



Speeds & Feeds

Product Table: Chamfer Cutters - Pointed & Flat End

Characteristics: 4 Flutes

Series: 183xx, 7636xx, 7640xx, 7776xx, 8487xx, 8661xx, 8710xx, 8732xx, 8764xx, 8812xx, 8951xx, 9824xx

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.

For machining on two sides, reduce Chip Loads to 60%-80% depending on contact length and finish

For vertical plunging, 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, Hardness: ≤ 28 Rc (≤ 271 HBn), Chip Load (IPT) By Effective Cutter Diameter (0.015 to 0.500), Depth of Cut Passes. Rows include ALUMINUM ALLOYS, MAGNESIUM ALLOYS, ZINC ALLOYS, and COPPER ALLOYS.

Table with columns: MATERIAL, SFM, Hardness: 29-37 Rc (279-344 HBn), Chip Load (IPT) By Effective Cutter Diameter (0.015 to 0.500), Depth of Cut Passes. Rows include CARBON STEELS, STAINLESS STEELS, TOOL STEELS, and TITANIUM ALLOYS.

Table with columns: SFM, Hardness: 38-45 Rc (353-421 HBn), Chip Load (IPT) By Effective Cutter Diameter (0.015 to 0.500), Depth of Cut Passes. Rows include various material categories with corresponding SFM and Depth of Cut Passes values.