D	325	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0020	.0023	.0027	.0036	.0
	10-2-3 18-31 HRc	Finish Facing	.020 x D	.700 x D	314	.0005	.0007	.0009	.0012	.0014	.0017	.0019	.0021	.0024	.0028	.0038	.0
	18-31 FIRC	Helical Entry	2.000 x D	15 deg	440	.0004	.0006	.0008	.0010	.0012	.0014	.0016	.0018	.0020	.0024	.0032	.0
		Straight Line Ramp	1.500 x D	14 deg	289	.0005	.0007	.0010	.0012	.0014	.0017	.0019	.0021	.0024	.0029	.0038	.0
		Trad. Style Pocket	1.250 x D	.625 x D	275	.0005	.0008	.0011	.0013	.0016	.0018	.0021	.0024	.0026	.0032	.0042	.0
	Nickel-based super alloys Hastalloy, Waspalloy 15-30 HRc	Peripheral -Rough	1.500 x D	.200 x D	270	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0019	.0021	.0026	.0034	.0
		Peripheral -Finish	2.000 x D	.015 x D	280	.0005	.0007	.0009	.0011	.0014	.0016	.0018	.0020	.0023	.0027	.0036	.0
		Peripheral -HEM	2.000 x D	.070 x D	300	.0016	.0024	.0032	.0039	.0047	.0055	.0063	.0071	.0079	.0095	.0126	.0
		Slotting -Traditional	.500 x D	1.000 x D	225	.0005	.0007	.0010	.0012	.0014	.0017	.0019	.0021	.0024	.0029	.0038	.0
		Rough Facing	.300 x D	.700 x D	297	.0004	.0006	.0008	.0010	.0011	.0013	.0015	.0017	.0019	.0023	.0031	.00
		Finish Facing	.020 x D	.700 x D	293	.0005	.0007	.0010	.0012	.0015	.0017	.0019	.0022	.0024	.0029	.0039	.00
		Helical Entry	2.000 x D	10 deg	270	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0019	.0021	.0026	.0034	.00
		Straight Line Ramp	.500 x D	13 deg	236	.0004	.0006	.0009	.0011	.0013	.0015	.0017	.0019	.0022	.0026	.0035	.00
		Trad. Style Pocket	.500 x D	.550 x D	225	.0005	.0007	.0010	.0012	.0014	.0017	.0019	.0021	.0024	.0029	.0038	.00
		Peripheral -Rough	1.250 x D	.200 x D	80	.0004	.0005	.0007	.0009	.0011	.0012	.0014	.0016	.0018	.0021	.0028	.0
		Peripheral -Finish	2.000 x D	.015 x D	95	.0009	.0013	.0018	.0022	.0026	.0031	.0035	.0039	.0044	.0053	.0070	.0
	Nickel	Peripheral -HEM	2.000 x D	.060 x D	95	.0023	.0035	.0047	.0058	.0070	.0081	.0093	.0105	.0116	.0140	.0186	.0
	Chromium- based	Slotting -Traditional	.500 x D	1.000 x D	85	.0004	.0006	.0008	.0009	.0011	.0013	.0015	.0017	.0019	.0023	.0030	.0
	super alloys	Rough Facing	.300 x D	.700 x D	88	.0003	.0005	.0006	.0008	.0009	.0011	.0013	.0014	.0016	.0019	.0025	.0
	Inconel 718, Rene 88	Finish Facing	.020 x D	.650 x D	92	.0007	.0011	.0014	.0018	.0022	.0025	.0029	.0032	.0036	.0043	.0057	.0
	10-25 HRc	Helical Entry	1.000 x D	8 deg	106	.0004	.0005	.0007	.0009	.0011	.0012	.0014	.0016	.0018	.0021	.0028	.00
		Straight Line Ramp	.375 x D	6 deg	88	.0004	.0005	.0007	.0009	.0011	.0013	.0015	.0016	.0018	.0022	.0029	.0
		Trad. Style Pocket	.500 x D	.500 x D	85	.0004	.0006	.0008	.0009	.0011	.0013	.0015	.0017	.0019	.0023	.0030	.0
		Peripheral -Rough	2.000 x D	.490 x D	750	.0015	.0023	.0030	.0038	.0045	.0053	.0060	.0068	.0075	.0090	.0120	.0
		Peripheral -Finish	3.000 x D	.020 x D	800	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0
		Peripheral -HEM	2.000 x D	.250 x D	750	.0020	.0030	.0040	.0050	.0060	.0070	.0080	.0090	.0100	.0120	.0160	.0.
