Depth of Cut and Bearing Selection

Selection of the correct bearing for a perfect rabbet cut can be tricky! The formulas below will help you determine the exact bearing size for any type of bit.

(D) Diameter of Cutter = outer diameter of the cutter
(BOD) Bearing OD = Outer diameter of the guide bearing
Bearing ID = Inner diameter of guide bearing (To fit the bit)
(CD) Cut depth = result of cutting using the guide bearing against the material with the cutter
Kerf = depth of cut (changed by height of router or shaper)

Use one of the formulas below to calculate the bearing, cutter diameter or cut depth you need

BOD = D-(2*CD)	Example	**½″ bearing** = 1½″ cutter-(2* 1/2″ cut depth)
CD = (D-BOD)/2		**¼″ cut depth** = (1½″ cutter-1″ bearing)/2
D = (2*CD)+BOD		**1½″ Cutter** = (2* 1/4″ cut depth)+ 1″ bearing

When ordering bits be sure and specify the ID and the OD to assure you get the right bearing. If possible provide the Woodline bit part number you are using the bearing on. Example 5/8″ bearing with 3/16″ ID to fit a WL 1225-1