HARVEY TOOL

Speeds & Feeds

Product Table: Engraving Cutters - Tipped Off - Helical Flute
Characteristics: 1 Flute, Helical Flute
Series: 7790xx, 8147xx, 8247xx

Series or Item	RPM	Chip Load (IPT) by Material													Axial DOC
		Plastics	Non-Ferrous	Iron			Carbon Steels			Stainless Steels		Titanium		High Temp Alloys	
		Non-Filled, Glass Filled, Carbon Fiber, G10	Aluminum, Magnesium, Copper Alloys	Cast Iron (< 30 Rc)	Cast Iron (30+ Rc)	Ductile, Malleable	< 29 Rc	30 < 39 Rc	40 < 45 Rc	< 30 Rc	32 < 45 Rc	< 30 Rc	32 < 45 Rc	Inconel, Waspaloy, Monel	
7790xx	6000+	.00210	.00140	.00140	.00056	.00070	.00084	.00063	.00035	.00070	.00035	.00070	.00035	.00056	< .009
814708	6000+	.00300	.00200	.00200	.00080	.00100	.00120	.00090	.00050	.00100	.00050	.00100	.00050	.00080	< .010
824708	6000+	.00330	.00220	.00220	.00088	.00110	.00132	.00099	.00055	.00110	.00055	.00110	.00055	.00088	< .010
814712	6000+	.00300	.00200	.00200	.00080	.00100	.00120	.00090	.00050	.00100	.00050	.00100	.00050	.00080	< .010
824712	6000+	.00330	.00220	.00220	.00088	.00110	.00132	.00099	.00055	.00110	.00055	.00110	.00055	.00088	< .010
814716	6000+	.00300	.00200	.00200	.00080	.00100	.00120	.00090	.00050	.00100	.00050	.00100	.00050	.00080	< .010
824716	6000+	.00330	.00220	.00220	.00088	.00110	.00132	.00099	.00055	.00110	.00055	.00110	.00055	.00088	< .010

Please note:

All posted speed and feed parameters are suggested starting values that may be increased given optimal setup conditions (minimal runout is required for best results).

Suggested speed is 6000 rpm or more. Choose an rpm value that creates the least amount of internal machine vibration. In many cases, a speed increaser is helpful.
Posted chip loads reflect axial depths of cut up to .009. For depths of cut = .010" -.015", reduce posted chip loads by 20%. For depths of cut = .016" -.020", reduce posted chip loads by 30%.
Posted chip loads reflect uncoated cutters. Coating is better suited to prolong tool life rather than decrease cycle times.
Posted chip loads reflect HORIZONTAL milling conditions. For VERTICAL plunge milling to depth, reduce posted chip loads by 50% (ramping is preferred to maintain tip integrity).

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**.