



Speeds & Feeds

Product Table: Variable Helix End Mills for Aluminum Alloys - Chipbreaker Roughers - Square
Characteristics: 5x Length of Cut, 3 Flute, Chipbreaker
Series: 6959xx, 6960xx, 6959xx-C8, 6960xx-C8

Cutter Series	MATERIAL	SFM	Chip Load (IPT) By Cutter Diameter												Depth of Cut		
			0.015	0.031	0.047	0.062	0.078	0.093	0.125	0.187	0.250	0.312	0.375	0.500	Radial	Axial	
Uncoated	ALUMINUM ALLOYS																
	Casting (2xx, 5xx, 7xx, 8xx)	750	Slotting	.00015	.00032	.00048	.00063	.00079	.00095	.00127	.00190	.00254	.00366	.00440	.00587	1x Dia	.35x Dia
	Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	1000	Roughing	.00018	.00037	.00056	.00074	.00092	.00110	.00148	.00222	.00296	.00427	.00514	.00685	.35x Dia	.5x - 1x Dia
	MAGNESIUM ALLOYS	1500	Max	.00020	.00042	.00063	.00083	.00105	.00125	.00167	.00251	.00335	.00483	.00580	.00774	-	-
	ZINC ALLOYS	800															
	COPPER ALLOYS																
	High Coppers - 90%+ (C1xxxx)	225	Slotting	.00012	.00025	.00038	.00050	.00063	.00076	.00102	.00152	.00203	.00293	.00352	.00470	1x Dia	.35x Dia
	Brass (Copper Zinc alloys, C2xxxx, C3xxxx, C4xxxx, C66400-C69800)	500	Roughing	.00014	.00029	.00045	.00059	.00074	.00088	.00119	.00177	.00237	.00342	.00411	.00548	.35x Dia	.5x - 1x Dia
	Phosphor Bronzes (Copper Tin alloys, C5xxxx)	225															
	Aluminum Bronzes (Copper Aluminum alloys, C60600-C64200)	500															
Silicon Bronzes (Copper Silicon alloys, C64700-C66100)	500																
Copper Nickels, Nickel Silvers (Copper Nickel alloys, C7xxxx)	225																
Cast Copper Alloys (C83300-C86200, C86400-C87900, C92200-C95800, C97300-C97800, C99400-C99700)	550	Max	.00016	.00033	.00050	.00066	.00084	.00100	.00134	.00200	.00268	.00386	.00464	.00619	-	-	
TiB2	ALUMINUM ALLOYS																
	Casting (2xx, 5xx, 7xx, 8xx)	1000	Slotting	.00020	.00041	.00062	.00082	.00103	.00123	.00165	.00247	.00330	.00476	.00572	.00763	1x Dia	.35x Dia
	Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	1400	Roughing	.00023	.00048	.00072	.00096	.00120	.00143	.00193	.00288	.00385	.00556	.00668	.00890	.35x Dia	.5x - 1x Dia
	MAGNESIUM ALLOYS	2000	Max	.00026	.00054	.00082	.00108	.00136	.00162	.00218	.00326	.00435	.00628	.00754	.01006	-	-
ZINC ALLOYS	1100																

Please note:
All posted speed and feed parameters are suggested starting values that may be increased given optimal setup conditions. If less than minimum Axial or Radial DOC values are used, increased feed rates are possible. If greater than maximum Axial or Radial DOC values are used, decreased feed rates may be needed.
If you require additional information, Harvey Tool has a team of technical experts available to assist you through even the most challenging applications. Please contact us at **800-645-5609** or **Harveytech@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.