



Speeds & Feeds

Product Table: Chamfer Cutters - Pointed & Flat End
Characteristics: 4 Flutes, Type I
Series: 7422xx, 7427xx, 7431xx, 7437xx, 7444xx

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)

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)

Table with columns: MATERIAL, SFM, Hardness: 38-45 Rc (353-421 HBn), Chip Load (IPT) By Effective Cutter Diameter (0.015 to 0.500), Depth of Cut (Passes)