



Speeds & Feeds

Product Table: Variable Helix End Mills for Aluminum Alloys - Chipbreaker Roughers - Square

Characteristics: 3x Length of Cut

Series: 7690xx, 7691xx, 7690xx-C8, 7691xx-C8

Cutter Series	MATERIAL	SFM		Chip Load (IPT) By Cutter Diameter									Depth of Cut	
				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	.00090	.00113	.00135	.00182	.00272	.00363	.00523	.00629	.00839	1x Dia	.5x Dia
	Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	1000	Roughing	.00105	.00132	.00158	.00212	.00317	.00424	.00610	.00734	.00978	.5x Dia	.5x - 1x Dia
	MAGNESIUM ALLOYS	1500	Max	.00119	.00149	.00178	.00239	.00358	.00479	.00690	.00829	.01105	-	-
	ZINC ALLOYS	800												
	COPPER ALLOYS													
	High Coppers - 90%+ (C1xxxx)	225	Slotting	.00072	.00091	.00108	.00145	.00217	.00290	.00419	.00503	.00671	1x Dia	.5x Dia
	Brass (Copper Zinc alloys, C2xxxx, C3xxxx, C4xxxx, C66400-C69800)	500												
	Phosphor Bronzes (Copper Tin alloys, C5xxxx)	225	Roughing	.00084	.00106	.00126	.00169	.00253	.00339	.00488	.00587	.00783	.5x Dia	.5x - 1x Dia
	Aluminum Bronzes (Copper Aluminum alloys, C60600-C64200)	500												
Silicon Bronzes (Copper Silicon alloys, C64700-C66100)	500	Max	.00095	.00119	.00142	.00191	.00286	.00383	.00552	.00663	.00884	-	-	
Copper Nickels, Nickel Silvers (Copper Nickel alloys, C7xxxx)	225													
Cast Copper Alloys (C83300-C86200, C86400-C87900, C92200-C95800, C97300-C97800, C99400-C99700)	550													
TiB2	ALUMINUM ALLOYS													
	Casting (2xx, 5xx, 7xx, 8xx)	1000	Slotting	.00117	.00147	.00176	.00236	.00353	.00472	.00680	.00818	.01090	1x Dia	.5x Dia
	Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	1400	Roughing	.00137	.00172	.00205	.00275	.00412	.00551	.00794	.00954	.01272	.5x Dia	.5x - 1x Dia
	MAGNESIUM ALLOYS	2000	Max	.00154	.00194	.00231	.00311	.00465	.00622	.00897	.01078	.01437	-	-
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.