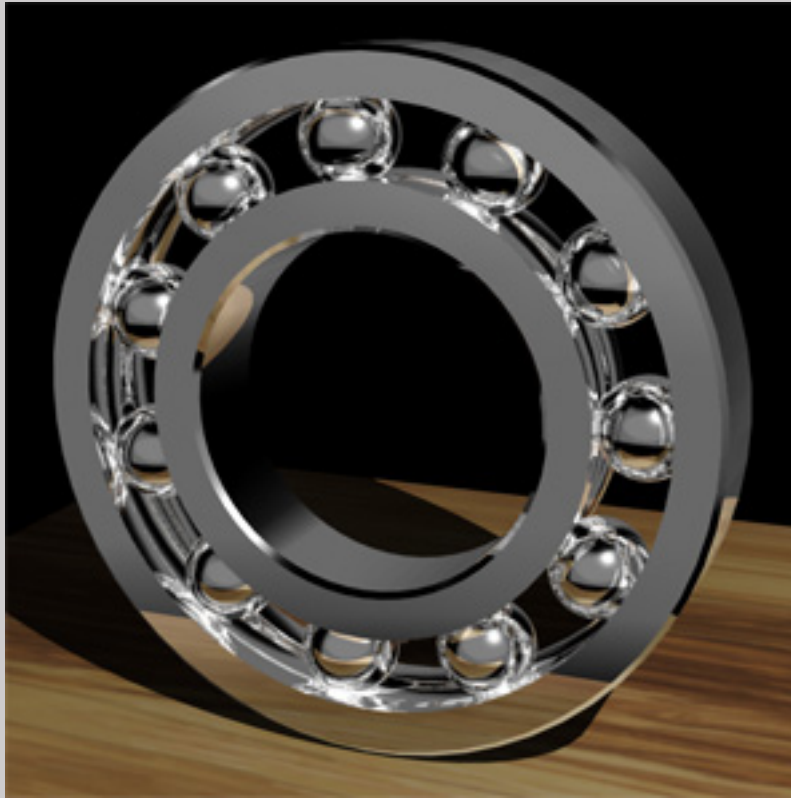
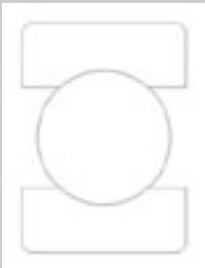


# How to make a bearing, a modeling tutorial. © Glen A

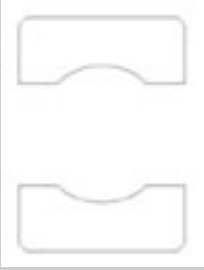


Of course you probably don't want a model of a bearing, but this will go over some basic modeling skills.

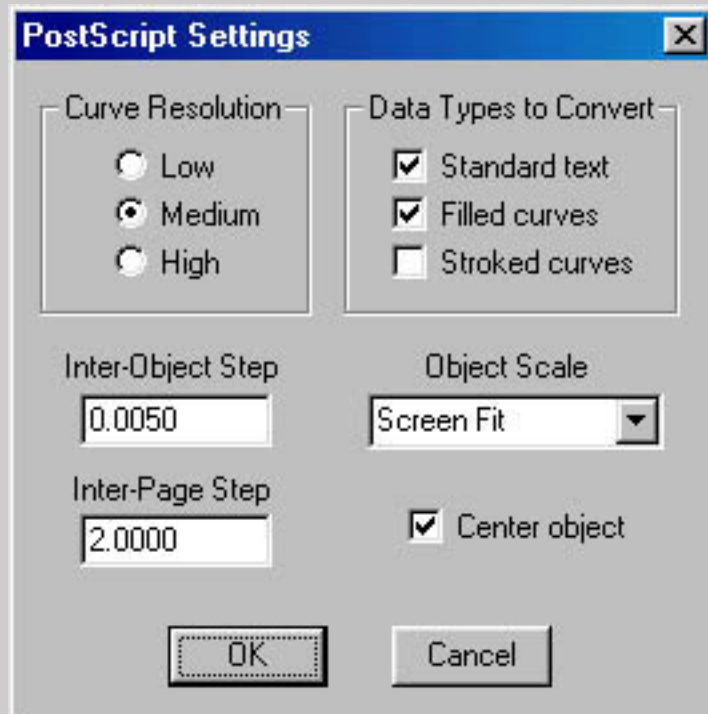
Start with your favorite vector program, Illustrator or Corel Draw are some examples. If you don't have one you can still use tS to make the shapes.

