



Speeds & Feeds

Product Tables: Corner Rounding End Mills - 2 & 4 Flute - Flared
Corner Rounding End Mills - 2 & 4 Flute - Unflared

Characteristics: 2 Flutes

Series: 170xx, 171xx, 172xx, 316xx, 317xx, 453xx, 460xx, 461xx, 462xx, 463xx, 674xx, 678xx, 7934xx, 7935xx, 9280xx, 9281xx, 9322xx, 9415xx, 9484xx

Product notes:

Due to a varying diameter, an Effective Cutter Diameter must be determined for Chip Load selection and RPM calculation:

For a Radius/Pilot ratio < 2.5, Effective Cutter Diameter = Pilot Diameter + Radius
For a Radius/Pilot ratio >= 2.5, Effective Cutter Diameter = Pilot Diameter + .7x Radius

Depth of Cut is shown as a full Radial stepover with multiple, descending Axial passes with following breakdown (same progression works for full Axial depth with multiple, descending Radial passes):

- 1 pass = 1x Radius
2 passes = .7x Radius, .3x Radius
3 passes = .4x Radius, .4x Radius, .2x Radius
4 passes = .4x Radius, .3x Radius, .2x Radius, .1x Radius
5 passes = .3x Radius, .3x Radius, .2x Radius, .1x Radius, .1x Radius

Chip Loads (IPT) within table pertain to rounding a corner on one side of existing slot.
For rounding on both sides, reduce Chip Loads to 60%-80% depending on contact length and finish
For vertical plunging into a hole, reduce Chip Loads to 40%-50% depending on finish

General notes:

All posted speed and feed parameters are suggested starting values that may be increased given optimal setup conditions. Chip loads reflect uncoated cutters and may be increased 10%-20% if coated. For ferrous materials with hardness <= 28 Rc, chip loads can be increased 10%-20%.

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 Harvetytech@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.

Table with 15 columns: MATERIAL, SFM, Chip Load (IPT) By Effective Cutter Diameter (0.015 to 0.500), Depth of Cut (Radial Passes, Axial Passes). Rows include ALUMINUM ALLOYS, MAGNESIUM ALLOYS, ZINC ALLOYS, and COPPER ALLOYS.

Table with 15 columns: MATERIAL, SFM, Chip Load (IPT) By Effective Cutter Diameter (0.015 to 0.500), Depth of Cut (Radial Passes, Axial Passes). Rows include CARBON STEELS, STAINLESS STEELS, TOOL STEELS, TITANIUM ALLOYS, and HIGH TEMP ALLOYS.

Table with 15 columns: MATERIAL, SFM, Chip Load (IPT) By Effective Cutter Diameter (0.015 to 0.500), Depth of Cut (Radial Passes, Axial Passes). Rows include CARBON STEELS, STAINLESS STEELS, TOOL STEELS, TITANIUM ALLOYS, and HIGH TEMP ALLOYS.