MILL SPEEDS AND FEEDS

SPINDLE SPEED

$$n = V_c \times 3.82 \div D$$

RPM = SFM x 3.82 ÷ Ø

TABLE FEED END MILL

$$V_f = f_Z \times Z \times n$$

IPM = Feed per Tooth x Number of Teeth x RPM

FEED DRILLS

$$V_f = f_n \times n$$

IPM = Feed per Rev. x RPM

V_C	Cutting Speed (SFM, Surface Feet / Minute)
π	Pi (3.14, our Ø to C ratio)
D	Tool Diameter
n	rev/min (RPM, Revolutions / Minute, S-Code)
V_F	Table Feed (IPM Inches / Minute, F-Code)
f_Z	Feed per Tooth (Inches)
f_n	Feed per Revolution (Inches)
Z	Number of Flutes
n	rev/min, RPM
a_e	Width of Cut, Radial Depth of Cut
a_p	Depth of Cut, Axial Depth of Cut
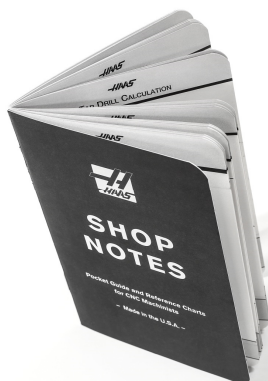
Download **Haas Shop Notes**, the Machinist's CNC Reference Guide, from diy.Haascnc.com for more tips and formulas