HARVEY TOOL

Speeds & Feeds

Product Table: Keyseat Cutters - Square - For Non-Ferrous Materials
Characteristics: Deep Slotting (Type II), 4 Flutes
Series: 9092xx

Product notes:

Chip Loads (IPT) within table pertain to applications where the cutter is engaged on one side only and the cutter width is less than .5x diameter.
If the cutter is engaged on both sides, reduce chiploads to 50-60% of posted values.

General notes:

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 up to 15% if coated. For ferrous materials with hardness ≤ 28 Rc, chip loads can be increased 10%-20%.

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.

MATERIAL	Hardness: ≤ 28 Rc (≤ 271 HBn)																
	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	0.438	0.500	0.625	0.750	1.000	Radial	Axial
ALUMINUM ALLOYS Casting (2xx, 5xx, 7xx, 8xx)	750	.00032	.00041	.00049	.00065	.00098	.00130	.00163	.00196	.00229	.00261	.00326	.00391	.00522	.12 x Dia	Full Width
Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	1000															
Casting - 3%-5% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	750	.00029	.00037	.00044	.00059	.00088	.00117	.00147	.00176	.00206	.00235	.00294	.00352	.00470	.12 x Dia	Full Width
Casting - 5%-8% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	700															
Casting - 8%-12% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	650															
Casting - 12%-16% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	475															
Wrought - 5%-8% Si (4xxx)	1000															
Wrought - 8%-12% Si (4xxx)	800															
MAGNESIUM ALLOYS	1500	.00032	.00041	.00049	.00065	.00098	.00130	.00163	.00196	.00229	.00261	.00326	.00391	.00522	.12 x Dia	Full Width
ZINC ALLOYS	800															
COPPER ALLOYS High Coppers - 90%+ (C1xxxx)	225	.00026	.00033	.00039	.00052	.00078	.00104	.00130	.00157	.00183	.00209	.00261	.00313	.00417	.12 x Dia	Full Width
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															
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															