



Speeds & Feeds

Product Table: End Mills - Corner Radius - 2 Flute - Reduced Neck
Characteristics: 8x-20x Reach Multiple, 2 Flutes
Series: MMRM-008-10, MMRM-008-16, MMRM-010-8, MMRM-015-15, MMRM-015-25, MMRM-020-30, MMRM-030-30

Please note:

All posted speed and feed parameters are suggested starting values that may be increased given optimal setup conditions. Chip loads reflect uncoated cutters and may be increased 10%-20% if coated. For ferrous materials with hardness ≤ 28 Rc, chip loads can be increased 10%-20%.

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	SFM	Hardness: ≤ 28 Rc (≤ 271 HBn)															
		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	
ALUMINUM ALLOYS	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
		Finishing	.00027	.00056	.00085	.05 x Dia	3 x Dia	.00097	.00122	.00145	.00196	.00293	.00391	.00587	.00782	.10 x Dia	3 x Dia
Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	1000	Slotting	.00012	.00024	.00036	1 x Dia	.07 x Dia	.00042	.00053	.00063	.00084	.00126	.00168	.00252	.00337	1 x Dia	.18 x Dia
		Roughing	.00015	.00030	.00045	.28 x Dia	.30 x Dia	.00052	.00066	.00078	.00105	.00157	.00210	.00316	.00421	.55 x Dia	.30 x Dia
		Finishing	.00024	.00050	.00076	.05 x Dia	3 x Dia	.00087	.00110	.00131	.00176	.00263	.00352	.00528	.00704	.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
		Roughing	.00015	.00030	.00045	.28 x Dia	.30 x Dia	.00052	.00066	.00078	.00105	.00157	.00210	.00316	.00421	.55 x Dia	.30 x Dia
		Finishing	.00024	.00050	.00076	.05 x Dia	3 x Dia	.00087	.00110	.00131	.00176	.00263	.00352	.00528	.00704	.10 x Dia	3 x Dia
Casting - 5%-8% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	700	Slotting	.00012	.00024	.00036	1 x Dia	.07 x Dia	.00042	.00053	.00063	.00084	.00126	.00168	.00252	.00337	1 x Dia	.18 x Dia
		Roughing	.00015	.00030	.00045	.28 x Dia	.30 x Dia	.00052	.00066	.00078	.00105	.00157	.00210	.00316	.00421	.55 x Dia	.30 x Dia
		Finishing	.00024	.00050	.00076	.05 x Dia	3 x Dia	.00087	.00110	.00131	.00176	.00263	.00352	.00528	.00704	.10 x Dia	3 x Dia
Casting - 8%-12% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	650	Slotting	.00012	.00024	.00036	1 x Dia	.07 x Dia	.00042	.00053	.00063	.00084	.00126	.00168	.00252	.00337	1 x Dia	.18 x Dia
		Roughing	.00015	.00030	.00045	.28 x Dia	.30 x Dia	.00052	.00066	.00078	.00105	.00157	.00210	.00316	.00421	.55 x Dia	.30 x Dia
		Finishing	.00024	.00050	.00076	.05 x Dia	3 x Dia	.00087	.00110	.00131	.00176	.00263	.00352	.00528	.00704	.10 x Dia	3 x Dia
Casting - 12%-16% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	475	Slotting	.00012	.00024	.00036	1 x Dia	.07 x Dia	.00042	.00053	.00063	.00084	.00126	.00168	.00252	.00337	1 x Dia	.18 x Dia
		Roughing	.00015	.00030	.00045	.28 x Dia	.30 x Dia	.00052	.00066	.00078	.00105	.00157	.00210	.00316	.00421	.55 x Dia	.30 x Dia
		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 - 5%-8% Si (4xxx)	1000	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
		Finishing	.00027	.00056	.00085	.05 x Dia	3 x Dia	.00097	.00122	.00145	.00196	.00293	.00391	.00587	.00782	.10 x Dia	3 x Dia
Wrought - 8%-12% Si (4xxx)	800	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
		Finishing	.00027	.00056	.00085	.05 x Dia	3 x Dia	.00097	.00122	.00145	.00196	.00293	.00391	.00587	.00782	.10 x Dia	3 x Dia
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
		Finishing	.00027	.00056	.00085	.05 x Dia	3 x Dia	.00097	.00122	.00145	.00196	.00293	.00391	.00587	.00782	.10 x Dia	3 x Dia
ZINC ALLOYS	800	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
