



Speeds & Feeds

Product Table: Chamfer Cutters - Pointed & Flat End
Characteristics: 4 Flutes, Type III
Products: 7642xx, 7645xx, 7648xx, 7651xx, 7654xx, 7775xx, 7941xx, 8028xx, 8097xx, 8202xx, 8278xx, 8331xx

Product notes: Due to a varying diameter, an Effective Cutter Diameter is needed for Chip Load selection and RPM calculation: Effective Cutter Diameter = (Major Diameter + Minor Diameter)/2. Or consider the actual diameter along the angle that is engaged with the workpiece.

Depth of Cut is shown as number of Passes with each pass resulting in a descending stepover

Chip Loads are given 3 ways: Traditional Edge Break of .010"-.015" Full Chamfer engagement for cutters with angles GREATER than or equal to 25° per side (50° included) Full Chamfer engagement for cutters with angles LESS than 25° per side (50° included)

Chip Loads within table pertain to machining on one side of workpiece. When tip diameter is engaged, reduce Chip Loads to 80%-90% depending on contact length and finish For machining on two sides, reduce Chip Loads to 60%-80% depending on contact length and finish For slotting, reduce Chip Loads to 70%-90% depending on contact length and finish For vertical turning, 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 12 columns: MATERIAL, SFM, 0.015, 0.031, 0.047, 0.062, 0.078, 0.093, 0.125, 0.187, 0.250, 0.312, 0.375, 0.500, Depth of Cut Passes. Header: Hardness: ≤ 28 Rc (≤ 271 HBn)

Table with 12 columns: MATERIAL, SFM, 0.015, 0.031, 0.047, 0.062, 0.078, 0.093, 0.125, 0.187, 0.250, 0.312, 0.375, 0.500, Depth of Cut Passes. Header: Hardness: 29-37 Rc (279-344 HBn)

Table with 12 columns: MATERIAL, SFM, 0.015, 0.031, 0.047, 0.062, 0.078, 0.093, 0.125, 0.187, 0.250, 0.312, 0.375, 0.500, Depth of Cut Passes. Header: Hardness: 38-45 Rc (353-421 HBn)