	Aluminum alleus	Slotting -Traditional	1.750 x D	1.000 x D	700	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0
	Aluminum alloys O-T6	Rough Facing	.375 x D	.700 x D	825	.0013	.0019	.0026	.0032	.0038	.0045	.0051	.0057	.0064	.0077	.0102	.0
N	2024, 6061, 7075	Finish Facing	.020 x D	.700 x D	880	.0006	.0010	.0013	.0016	.0019	.0022	.0026	.0029	.0032	.0038	.0051	.0
		Helical Entry	2.000 x D	25 deg	850	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.0030	.0036	.0048	.0
		Straight Line Ramp	1.750 x D	18 deg	875	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.0030	.0036	.0047	.00
		Trad. Style Pocket	1.750 x D	.450 x D	700	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.00
		*		1													



ISO			Axial	Radial	Speed		Feed Rate Per Tooth (IPT)											
Code	Work Material	Type of Cut	DOC	DOC	(SFM)	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4		1-1/4	
		Peripheral -Rough	2.000 x D	.490 x D	730	.0013	.0019	.0025	.0031	.0038	.0044	.0050	.0056	.0063	.0075	.0100	.0125	
		Peripheral -Finish	2.000 x D	.020 x D	775	.0007	.0011	.0015	.0018	.0022	.0025	.0029	.0033	.0036	.0044	.0058	.0073	
		Peripheral -HEM	2.000 x D	.250 x D	730	.0018	.0026	.0035	.0044	.0053	.0061	.0070	.0079	.0088	.0105	.0140	.0175	
	High-silicon aluminum	Slotting -Traditional	1.750 x D	1.000 x D	650	.0007	.0011	.0014	.0018	.0021	.0025	.0028	.0032	.0035	.0042	.0056	.0070	
	alloys	Rough Facing	.375 x D	.700 x D	803	.0011	.0016	.0021	.0027	.0032	.0037	.0043	.0048	.0053	.0064	.0085	.0106	
	A380, A390 45-75 Bhn	Finish Facing	.020 x D	.700 x D	853	.0006	.0009	.0012	.0015	.0018	.0022	.0025	.0028	.0031	.0037	.0049	.0062	
	457551111	Helical Entry	2.000 x D	20 deg	845	.0006	.0008	.0011	.0014	.0017	.0020	.0022	.0025	.0028	.0034	.0045	.0056	
		Straight Line Ramp	1.750 x D	18 deg	748	.0006	.0009	.0011	.0014	.0017	.0020	.0023	.0026	.0028	.0034	.0045	.0057	
		Trad. Style Pocket	1.750 x D	.450 x D	650	.0007	.0011	.0014	.0018	.0021	.0025	.0028	.0032	.0035	.0042	.0056	.0070	
		Peripheral -Rough	2.000 x D	.490 x D	750	.0015	.0023	.0030	.0038	.0045	.0053	.0060	.0068	.0075	.0090	.0120	.0150	
		Peripheral -Finish	2.000 x D	.020 x D	800	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0075	
		Peripheral -HEM	2.000 x D	.250 x D	750	.0020	.0030	.0040	.0050	.0060	.0070	.0080	.0090	.0100	.0120	.0160	.0200	
	Magnesium	Slotting -Traditional	1.750 x D	1.000 x D	700	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0075	
	alloys	Rough Facing	.375 x D	.700 x D	825	.0013	.0019	.0026	.0032	.0038	.0045	.0051	.0057	.0064	.0077	.0102	.0128	
	47-140 Bhn	Finish Facing	.020 x D	.700 x D	880	.0006	.0010	.0013	.0016	.0019	.0022	.0026	.0029	.0032	.0038	.0051	.0064	
		Helical Entry	2.000 x D	25 deg	910	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.0030	.0036	.0048	.0060	
		Straight Line Ramp	1.750 x D	18 deg	875	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.0030	.0036	.0047	.0059	
		Trad. Style Pocket	1.750 x D	.450 x D	700	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0075	
	Copper, brass 111-170 Bhn	Peripheral -Rough	2.000 x D	.350 x D	400	.0008	.0011	.0015	.0019	.0023	.0026	.0030	.0034	.0038	.0045	.0060	.0075	
