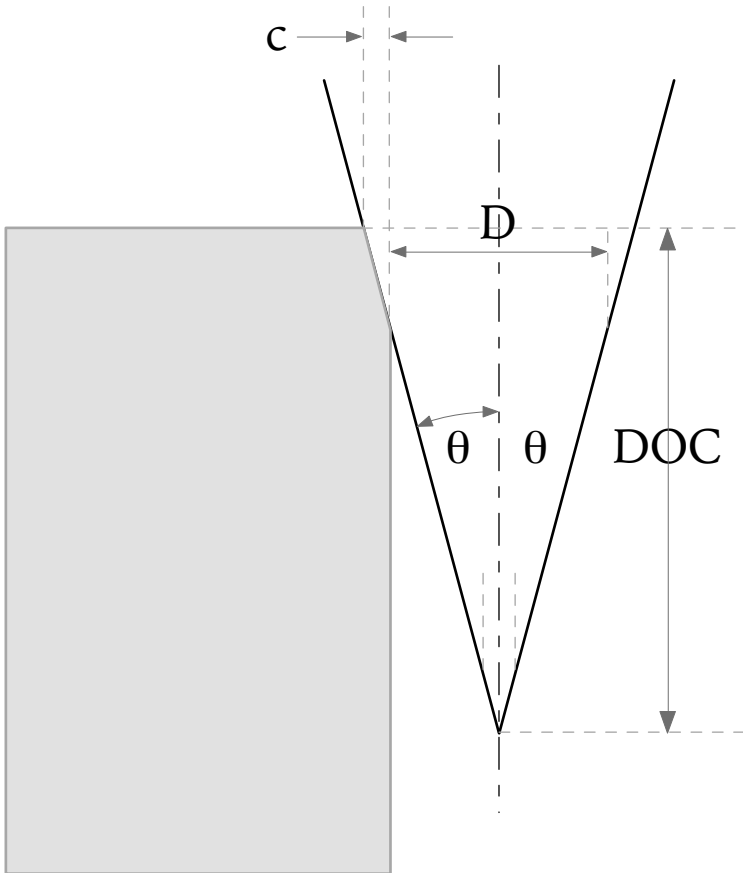


DOC vs. c (width of chamfer)



DOC = depth of cut

This is what you calculate to get your desired width of chamfer.

D = "virtual" bit diameter

The pretend value you enter for the bit's diameter. This is so the tip of the vee bit runs clear of the edge of your cut, any small value that presents only the bit's cutting edge will do.

c = width of chamfer

This is how wide your chamfer appears viewed from the top.

θ = angle of vee bit

This is the "half angle" of the vee, usually half the angle advertised for the bit.

$$\tan \theta = \frac{\text{opposite}}{\text{adjacent}} = \frac{0.5D + c}{\text{DOC}}$$

$$\text{DOC} = \frac{0.5D + c}{\tan \theta}$$

For most vee bits a virtual diameter of 0.050" should be plenty. In that case the equation becomes:

$$\text{DOC} = \frac{0.025" + c}{\tan \theta}$$