

MATERIAL	Hardness: ≤ 28 Rc (≤ 271 HBn)															
	SFM	Chip Load (IPT) by Dia			Depth of Cut		Chip Load (IPT) by Cutter Dia						Depth of Cut			
		0.015	0.031	0.047	Radial	Axial	0.062	0.078	0.093	0.125	0.187	0.250	0.375	0.500	Radial	Axial
ALUMINIUM ALLOYS																
Casting (2xx, 5xx, 7xx, 8xx)	750	Slotting	.00013	.00027	.00040	1 x Dia	.07 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	1 x Dia .18 x Dia
		Roughing	.00016	.00033	.00051	.28 x Dia	.30 x Dia	.00058	.00073	.00087	.00117	.00175	.00234	.00351	.00468	.55 x Dia .30 x Dia
Wrought (1xx, 2xx, 3xx, 5xxx, 6xxx, 7xx, 8xxx)	1000	Finishing	.00027	.00056	.00085	.05 x Dia	3 x Dia	.00097	.00122	.00145	.00196	.00293	.00391	.00587	.00782	.10 x Dia 3 x Dia
Casting - 3%-5% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	750	Slotting	.00012	.00024	.00036	1 x Dia	.07 x Dia	.00042	.00053	.00063	.00084	.00126	.00168	.00252	.00337	1 x Dia .18 x Dia
Casting - 5%-8% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	700															
Casting - 8%-12% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	650	Roughing	.00015	.00030	.00045	.28 x Dia	.30 x Dia	.00052	.00066	.00078	.00105	.00157	.00210	.00316	.00421	.55 x Dia .30 x Dia
Casting - 12%-18% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	475															
Wrought - 5%-8% Si (4xxx)	1000	Finishing	.00024	.00050	.00076	.05 x Dia	3 x Dia	.00087	.00110	.00131	.00176	.00263	.00352	.00528	.00704	.10 x Dia 3 x Dia
Wrought - 8%-12% Si (4xxx)	800															
MAGNESIUM ALLOYS	1500	Slotting	.00013	.00027	.00040	1 x Dia	.07 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	1 x Dia .18 x Dia
		Roughing	.00016	.00033	.00051	.28 x Dia	.30 x Dia	.00058	.00073	.00087	.00117	.00175	.00234	.00351	.00468	.55 x Dia .30 x Dia
ZINC ALLOYS	800	Finishing	.00027	.00056	.00085	.05 x Dia	3 x Dia	.00097	.00122	.00145	.00196	.00293	.00391	.00587	.00782	.10 x Dia 3 x Dia
COPPER ALLOYS																
High Coppers - 90%+ (C1xxxx)	225	Slotting	.00010	.00021	.00032	1 x Dia	.07 x Dia	.00037	.00047	.00056	.00075	.00112	.00150	.00224	.00299	1 x Dia .18 x Dia
Brass (Copper Zinc alloys, C2xxxx, C3xxxx, C4xxxx, C66400-C69800)	500															
Phosphor Bronzes (Copper Tin alloys, C5xxxx)	225															
Aluminum Bronzes (Copper Aluminum alloys, C60600-C64200)	500	Roughing	.00013	.00027	.00040	.28 x Dia	.30 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	.55 x Dia .30 x Dia
Silicon Bronzes (Copper Silicon alloys, C64700-C66100)	500															
Copper Nickels, Nickel Silvers (Copper Nickel alloys, C7xxxx)	225															
Cast Copper Alloys (C83300-C86200, C86400-C87500, C92200-C95800, C97300-C97800, C99400-C99700)	550	Finishing	.00022	.00045	.00068	.05 x Dia	3 x Dia	.00078	.00098	.00116	.00156	.00234	.00313	.00469	.00626	.10 x Dia 3 x Dia

Speeds & Feeds

Characteristics: 8x-20x Reach Multiple, 2 Flutes

Please note:

If you require additional information, Micro 100 has a team of technical experts available to assist you through even the most challenging applications. Please contact us at **800-421-8065** or **micro100tech@harveyperformance.com**.

WARNING: Cutting tools may shatter under improper use. Government regulations require use of safety glasses and other appropriate safety equipment in the vicinity of use.