		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	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
		Roughing	.00013	.00027	.00040	.28 x Dia	.30 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	.55 x Dia	.30 x Dia
		Finishing	.00022	.00045	.00068	.05 x Dia	3 x Dia	.00078	.00098	.00116	.00156	.00234	.00313	.00469	.00626	.10 x Dia	3 x Dia
High Coppers - 90%+ (C1xxx)	500	Slotting	.00010	.00021	.00032	1 x Dia	.07 x Dia	.00037	.00047	.00056	.00075	.00112	.00150	.00224	.00299	1 x Dia	.18 x Dia
		Roughing	.00013	.00027	.00040	.28 x Dia	.30 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	.55 x Dia	.30 x Dia
		Finishing	.00022	.00045	.00068	.05 x Dia	3 x Dia	.00078	.00098	.00116	.00156	.00234	.00313	.00469	.00626	.10 x Dia	3 x Dia
Brass (Copper Zinc alloys, C2xxx, C3xxx, C4xxx, C6400-C69800)	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
		Roughing	.00013	.00027	.00040	.28 x Dia	.30 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	.55 x Dia	.30 x Dia
		Finishing	.00022	.00045	.00068	.05 x Dia	3 x Dia	.00078	.00098	.00116	.00156	.00234	.00313	.00469	.00626	.10 x Dia	3 x Dia
Phosphor Bronzes (Copper Tin alloys, C5xxx)	500	Slotting	.00010	.00021	.00032	1 x Dia	.07 x Dia	.00037	.00047	.00056	.00075	.00112	.00150	.00224	.00299	1 x Dia	.18 x Dia
		Roughing	.00013	.00027	.00040	.28 x Dia	.30 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	.55 x Dia	.30 x Dia
		Finishing	.00022	.00045	.00068	.05 x Dia	3 x Dia	.00078	.00098	.00116	.00156	.00234	.00313	.00469	.00626	.10 x Dia	3 x Dia
Aluminum Bronzes (Copper Aluminum alloys, C69800-C84200)	500	Slotting	.00010	.00021	.00032	1 x Dia	.07 x Dia	.00037	.00047	.00056	.00075	.00112	.00150	.00224	.00299	1 x Dia	.18 x Dia
		Roughing	.00013	.00027	.00040	.28 x Dia	.30 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	.55 x Dia	.30 x Dia
		Finishing	.00022	.00045	.00068	.05 x Dia	3 x Dia	.00078	.00098	.00116	.00156	.00234	.00313	.00469	.00626	.10 x Dia	3 x Dia
Silicon Bronzes (Copper Silicon alloys, C64700-C68100)	500	Slotting	.00010	.00021	.00032	1 x Dia	.07 x Dia	.00037	.00047	.00056	.00075	.00112	.00150	.00224	.00299	1 x Dia	.18 x Dia
		Roughing	.00013	.00027	.00040	.28 x Dia	.30 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	.55 x Dia	.30 x Dia
		Finishing	.00022	.00045	.00068	.05 x Dia	3 x Dia	.00078	.00098	.00116	.00156	.00234	.00313	.00469	.00626	.10 x Dia	3 x Dia
Copper Nickels, Nickel Silvers (Copper Nickel alloys, C7xxx)	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
		Roughing	.00013	.00027	.00040	.28 x Dia	.30 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	.55 x Dia	.30 x Dia
		Finishing	.00022	.00045	.00068	.05 x Dia	3 x Dia	.00078	.00098	.00116	.00156	.00234	.00313	.00469	.00626	.10 x Dia	3 x Dia
Cast Copper Alloys (C83300-C86200, C86400-C87900, C92200-C95800, C97300-C97800, C99400-C99700)	550	Slotting	.00010	.00021	.00032	1 x Dia	.07 x Dia	.00037	.00047	.00056	.00075	.00112	.00150	.00224	.00299	1 x Dia	.18 x Dia
		Roughing	.00013	.00027	.00040	.28 x Dia	.30 x Dia	.00046	.00058	.00070	.00094	.00140	.00187	.00281	.00374	.55 x Dia	.30 x Dia
		Finishing	.00022	.00045	.00068	.05 x Dia	3 x Dia	.00078	.00098	.00116	.00156	.00234	.00313	.00469	.00626	.10 x Dia	3 x Dia

MATERIAL	SFM	Hardness: 29-37 Rc (279-344 HBn)															
		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	
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
		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, 20xx, 30xx, 40xx & 4Lxx, 50xx & 5Lxx, 60xx & 6Lxx, 51xx & 51Lxx, 52xx & 52Lxx, 60xx, 80xx, 90xx	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										