

Speeds & Feeds

Product Table: Variable Helix End Mills for High Temp Alloys - Square - Reduced Shank

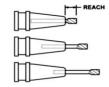
Characteristics: 1.5x LOC, 4 Flutes

Series: 7401xx-C6

## **Product Notes:**

Reduced shank end mills can be chucked at a variety of reach lengths. Posted values reflect a 3x reach length (ex. a 1/8 diameter mill chucked at a 3/8 reach). When chucking at longer reach lengths, use the table to the right for Chip Load and Depth of Cut adjustment multipliers.

		Slotting	)	R	oughing		Finishing				
Reach	Chip	Depth	of Cut	Chip	Depth	of Cut	Chip	Depth	of Cut		
Multiple	Load	Radial	Axial	Load	Radial	Axial	Load	Radial	Axial		
3x	100%	100%	100%	100%	100%	100%	100%	100%	100%		
5x	92%	100%	57%	92%	92%	78%	92%	100%	100%		
8x	72%	100%	51%	72%	85%	67%	72%	67%	100%		
12x	65%	100%	43%	65%	69%	56%	65%	67%	100%		



## **General Notes:**

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, 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	SFM		Chip Load (IPT) By Cutter Diameter												Depth of Cut	
	(HBn)	SFIVI		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
Stainless Steels: 40x, 41x, 42x, 43x, 44x, 13-8, 15-5, 15-7, 17-4, 17-7	275 - 300	160	Slotting	.00004	.00009	.00013	.00017	.00022	.00026	.00035	.00053	.00070	.00092	.00111	.00147	1x Dia	.2x Dia
	300 - 350	140															
Tool Steels: D, H, M, T, S series	350 - 400	100															
	400 - 425	80															
Titanium: Ali alloys	275 - 300	200	Roughing	.00005	.00011	.00016	.00021	.00027	.00032	.00043	.00064	.00085	.00112	.00135	.00180	.3x Dia	.23x32x Dia
	300 - 350	125															
	350 - 400	75															
	400 - 425	75															
Nickel Alloys: Inconel, Hastelloy, Waspalloy, Monel, Nimonic, Haynes, Discoloy, Incoloy	275 - 300	80	- Finishing	.00009	.00019	.00028	.00037	.00047	.00056	.00075	.00112	.00150	.00197	.00237	.00315	.06x Dia	.75x -1.5x Dia
	300 - 350	60															
	350 - 400	50															
	400 - 425	40															
Waspalloy, Monel, Nimonic, Haynes,	300 - 350 350 - 400	60 50	Finishing	.0000a	.00019	.00028	.00037	.00047	.00056	.00075	.00112	.00150	.00197	.00237	.00315	.06x Dia	.7