MATERIAL		Hardness: 29-37 Rc (279-344 HBn)																
		SFM	Chip Load (IPT) by Dia			Depth of Cut		Chip Load (IPT) by Cutter Dia						Depth of Cut				
			0.015	0.031	0.047	Radial	Axial	0.062	0.078	0.093	0.125	0.167	0.250	0.375	0.500	Radial	Axial	
CARBON STEELS		600	Slotting	.00004	.00009	.00014	1 x Dia	.07 x Dia	.00016	.00020	.00024	.00032	.00048	.00064	.00096	.00129	1 x Dia	.18 x Dia
Free-Machining/Low Carbon steels, 10xx - 1029 & all 10Lxx, 11xx - 1139 & all 11Lxx, 12xx - 1215 & all 12Lxx			Roughing	.00005	.00010	.00016	28 x Dia	.30 x Dia	.00018	.00023	.00027	.00036	.00054	.00072	.00108	.00145	.55 x Dia	.30 x Dia
			Finishing	.00008	.00017	.00026	.05 x Dia	3 x Dia	.00030	.00038	.00045	.00061	.00091	.00122	.00183	.00245	.10 x Dia	3 x Dia
1030 - 1095, 1140 - 1151, 13xx, 15xx, 2xxx, 3xxx, 4xxx & 4xLxx, 5xxx & 5xLxx, 50xxx & 50Lxx, 51xxx & 51Lxx, 52xxx & 52Lxx, 6xxx, 8xxx, 9xxx		200	Slotting	.00004	.00008	.00013	1 x Dia	.07 x Dia	.00015	.00018	.00022	.00029	.00044	.00059	.00088	.00118	1 x Dia	.18 x Dia
			Roughing	.00005	.00009	.00014	28 x Dia	.30 x Dia	.00016	.00021	.00025	.00033	.00049	.00066	.00099	.00132	.55 x Dia	.30 x Dia
			Finishing	.00008	.00016	.00024	.05 x Dia	3 x Dia	.00028	.00035	.00042	.00056	.00084	.00112	.00168	.00224	.10 x Dia	3 x Dia
STAINLESS STEELS		450	Slotting	.00004	.00009	.00014	1 x Dia	.07 x Dia	.00016	.00020	.00024	.00032	.00048	.00064	.00096	.00129	1 x Dia	.18 x Dia
203 EZ, 303 (all types), 416, 416Se, 416 Plus X, 420F, 420FSe, 430F, 430FSe, 440F, 440FSe			Roughing	.00005	.00010	.00016	28 x Dia	.30 x Dia	.00018	.00023	.00027	.00036	.00054	.00072	.00108	.00145	.55 x Dia	.30 x Dia
			Finishing	.00008	.00017	.00026	.05 x Dia	3 x Dia	.00030	.00038	.00045	.00061	.00091	.00122	.00183	.00245	.10 x Dia	3 x Dia
201, 202, 203, 205, 301, 302, 304, 304L, 308, 309, 310, 314, 316, 316L, 317, 321, 329, 330, 347, 348, 385, 403, 405, 409, 410, 413, 420, 429, 430, 434, 436, 442, 446, 501, 502		200	Slotting	.00004	.00008	.00013	1 x Dia	.07 x Dia	.00015	.00018	.00022	.00029	.00044	.00059	.00088	.00118	1 x Dia	.18 x Dia
			Roughing	.00005	.00009	.00014	28 x Dia	.30 x Dia	.00016	.00021	.00025	.00033	.00049	.00066	.00099	.00132	.55 x Dia	.30 x Dia
			Finishing	.00008	.00016	.00024	.05 x Dia	3 x Dia	.00028	.00035	.00042	.00056	.00084	.00112	.00168	.00224	.10 x Dia	3 x Dia
414, 431, 440A, 440B, 440C, 13-8, 15-5, 15-7, 17-4, 17-7		150	Slotting	.00003	.00005	.00008	1 x Dia	.07 x Dia	.00009	.00011	.00014	.00018	.00027	.00037	.00055	.00073	1 x Dia	.18 x Dia
			Roughing	.00003	.00006	.00009	28 x Dia	.30 x Dia	.00010	.00013	.00015	.00021	.00031	.00041	.00062	.00083	.55 x Dia	.30 x Dia
			Finishing	.00005	.00010	.00015	.05 x Dia	3 x Dia	.00017	.00022	.00026	.00035	.00052	.00070	.00105	.00140	.10 x Dia	3 x Dia
TOOL STEELS		200	Slotting	.00004	.00008	.00013	1 x Dia	.07 x Dia	.00015	.00018	.00022	.00029	.00044	.00059	.00088	.00118	1 x Dia	.18 x Dia
A, L, O, P, W series			Roughing	.00005	.00009	.00014	28 x Dia	.30 x Dia	.00016	.00021	.00025	.00033	.00049	.00066	.00099	.00132	.55 x Dia	.30 x Dia
			Finishing	.00008	.00016	.00024	.05 x Dia	3 x Dia	.00028	.00035	.00042	.00056	.00084	.00112	.00168	.00224	.10 x Dia	3 x Dia
D, H, M, T, S series		150	Slotting	.00003	.00005	.00008	1 x Dia	.07 x Dia	.00009	.00011	.00014	.00018	.00027	.00037	.00055	.00073	1 x Dia	.18 x Dia
			Roughing	.00003	.00006	.00009	28 x Dia	.30 x Dia	.00010	.00013	.00015	.00021	.00031	.00041	.00062	.00083	.55 x Dia	.30 x Dia
			Finishing	.00005	.00010	.00015	.05 x Dia	3 x Dia	.00017	.00022	.00026	.00035	.00052	.00070	.00105	.00140	.10 x Dia	3 x Dia
TITANIUM ALLOYS		150	Slotting	.00003	.00005	.00008	1 x Dia	.07 x Dia	.00009	.00011	.00014	.00018	.00027	.00037	.00055	.00073	1 x Dia	.18 x Dia
			Roughing	.00003	.00006	.00009	28 x Dia	.30 x Dia	.00010	.00013	.00015	.00021	.00031	.00041	.00062	.00083	.55 x Dia	.30 x Dia
			Finishing	.00005	.00010	.00015	.05 x Dia	3 x Dia	.00017	.00022	.00026	.00035	.00052	.00070	.00105	.00140	.10 x Dia	3 x Dia
HIGH TEMP ALLOYS		70	Slotting	.00003	.00005	.00008	1 x Dia	.07 x Dia	.00009	.00011	.00014	.00018	.00027	.00037	.00055	.00073	1 x Dia	.18 x Dia
Inconel, Hastelloy, Waspalloy, Monel, Nimonic, Haynes, Discovoy, Incoloy			Roughing	.00003	.00006	.00009	28 x Dia	.30 x Dia	.00010	.00013	.00015	.00021	.00031	.00041	.00062	.00083	.55 x Dia	.30 x Dia
			Finishing	.00005	.00010	.00015	.05 x Dia	3 x Dia	.00017	.00022	.00026	.00035	.00052	.00070	.00105	.00140	.10 x Dia	3 x Dia