DRAWING CIRCLES WITH THE DEED PLOTTER - EASY !!

Beginning with the following calls: /se,32,4s,42w , /n0e 2300, /s90w 1300

How do I plot a circle with a 300' radius with this point of beginning as the center?

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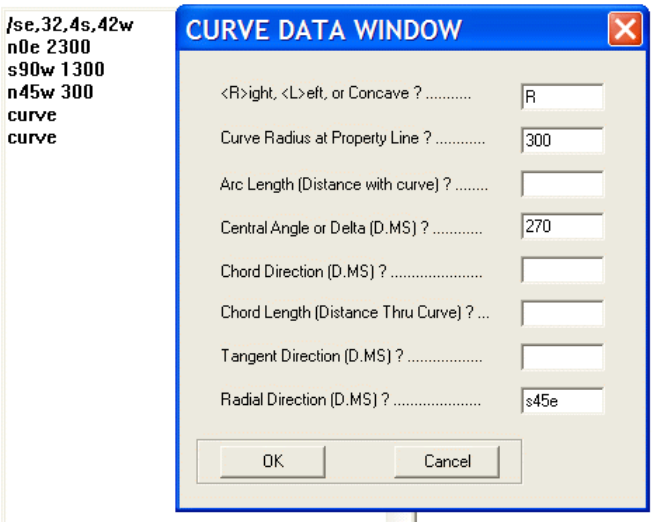
This is actually an easy process, but you have to think about the problem, understand how the curve window operates and know that the curve window will NOT do a 360˚ central angle.

So, considering the question: ***"How do I plot a circle with a 300' radius with this point of beginning as the center?"***, the critical issue is that you want the center of the circle to be at the end of the S90W 1,300 foot offset call line.

Here's what you need to know. The Curve window has an input option for "The direction to the Radial Point". So, the answer is easy enough, simply move some direction away from the desired center point by a distance equal to the radius, then "point" back to it with "The direction to Radial Point" input.

Therefore, for easier illustration, I'll use the two hidden offset calls from above, but make them show, but removing the " / ".

/se,32,4s,42w
n0e 2300
s90w 1300
n45w 300 - Now I'll add a line equal to the radius in some direction, to get to the edge of the circle.
Curve - Now we add the first curve. I say first, because you need to do parts of 2 curves to get a total central angle of 360˚.



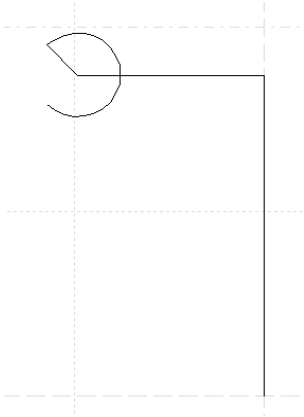
Curve can be either Right or Left, it doesn't matter 300 foot radius

I use 270˚ or 3/4 of the central angle. It really doesn't matter as long as the total of this curve and the next one is 360˚.

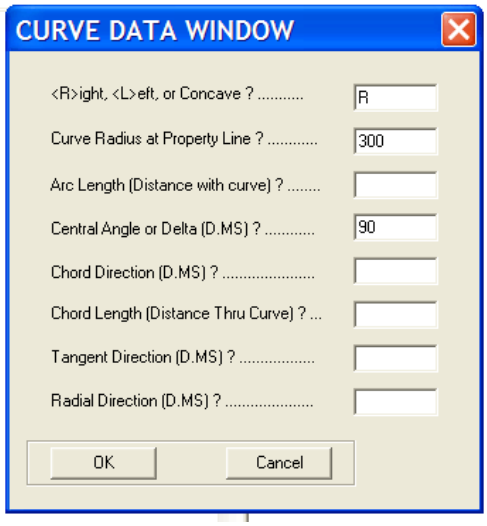
In the Radial Direction tile, see that I used "s45e " which is the OPPOSITE of the " n45w " 300 foot call that I added to get to some point on the outside edge of the curve. These two calls can be anything, as long as they are opposites.

CREATING A CIRCLE IS EASY WITH THE DEED PLOTTER !!

So, if we were to draw what we had so far, we would get this image, with the two offset calls AND my N45W 300 radius line PLUS 3/4 of a circle.



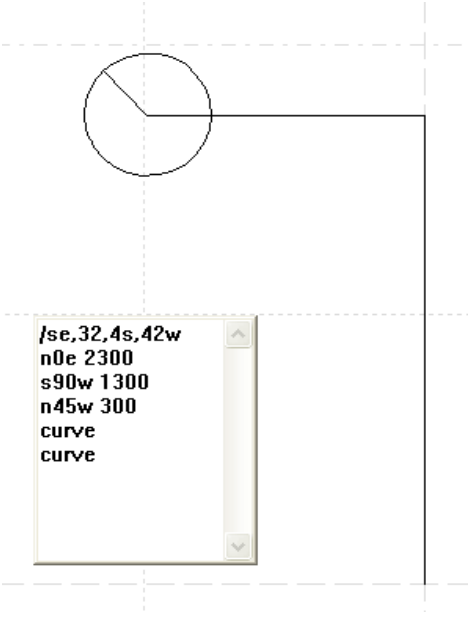
/se,32,4s,42w
n0e 2300
s90w 1300
n45w 300
curve
curve



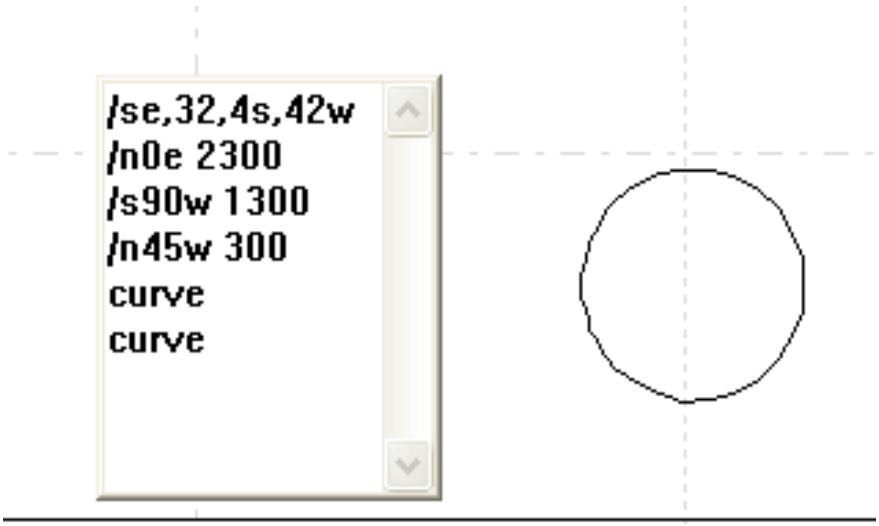
To finish, we just need to finish and add a 2nd curve with the rest of the central angle AND remove "The Direction to Radial Point". That last data MUST be removed, but that " s45e " is NOT now the direction to the radial point at that location on the circle. We want the curve to continue as a tangent curve to the previous curve.

So, the first two entries are the same, and the rest of the central angle that adds to 360˚ would be 90˚ or 1/4 of the missing circle.

So, now draw it and see the whole circle with the center being at the end of the dead west offset line or (s90w 1300).



/se,32,4s,42w
n0e 2300
s90w 1300
n45w 300
curve
curve



/se,32,4s,42w
/n0e 2300
/s90w 1300
/n45w 300
curve
curve

Now, add the " / ", back to the two offset calls AND the added call to the edge of the circle and you are done. You have a circle with a 300 foot radius that is centered at the end of the last offset call.

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