



Speeds & Feeds

**Product Table:** End Mills for Steels & High Temp Alloys - Square - 5 Flute - Variable Helix  
**Characteristics:** 1x LOC, 5 flutes  
**Series:** VHS-XXX-X-XXX

Material	Hardness (HBn)	SFM	Chip Load (IPT) By Cutter Diameter												Depth of Cut		
			0.015		0.031	0.047	0.062	0.078	0.093	0.125	0.187	0.250	0.312	0.375	0.500	Radial	Axial
Tool Steels: D, H, M, T, S series	350 - 400	100	Slotting	.00006	.00012	.00018	.00024	.00030	.00035	.00047	.00071	.00095	.00124	.00149	.00199	1x Dia	.4x Dia
	400 - 425	80															
Stainless Steels: 40x, 41x, 42x, 43x, 44x, 13-8, 15-5, 15-7, 17-4, 17-7	275 - 300	160	Roughing	.00007	.00015	.00023	.00030	.00038	.00045	.00060	.00090	.00121	.00158	.00190	.00254	.4x Dia	.5x - .7x Dia
	300 - 350	140															
Titanium: All alloys	275 - 300	200	Finishing	.00009	.00020	.00030	.00039	.00049	.00059	.00079	.00118	.00158	.00207	.00249	.00332	.1x Dia	.5x - .8x Dia
	300 - 350	125															
	350 - 400	75	Max	.00011	.00024	.00036	.00047	.00059	.00071	.00095	.00142	.00190	.00249	.00299	.00398	-	-
400 - 425	75																
Nickel Alloys: Inconel, Hastelloy, Waspalloy, Monel, Nimonic, Haynes, Discoloy, Incoloy	275 - 300	80	Max	.00011	.00024	.00036	.00047	.00059	.00071	.00095	.00142	.00190	.00249	.00299	.00398	-	-
	300 - 350	60															
	350 - 400	50															
	400 - 425	40															

**Please note:**  
All posted speed and feed parameters are suggested starting values that may be increased given optimal setup conditions. If less than minimum Axial or Radial DOC values are used, increased feed rates are possible. If greater than maximum Axial or Radial DOC values are used, decreased feed rates may be needed.  
If you require additional information, Micro100 has a team of technical experts available to assist you through even the most challenging applications. Please contact us at **800-421-8065** or **micro100tech@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.