

MATERIAL	Hardness: ≤ 28 Rc (≤ 271 HBn)									Depth of Cut Passes	
	SFM	Chip Load (IPT) By Cutter Diameter									
		0.250	0.312	0.375	0.437	0.500	0.625	0.750	1.000		
ALUMINUM ALLOYS	750	Deburring	.00228	.00314	.00378	.00440	.00504	.00630	.00756	.01007	1
		Front/Back Chamfer	.00190	.00262	.00315	.00367	.00420	.00525	.00630	.00840	2
Castino (2xx, 5xx, 7xx, 8xx)	1000	V-Groove	.00156	.00215	.00259	.00302	.00345	.00432	.00518	.00691	3
Wrought (1xxx, 2xxx, 3xxx, 5xxx, 6xxx, 7xxx, 8xxx)	750	Deburring	.00205	.00283	.00340	.00396	.00453	.00567	.00680	.00907	1
Casting - 3%-5% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	700	Deburring	.00205	.00283	.00340	.00396	.00453	.00567	.00680	.00907	1
Casting - 5%-8% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	650	Front/Back Chamfer	.00171	.00236	.00283	.00330	.00378	.00472	.00567	.00756	2
Casting - 8%-12% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	475	Front/Back Chamfer	.00171	.00236	.00283	.00330	.00378	.00472	.00567	.00756	2
Casting - 12%-16% Si (3xx, A3xx, C3xx, 4xx, A4xx, B4xx)	1000	V-Groove	.00140	.00194	.00233	.00272	.00311	.00388	.00466	.00622	3
Wrought - 5%-8% Si (4xxx)	800	V-Groove	.00140	.00194	.00233	.00272	.00311	.00388	.00466	.00622	3
Wrought - 8%-12% Si (4xxx)	1500	Deburring	.00228	.00314	.00378	.00440	.00504	.00630	.00756	.01007	1
MAGNESIUM ALLOYS	800	Front/Back Chamfer	.00190	.00262	.00315	.00367	.00420	.00525	.00630	.00840	2
		V-Groove	.00156	.00215	.00259	.00302	.00345	.00432	.00518	.00691	3
ZINC ALLOYS	225	Deburring	.00182	.00251	.00302	.00352	.00403	.00504	.00604	.00806	1
		Front/Back Chamfer	.00182	.00251	.00302	.00352	.00403	.00504	.00604	.00806	1
COPPER ALLOYS	500	Deburring	.00182	.00251	.00302	.00352	.00403	.00504	.00604	.00806	1
		Front/Back Chamfer	.00182	.00251	.00302	.00352	.00403	.00504	.00604	.00806	1
High Coppers - 90%+ (C1xxxx)	500	Front/Back Chamfer	.00152	.00210	.00252	.00293	.00336	.00420	.00504	.00672	2
Aluminum Bronzes (Copper Aluminum alloys, C6600-C66200)	500	Front/Back Chamfer	.00152	.00210	.00252	.00293	.00336	.00420	.00504	.00672	2
Silicon Bronzes (Copper Silicon alloys, C64700-C66100)	225	Front/Back Chamfer	.00152	.00210	.00252	.00293	.00336	.00420	.00504	.00672	2
Copper Nickels, Nickel Silvers (Copper Nickel alloys, C7xxxx)	550	V-Groove	.00125	.00172	.00207	.00241	.00276	.00345	.00414	.00552	3
Cast Copper Alloys (C83300-C86200, C86400-C87900, C92200-C95800, C97300-C97800, C99400-C99700)		V-Groove	.00125	.00172	.00207	.00241	.00276	.00345	.00414	.00552	3



Product Table: Picatinny Form Cutters - Picatinny Attachment Cutters
Characteristics: 90° Included Angle
Series: 8592xx

Product notes:

- Chip Loads are given 3 ways:
 - Deburring: Generating an Edge Break of .005"-.008"
 - Front/Back Chamfer: Full chamfer generation using front or back of the cutter head
 - V-Groove: Assumes engagement on the flat, front and back of the cutter head

Depth of Cut is shown as number of radial passes with each pass resulting in a descending stepover

Chip Loads within table pertain to machining on one side (from tool centerline) of the cutter head.
 For machining on two sides, reduce Chip Loads to 60%-80% depending on contact length and finish

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 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

