



Speeds & Feeds

Product Table: Corner Rounding End Mills - Back Corner Rounding End Mills - Flared
Characteristics: 8x Reach Multiple, 3 Flutes
Series: 598xx

Product notes:

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

Effective Cutter Diameter = the Neck Diameter + 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 = .5x Radius, .3x 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 Load to 60%-80% depending on contact length & finish
For rounding an existing hole, modify Chip Load using Circular Interpolation rules

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 harveytech@harveyperformance.com.

WARNING: Cutting tools may shatter under improper use. Government regulations require use of safety glasses and

Table with columns: MATERIAL, SFM, Hardness: <= 28 Rc (<= 271 HBn), Chip Load (IPT) By Effective Cutter Diameter, Depth of Cut (Radial Passes, Axial Passes). Rows include ALUMINUM ALLOYS, MAGNESIUM ALLOYS, ZINC ALLOYS, COPPER ALLOYS.

Table with columns: MATERIAL, SFM, Hardness: 29-37 Rc (279-344 HBn), Chip Load (IPT) By Effective Cutter Diameter, Depth of Cut (Radial Passes, Axial Passes). Rows include CARBON STEELS, STAINLESS STEELS, TOOL STEELS, TITANIUM ALLOYS, HIGH TEMP ALLOYS.

Table with columns: MATERIAL, SFM, Hardness: 38-45 Rc (353-421 HBn), Chip Load (IPT) By Effective Cutter Diameter, Depth of Cut (Radial Passes, Axial Passes). Rows include CARBON STEELS, STAINLESS STEELS, TOOL STEELS, TITANIUM ALLOYS, HIGH TEMP ALLOYS.