



Speeds & Feeds

Product Table: Dovetail Cutters - O-Ring Slotting End Mills
Characteristics: 3 Flutes
Series: 565xx

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, 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		
		0.047	0.062	0.078	0.093	0.125	0.187	0.250	0.312	0.375	0.500	Radial	Axial	
ALUMINUM ALLOYS														
Casting (2xx, 5xx, 7xx, 8xx)	750	Slotting	.00054	.00071	.00089	.00106	.00142	.00213	.00285	.00355	.00427	.00569	1 x Dia	.50 x Dia
Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	1000													
Casting - 3%-5% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	750													
Casting - 5%-8% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	700													
Casting - 8%-12% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	650	Slotting	.00048	.00064	.00080	.00095	.00128	.00192	.00256	.00320	.00384	.00512	1 x Dia	.50 x Dia
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	Slotting	.00054	.00071	.00089	.00106	.00142	.00213	.00285	.00355	.00427	.00569	1 x Dia	.50 x Dia
ZINC ALLOYS	800													
COPPER ALLOYS														
High Coppers - 90%+ (C1xxxx)	225													
Brass (Copper Zinc alloys, C2xxx, C3xxx, C4xxx, C6400-C6800)	500													
Phosphor Bronzes (Copper Tin alloys, C5xxxx)	225													
Aluminum Bronzes (Copper Aluminum alloys, C6060-C64200)	500	Slotting	.00043	.00056	.00071	.00085	.00114	.00170	.00228	.00284	.00342	.00455	1 x Dia	.50 x Dia
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													

MATERIAL	Hardness: 29-37 Rc (279-344 HBn)													
	SFM	Chip Load (IPT) By Cutter Diameter										Depth of Cut		
		0.047	0.062	0.078	0.093	0.125	0.187	0.250	0.312	0.375	0.500	Radial	Axial	
CARBON STEELS														
Free-Machining/Low Carbon steels, 10xx - 1029 & all 10Lxx, 11xx - 1139 & all 11Lxx, 12xx - 1215 & all 12Lxx	600	Slotting	.00018	.00024	.00031	.00036	.00049	.00073	.00098	.00122	.00147	.00196	1 x Dia	.50 x Dia
1030 - 1095, 1140 - 1151, 13xx, 15xx, 2xxx, 3xxx, 4xxx & 4Lxx, 5xxx & 5Lxx, 50xxx & 50Lxxx, 51xxx & 51Lxxx, 52xxx & 52Lxxx, 6xxx, 8xxx, 9xxx	200	Slotting	.00017	.00022	.00028	.00033	.00045	.00067	.00089	.00112	.00134	.00179	1 x Dia	.50 x Dia
STAINLESS STEELS														
203 EZ, 303 (all types), 416, 416Se, 416 Plus X, 420F, 420FSe, 430F, 430FSe, 440F, 440FSe	450	Slotting	.00018	.00024	.00031	.00036	.00049	.00073	.00098	.00122	.00147	.00196	1 x Dia	.50 x Dia
201, 202, 203, 205, 301, 302, 304, 304L, 308, 309, 310, 314, 316, 316L, 317, 321, 329, 330, 347, 348, 385, 403, 405, 409, 410, 413, 420, 429, 430, 434, 436, 442, 446, 501, 502	200	Slotting	.00017	.00022	.00028	.00033	.00045	.00067	.00089	.00112	.00134	.00179	1 x Dia	.50 x Dia
414, 431, 440A, 440B, 440C, 13-8, 15-5, 15-7, 17-4, 17-7	150	Slotting	.00011	.00014	.00017	.00021	.00028	.00042	.00056	.00070	.00084	.00112	1 x Dia	.50 x Dia
TOOL STEELS														
A, L, O, P, W series	200	Slotting	.00017	.00022	.00028	.00033	.00045	.00067	.00089	.00112	.00134	.00179	1 x Dia	.50 x Dia
D, H, M, T, S series	150	Slotting	.00011	.00014	.00017	.00021	.00028	.00042	.00056	.00070	.00084	.00112	1 x Dia	.50 x Dia
TITANIUM ALLOYS	150	Slotting	.00011	.00014	.00017	.00021	.00028	.00042	.00056	.00070	.00084	.00112	1 x Dia	.50 x Dia
HIGH TEMP ALLOYS														
Inconel, Hastelloy, Waspalloy, Monel, Nimonic, Haynes, Discoloy, Incoloy	70	Slotting	.00011	.00014	.00017	.00021	.00028	.00042	.00056	.00070	.00084	.00112	1 x Dia	.50 x Dia

MATERIAL	Hardness: 38-45 Rc (353-421 HBn)													
	SFM	Chip Load (IPT) By Cutter Diameter										Depth of Cut		
		0.047	0.062	0.078	0.093	0.125	0.187	0.250	0.312	0.375	0.500	Radial	Axial	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	100	Slotting	.00008	.00011	.00014	.00017	.00022	.00033	.00045	.00056	.00067	.00089	1 x Dia	.50 x Dia
	90	Slotting	.00005	.00007	.00009	.00010	.00014	.00021	.00028	.00035	.00042	.00056	1 x Dia	.50 x Dia
	100	Slotting	.00008	.00011	.00014	.00017	.00022	.00033	.00045	.00056	.00067	.00089	1 x Dia	.50 x Dia
	90	Slotting	.00005	.00007	.00009	.00010	.00014	.00021	.00028	.00035	.00042	.00056	1 x Dia	.50 x Dia
	75	Slotting	.00005	.00007	.00009	.00010	.00014	.00021	.00028	.00035	.00042	.00056	1 x Dia	.50 x Dia
	50	Slotting	.00005	.00007	.00009	.00010	.00014	.00021	.00028	.00035	.00042	.00056	1 x Dia	.50 x Dia