

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.

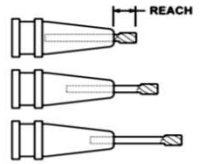
General Notes:

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.

Reach Multiple	Slotting			Roughing			Finishing		
	Chip Load	Depth of Cut		Chip Load	Depth of Cut		Chip Load	Depth of Cut	
		Radial	Axial		Radial	Axial		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%



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	
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															
	350 - 400	100															
Tool Steels: D, H, M, T, S series	400 - 425	80	Roughing	.00005	.00011	.00016	.00021	.00027	.00032	.00043	.00064	.00085	.00112	.00135	.00180	.3x Dia	.23x -.32x Dia
	275 - 300	200															
Titanium: All alloys	300 - 350	125	Finishing	.00009	.00019	.00028	.00037	.00047	.00056	.00075	.00112	.00150	.00197	.00237	.00315	.06x Dia	.75x -1.5x Dia
	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															