



Speeds & Feeds

Product Table: Drill/End Mills - Drill Style - 2 Flute

Characteristics: 90°-140° Included Angle

Series: 129xx, 465xx, 8491xx, 9505xx

Product Notes:

- Milling - Presented data reflects slotting application using OD of cutter up to .5x Dia Axial DOC
- Use OD of cutter for Chip Load selection and RPM calculation
- If Axial DOC exceeds .5x Dia, Chip Load and/or Radial DOC must be reduced

- Chamfering - Presented data reflects full chamfer engagement on one side of workpiece
- Due to a varying tip diameter, an Effective Cutter Diameter is needed for Chip Load selection and RPM calculation. Consider the major and minor diameters along the actual contact length and average them: (Major Diameter + Minor Diameter)/2
- Depth of Cut is shown as number of Passes with each made using a descending stepover
- Feed rates may be increased (or number of passes decreased) when creating traditional edge breaks

- Drilling - Presented values are Chip Load per Tooth and not Chip Load per Rev
- Use OD for Chip Load selection and RPM calculation
- Since only 2 flutes are center cutting in 2 and 4 flute drill/mills, all drilling feed calculations should be made using 2 Effective Flutes
- Depth of Cut not shown as it is not applicable
- Drilling is not recommended for tools with < 82° included point angle

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 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 Cutter Diameter (0.062 to 1.000), Depth of Cut (Radial, Axial). Rows include ALUMINUM ALLOYS, MAGNESIUM ALLOYS, ZINC ALLOYS, COPPER ALLOYS.

Table with columns: MATERIAL, SFM, Chip Load (IPT) By Cutter Diameter (0.062 to 1.000), Depth of Cut (Radial, Axial). Rows include CARBON STEELS, STAINLESS STEELS, TOOL STEELS, TITANIUM ALLOYS, HIGH TEMP ALLOYS.

Table with columns: SFM, Chip Load (IPT) By Cutter Diameter (0.062 to 1.000), Depth of Cut (Radial, Axial). Rows include various material categories with numerical values for SFM and Depth of Cut.