



Speeds & Feeds

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

Characteristics: 4 Flutes
Series: 210xx, 211xx, 212xx, 213xx, 440xx, 441xx, 442xx, 676xx, 680xx, 681xx, 682xx, 778xx, 8059xx, 8060xx, 8061xx, 9299xx, 9466xx, 9467xx

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 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.

Table with columns: MATERIAL, SFM, Chip Load (IPT) By Effective Cutter Diameter (0.015-0.500), Depth of Cut (Radial Passes, Axial Passes). Includes sub-sections for ALUMINUM ALLOYS, MAGNESIUM ALLOYS, ZINC ALLOYS, and COPPER ALLOYS.

Table with columns: MATERIAL, SFM, Chip Load (IPT) By Effective Cutter Diameter (0.015-0.500), Depth of Cut (Radial Passes, Axial Passes). Includes sub-sections for CARBON STEELS, STAINLESS STEELS, TOOL STEELS, TITANIUM ALLOYS, and HIGH TEMP ALLOYS.

Table with columns: MATERIAL, SFM, Chip Load (IPT) By Effective Cutter Diameter (0.015-0.500), Depth of Cut (Radial Passes, Axial Passes). Includes sub-sections for CARBON STEELS, STAINLESS STEELS, TOOL STEELS, TITANIUM ALLOYS, and HIGH TEMP ALLOYS.