

## AMP Series Cutting Data Recommendations



ISO Grade	Material	SFM Range	Application	Recommended Starting Parameters											
				Rad DOC % of Dia.	Axial DOC x Dia.	SFM Starting	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1
N	Aluminum	500 - 1500	Full Slotting	100%	1x	1000	.0006	.0008	.0010	.0012	.0018	.0022	.0027	.0034	.0042
			Heavy Profile	33%	1x	1200	.0011	.0015	.0020	.0026	.0032	.0042	.0054	.0064	.0085
			HEM Profile	15%	2x	1200	.0015	.0020	.0027	.0035	.0043	.0056	.0071	.0084	.0112
			Finishing	5%	2x	1000	.0024	.0033	.0044	.0057	.0070	.0092	.0116	.0137	.0183
	Brass / Bronze	500 - 900	Full Slotting	100%	1x	600	.0005	.0007	.0008	.0010	.0014	.0016	.0020	.0024	.0032
			Heavy Profile	25%	1x	700	.0011	.0013	.0019	.0022	.0029	.0038	.0047	.0057	.0075
			HEM Profile	15%	2x	700	.0013	.0016	.0023	.0027	.0035	.0047	.0057	.0069	.0090
			Finishing	5%	2x	600	.0022	.0026	.0037	.0044	.0057	.0076	.0094	.0113	.0148
	Copper Alloys	700 - 1000	Full Slotting	100%	1x	500	.0006	.0007	.0008	.0009	.0010	.0012	.0014	.0016	.0020
			Heavy Profile	25%	1x	600	.0012	.0014	.0016	.0019	.0021	.0025	.0029	.0033	.0037
			HEM Profile	15%	2x	600	.0015	.0017	.0020	.0023	.0026	.0031	.0035	.0040	.0045
			Finishing	5%	2x	500	.0024	.0028	.0033	.0037	.0042	.0050	.0057	.0065	.0074
	Magnesium	500 - 900	Full Slotting	100%	1x	500	.0006	.0007	.0008	.0009	.0010	.0012	.0014	.0016	.0020
			Heavy Profile	33%	1x	700	.0011	.0015	.0020	.0026	.0032	.0042	.0054	.0064	.0085
			HEM Profile	15%	2x	700	.0015	.0020	.0027	.0035	.0043	.0056	.0071	.0084	.0112
			Finishing	5%	2x	500	.0024	.0033	.0044	.0057	.0070	.0092	.0116	.0137	.0183

### Remember To Check Horsepower Requirements For Your Cut

Required Motor Horsepower = (Feed Rate) x Axial DOC x Radial DoC x Unit Power x Machine Efficiency %

Unit Power For Aluminum Alloys  $\approx$  0.32

Unit Power For Brass / Bronze Alloys  $\approx$  0.64

Unit Power For Copper Alloys  $\approx$  1

Unit Power For Magnesium Alloys  $\approx$  0.16

Machine Efficiency %  $\approx$  0.8

## AF 2 & 3 Flute Series Non-Coolant Through Cutting Data Recommendations

ISO Grade	Material	Unit Power	SFM Range	Application	Recommended Starting Parameters											
					Rad DOC % of DIA	Axial DOC x DIA	SFM Starting	Chip Load Per Tooth								
								1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1
N	Aluminum	0.32	500 - 1500	Full Slotting	100%	1x	1000	.0015	.0020	.0027	.0035	.0043	.0056	.0070	.0085	.0112
				Heavy Profile	33%	1x	1200	.0016	.0021	.0029	.0037	.0046	.0060	.0074	.0090	.0119
				HEM* Profile	15%	2x	1200	.0021	.0028	.0038	.0049	.0060	.0078	.0098	.0119	.0157
				Finishing	5%	2x	1000	.0034	.0046	.0062	.0080	.0099	.0128	.0161	.0195	.0257
	Brass / Bronze	0.64	500 - 900	Full Slotting	100%	1x	600	.0013	.0016	.0023	.0027	.0034	.0046	.0057	.0069	.0091
				Heavy Profile	25%	1x	700	.0015	.0018	.0027	.0031	.0039	.0053	.0066	.0080	.0105
				HEM* Profile	15%	2x	700	.0018	.0022	.0032	.0038	.0048	.0064	.0080	.0097	.0127
				Finishing	5%	2x	600	.0030	.0037	.0053	.0062	.0078	.0106	.0131	.0158	.0209
	Copper Alloys	1	700 - 1000	Full Slotting	100%	1x	500	.0014	.0017	.0020	.0023	.0026	.0030	.0035	.0040	.0045
				Heavy Profile	25%	1x	600	.0016	.0020	.0023	.0027	.0030	.0035	.0040	.0046	.0052
				HEM* Profile	15%	2x	600	.0020	.0024	.0028	.0032	.0036	.0042	.0049	.0056	.0063
				Finishing	5%	2x	500	.0032	.0039	.0046	.0053	.0060	.0069	.0080	.0092	.0103
	Magnesium	0.16	500 - 900	Full Slotting	100%	1x	500	.0016	.0019	.0028	.0034	.0042	.0056	.0070	.0085	.0112
				Heavy Profile	33%	1x	700	.0017	.0020	.0030	.0036	.0045	.0060	.0074	.0090	.0119
				HEM* Profile	15%	2x	700	.0022	.0027	.0039	.0048	.0059	.0078	.0098	.0119	.0157
				Finishing	5%	2x	500	.0037	.0044	.0064	.0078	.0096	.0128	.0161	.0195	.0257