		Peripheral -Finish	2.000 x D	.015 x D	400	.0006	.0009	.0013	.0016	.0019	.0022	.0025	.0028	.0031	.0038	.0050	.0063	
		Peripheral -HEM	2.000 x D	.250 x D	600	.0013	.0019	.0025	.0031	.0038	.0044	.0050	.0056	.0063	.0075	.0100	.0125	
		Slotting -Traditional	1.500 x D	1.000 x D	375	.0008	.0012	.0016	.0019	.0023	.0027	.0031	.0035	.0039	.0047	.0062	.0078	
N		Rough Facing	.375 x D	.700 x D	440	.0007	.0010	.0014	.0017	.0021	.0024	.0028	.0031	.0035	.0041	.0055	.0069	
		Finish Facing	.020 x D	.700 x D	440	.0006	.0008	.0011	.0014	.0017	.0020	.0023	.0025	.0028	.0034	.0045	.0056	
		Helical Entry	2.000 x D	18 deg	450	.0008	.0012	.0015	.0019	.0023	.0027	.0031	.0035	.0038	.0046	.0061	.0077	
		Straight Line Ramp	1.500 x D	16 deg	388	.0007	.0011	.0015	.0018	.0022	.0026	.0029	.0033	.0037	.0044	.0059	.0074	
		Trad. Style Pocket	1.500 x D	.625 x D	375	.0008	.0012	.0016	.0019	.0023	.0027	.0031	.0035	.0039	.0047	.0062	.0078	
		Peripheral -Rough	2.000 x D	.350 x D	390	.0007	.0011	.0014	.0018	.0021	.0025	.0028	.0032	.0035	.0042	.0056	.0070	
		Peripheral -Finish	2.000 x D	.015 x D	395	.0006	.0009	.0012	.0015	.0018	.0021	.0024	.0027	.0030	.0036	.0048	.0060	
		Peripheral -HEM	2.000 x D	.200 x D	490	.0012	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0060	.0072	.0096	.0120	
	Buones	Slotting -Traditional	1.500 x D	1.000 x D	365	.0008	.0012	.0016	.0019	.0023	.0027	.0031	.0035	.0039	.0047	.0062	.0078	
	Bronze 111-201 Bhn	Rough Facing	.375 x D	.700 x D	429	.0007	.0010	.0013	.0017	.0020	.0023	.0027	.0030	.0033	.0040	.0053	.0067	
		Finish Facing	.020 x D	.700 x D	435	.0006	.0008	.0011	.0014	.0017	.0019	.0022	.0025	.0028	.0033	.0044	.0055	
		Helical Entry	2.000 x D	18 deg	438	.0008	.0012	.0016	.0019	.0023	.0027	.0031	.0035	.0039	.0047	.0062	.0078	
		Straight Line Ramp	1.500 x D	16 deg	374	.0007	.0011	.0015	.0018	.0022	.0026	.0029	.0033	.0037	.0044	.0059	.0074	
		Trad. Style Pocket	1.500 x D	.625 x D	365	.0008	.0012	.0016	.0019	.0023	.0027	.0031	.0035	.0039	.0047	.0062	.0078	
		Peripheral -Rough	2.000 x D	.490 x D	650	.0010	.0015	.0020	.0025	.0030	.0035	.0040	.0045	.0050	.0060	.0080	.0100	
		Peripheral -Finish	2.000 x D	.020 x D	500	.0008	.0012	.0016	.0019	.0023	.0027	.0031	.0035	.0039	.0047	.0062	.0078	
		Peripheral -HEM	2.000 x D	.250 x D	700	.0013	.0020	.0026	.0033	.0039	.0046	.0052	.0059	.0065	.0078	.0104	.0130	
	Composites,	Slotting -Traditional	1.750 x D	1.000 x D	655	.0010	.0015	.0020	.0025	.0030	.0035	.0040	.0045	.0050	.0060	.0080	.0100	
	plastics,	Rough Facing	.375 x D	.700 x D	715	.0008	.0012	.0016	.0020	.0023	.0027	.0031	.0035	.0039	.0047	.0062	.0078	
	fiberglass	Finish Facing	.020 x D	.700 x D	550	.0007	.0011	.0014	.0018	.0021	.0025	.0029	.0032	.0036	.0043	.0057	.0071	
		Helical Entry	2.000 x D	20 deg	786	.0010	.0015	.0020	.0025	.0030	.0035	.0040	.0045	.0050	.0060	.0080	.0100	
		Straight Line Ramp	1.750 x D	18 deg	671	.0010	.0014	.0019	.0024	.0029	.0033	.0038	.0043	.0048	.0057	.0076	.0095	
		Trad. Style Pocket	1.750 x D	.625 x D	655	.0010	.0015	.0020	.0025	.0030	.0035	.0040	.0045	.0050	.0060	.0080	.0100	