



Speeds & Feeds

Product Table: Chamfer Cutters - Pointed & Flat End - Helical Flutes - Double-Ended
Characteristics: 4 Flutes
Series: 7850xx

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 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, Chip Load (IPT) By Effective Cutter Diameter (0.062 to 1.000), Depth of Cut (Passes). Rows include Aluminum Alloys, Magnesium Alloys, Zinc Alloys, and Copper Alloys.

Table with columns: MATERIAL, SFM, Chip Load (IPT) By Effective Cutter Diameter (0.062 to 1.000), Depth of Cut (Passes). Rows include Carbon Steels, Stainless Steels, Tool Steels, Titanium Alloys, and High Temp Alloys.

Table with columns: MATERIAL, SFM, Chip Load (IPT) By Effective Cutter Diameter (0.062 to 1.000), Depth of Cut (Passes). Rows include Carbon Steels, Stainless Steels, Tool Steels, Titanium Alloys, and High Temp Alloys.