HARVEY TOOL

Speeds & Feeds

Product Table: Engraving Cutters - Marking Cutters - Tip Radius for Non-Ferrous Materials
Characteristics: 2 Flutes

Series or Item	RPM	Chip Load (IPT) by Material												Axial DOC
		Non-Ferrous	Iron			Carbon Steels			Stainless Steels		Titanium		High Temp Alloys	
		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	
724330	6000+	.00144	.00144	.00040	.00050	.00061	.00047	.00025	.00050	.00025	.00050	.00025	.00040	< .010
724430	6000+	.00128	.00128	.00051	.00064	.00078	.00059	.00032	.00064	.00032	.00064	.00032	.00051	< .010
738115	6000+	.00101	.00101	.00040	.00050	.00061	.00047	.00025	.00050	.00025	.00050	.00025	.00040	< .010
738130	6000+	.00144	.00144	.00057	.00072	.00087	.00067	.00036	.00072	.00036	.00072	.00036	.00057	< .010
738145	6000+	.00158	.00158	.00063	.00079	.00096	.00073	.00040	.00079	.00040	.00079	.00040	.00063	< .010
847115	6000+	.00089	.00089	.00036	.00045	.00054	.00041	.00022	.00045	.00022	.00045	.00022	.00036	< .010
847130	6000+	.00128	.00128	.00051	.00064	.00078	.00059	.00032	.00064	.00032	.00064	.00032	.00051	< .010
847145	6000+	.00140	.00140	.00056	.00070	.00085	.00065	.00035	.00070	.00035	.00070	.00035	.00056	< .010
854415	6000+	.00101	.00101	.00040	.00050	.00061	.00047	.00025	.00050	.00025	.00050	.00025	.00040	< .010
854430	6000+	.00144	.00144	.00057	.00072	.00087	.00067	.00036	.00072	.00036	.00072	.00036	.00057	< .010
854445	6000+	.00158	.00158	.00063	.00079	.00096	.00073	.00040	.00079	.00040	.00079	.00040	.00063	< .010

Please note:

Tools are able to cut a variety of materials, although they are best suited for Non-Ferrous applications.
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**.

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.