MATERIAL	Hardness: 29-37 Rc (279-344 HBn)									Depth of Cut Passes	
	SFM	Chip Load (IPT) By Cutter Diameter									
		0.250	0.312	0.375	0.437	0.500	0.625	0.750	1.000		
CARBON STEELS	600	Deburring	.00097	.00136	.00163	.00190	.00217	.00272	.00326	.00435	1
		Front/Back Chamfer	.00081	.00113	.00136	.00158	.00181	.00226	.00272	.00362	3
Free-Machining/Low Carbon steels, 10xx - 1029 & all 10Lxx, 11xx - 1139 & all 11Lxx, 12xx - 1215 & all 12Lxx	200	V-Groove	.00066	.00093	.00112	.00130	.00149	.00186	.00223	.00298	4
1030 - 1095, 1140 - 1151, 13xx, 15xx, 20xx, 30xx, 40xx & 4Lxx, 50xx & 5Lxx, 50xx & 50Lxx, 51xx & 51Lxx, 52xx & 52Lxx, 60xx, 80xx, 90xx	200	Deburring	.00088	.00124	.00149	.00174	.00199	.00248	.00298	.00397	1
		Front/Back Chamfer	.00074	.00103	.00124	.00145	.00166	.00207	.00248	.00331	3
STAINLESS STEELS	450	V-Groove	.00061	.00085	.00102	.00119	.00136	.00170	.00204	.00272	4
		Deburring	.00097	.00136	.00163	.00190	.00217	.00272	.00326	.00435	1
203 EZ, 303 (all types), 416, 416Se, 416 Plus X, 420F, 420FSe, 430F, 430FSe, 440F, 440FSe	200	Front/Back Chamfer	.00081	.00113	.00136	.00158	.00181	.00226	.00272	.00362	3
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	V-Groove	.00061	.00085	.00102	.00119	.00136	.00170	.00204	.00272	4
		Deburring	.00088	.00124	.00149	.00174	.00199	.00248	.00298	.00397	1
414, 431, 440A, 440B, 440C, 13-8, 15-5, 15-7, 17-4, 17-7	150	Front/Back Chamfer	.00074	.00103	.00124	.00145	.00166	.00207	.00248	.00331	3
		V-Groove	.00061	.00085	.00102	.00119	.00136	.00170	.00204	.00272	4
TOOL STEELS	200	Deburring	.00088	.00124	.00149	.00174	.00199	.00248	.00298	.00397	1
		Front/Back Chamfer	.00074	.00103	.00124	.00145	.00166	.00207	.00248	.00331	3
A, L, O, P, W series	150	V-Groove	.00061	.00085	.00102	.00119	.00136	.00170	.00204	.00272	4
D, H, M, T, S series	150	Deburring	.00055	.00078	.00093	.00109	.00124	.00155	.00186	.00248	1
		Front/Back Chamfer	.00046	.00065	.00078	.00090	.00104	.00129	.00155	.00207	3
V-Groove	.00038	.00053	.00064	.00074	.00085	.00106	.00128	.00170	.00248	4	
TITANIUM ALLOYS	150	Deburring	.00055	.00078	.00093	.00109	.00124	.00155	.00186	.00248	1
		Front/Back Chamfer	.00046	.00065	.00078	.00090	.00104	.00129	.00155	.00207	3
V-Groove	.00038	.00053	.00064	.00074	.00085	.00106	.00128	.00170	.00248	4	
HIGH TEMP ALLOYS	70	Deburring	.00055	.00078	.00093	.00109	.00124	.00155	.00186	.00248	1
		Front/Back Chamfer	.00046	.00065	.00078	.00090	.00104	.00129	.00155	.00207	3
Inconel, Hastelloy, Waspalloy, Monel, Nimonic, Haynes, Discoloy, Incoloy	150	V-Groove	.00038	.00053	.00064	.00074	.00085	.00106	.00128	.00170	4

MATERIAL	Hardness: 38-45 Rc (353-421 HBn)									Depth of Cut Passes	
	SFM	Chip Load (IPT) By Cutter Diameter									
		0.250	0.312	0.375	0.437	0.500	0.625	0.750	1.000		
-	-	Deburring	-	-	-	-	-	-	-	-	-
		Front/Back Chamfer	-	-	-	-	-	-	-	-	-
-	-	V-Groove	-	-	-	-	-	-	-	-	-
		Deburring	-	-	-	-	-	-	-	-	-
-	-	Front/Back Chamfer	-	-	-	-	-	-	-	-	-
		V-Groove	-	-	-	-	-	-	-	-	-
-	-	Deburring	-	-	-	-	-	-	-	-	-
		Front/Back Chamfer	-	-	-	-	-	-	-	-	-
-	-	V-Groove	-	-	-	-	-	-	-	-	-
		Deburring	-	-	-	-	-	-	-	-	-
-	-	Front/Back Chamfer	-	-	-	-	-	-	-	-	-
		V-Groove	-	-	-	-	-	-	-	-	-
100	100	Deburring	.00088	.00124	.00149	.00174	.00199	.00248	.00298	.00397	1
		Front/Back Chamfer	.00074	.00103	.00124	.00145	.00166	.00207	.00248	.00331	3
-	-	V-Groove	.00061	.00085	.00102	.00119	.00136	.00170	.00204	.00272	4
		Deburring	.00055	.00078	.00093	.00109	.00124	.00155	.00186	.00248	1
90	90	Front/Back Chamfer	.00046	.00065	.00078	.00090	.00104	.00129	.00155	.00207	3
		V-Groove	.00038	.00053	.00064	.00074	.00085	.00106	.00128	.00170	4
-	-	Deburring	.00088	.00124	.00149	.00174	.00199	.00248	.00298	.00397	1
		Front/Back Chamfer	.00074	.00103	.00124	.00145	.00166	.00207	.00248	.00331	3
-	-	V-Groove	.00061	.00085	.00102	.00119	.00136	.00170	.00204	.00272	4
		Deburring	.00055	.00078	.00093	.00109	.00124	.00155	.00186	.00248	1
90	90	Front/Back Chamfer	.00046	.00065	.00078	.00090	.00104	.00129	.00155	.00207	3
		V-Groove	.00038	.00053	.00064	.00074	.00085	.00106	.00128	.00170	4
-	-	Deburring	.00055	.00078	.00093	.00109	.00124	.00155	.00186	.00248	1
		Front/Back Chamfer	.00046	.00065	.00078	.00090	.00104	.00129	.00155	.00207	3
75	75	V-Groove	.00038	.00053	.00064	.00074	.00085	.00106	.00128	.00170	4
		Deburring	.00055	.00078	.00093	.00109	.00124	.00155	.00186	.00248	1
50	50	Front/Back Chamfer	.00046	.00065	.00078	.00090	.00104	.00129	.00155	.00207	3
		V-Groove	.00038	.00053	.00064	.00074	.00085	.00106	.00128	.00170	4