



Speeds & Feeds

Product Table: Variable Helix End Mills for Medium Alloy Steels - Finishers - Square
Characteristics: 12x Length of Cut
Series: 685xx-C6, 686xx-C6

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
CARBON STEELS 1030 - 1095, 1140 - 1151, 13xx, 15xx, 2xxx, 3xxx, 4xxx & 4xLxx, 5xxx & 5xLxx, 51xxx & 50Lxxx, 51xxx & 51Lxxx, 52xxx & 52Lxxx, 6xxx, 8xxx, 9xxx	225 - 250	600	Finishing	-	.00019	.00028	.00037	.00047	.00056	.00075	.00112	.00150	.00197	.00236	.00315	< .04x Dia	.5x - 12x Dia
	250 - 275	550		-	.00017	.00026	.00034	.00043	.00051	.00069	.00103	.00138	.00180	.00217	.00289	< .04x Dia	.5x - 12x Dia
	275 - 300	500	Finishing	-	.00016	.00024	.00031	.00039	.00047	.00063	.00094	.00125	.00164	.00197	.00263	< .04x Dia	.5x - 12x Dia
STAINLESS STEELS 201, 202, 203, 205, 301, 302, 304, 304L, 308, 309, 310, 314, 316, 316L, 317, 321, 329, 330, 347, 348, 385, 403, 405, 409, 410, 413, 414, 42x, 43x, 44x, 501, 502	225 - 250	500	Finishing	-	.00014	.00021	.00028	.00035	.00042	.00056	.00084	.00113	.00147	.00177	.00236	< .04x Dia	.5x - 12x Dia
	250 - 275	500		-	.00014	.00021	.00028	.00035	.00042	.00056	.00084	.00113	.00147	.00177	.00236	< .04x Dia	.5x - 12x Dia
TOOL STEELS A, L, O, P, W series	275 - 300	500	Finishing	-	.00014	.00021	.00028	.00035	.00042	.00056	.00084	.00113	.00147	.00177	.00236	< .04x Dia	.5x - 12x Dia
	300 - 350	500		-	.00014	.00021	.00028	.00035	.00042	.00056	.00084	.00113	.00147	.00177	.00236	< .04x Dia	.5x - 12x Dia

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 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.