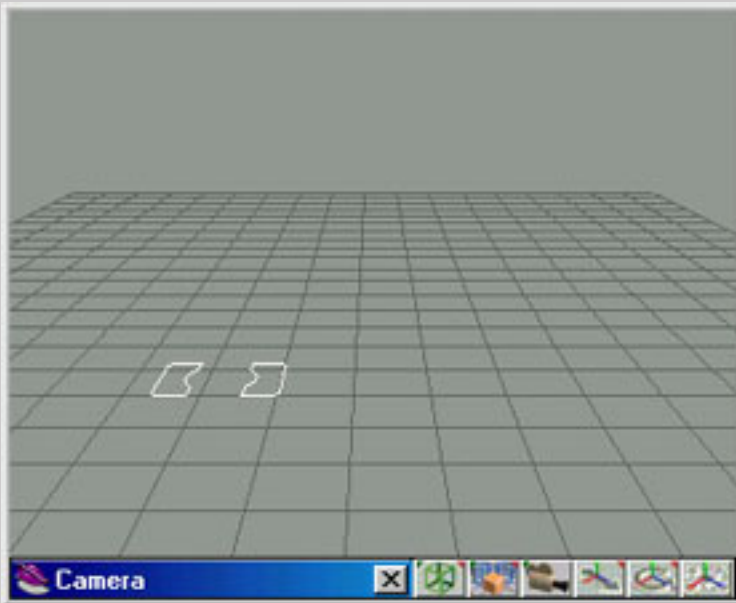


First we will create a cross section of the bearing, your drawing to look like this. Note the chamfered corners, when we lath this in ts it will give us a bevel edge.

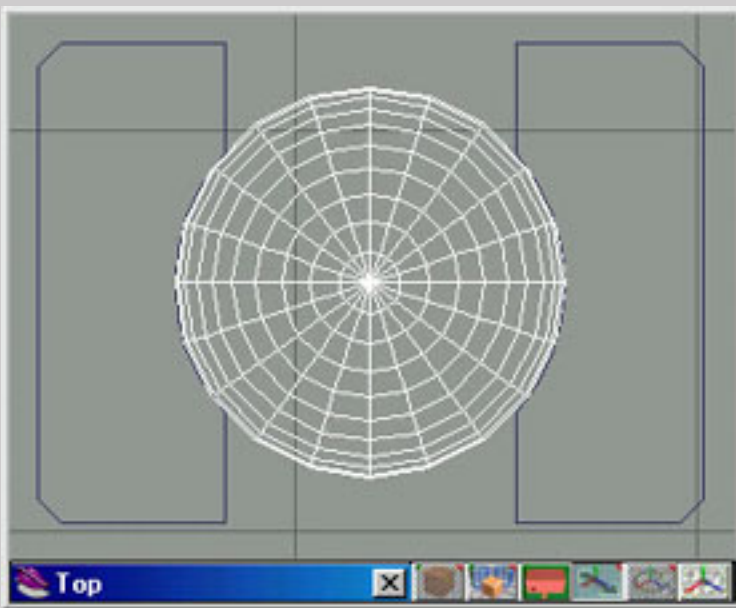


Now you can use a boolean command to cut out the circle and this is the final shape we will bring into ts. You can save this as an dxf or an Illustrator eps. If you choose the Illustrator eps make sure when you open the file in tS you have stroked curves unchecked. You also can just make sure your objects have no strokes in Illustrator. See the dialog box below, this what you will see when you load an eps object in tS 4.1. If you have version of Ts that is below 4.0 then I recommend you use a dxf.

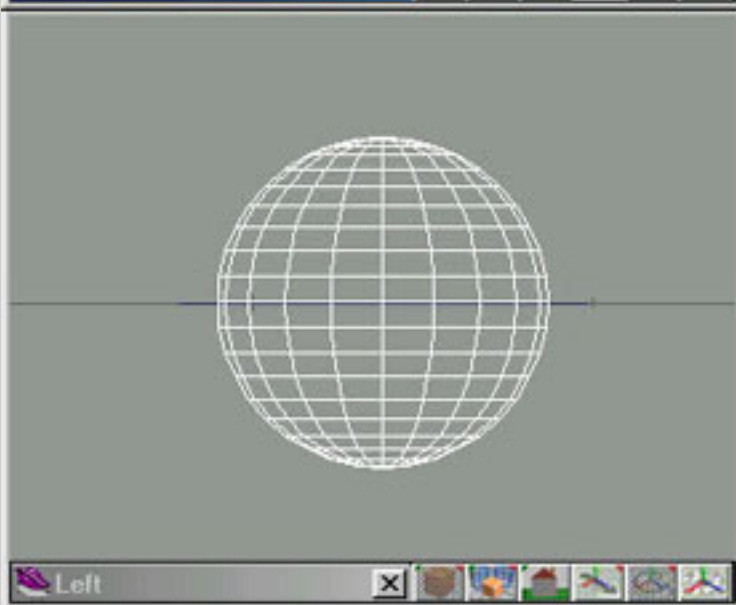




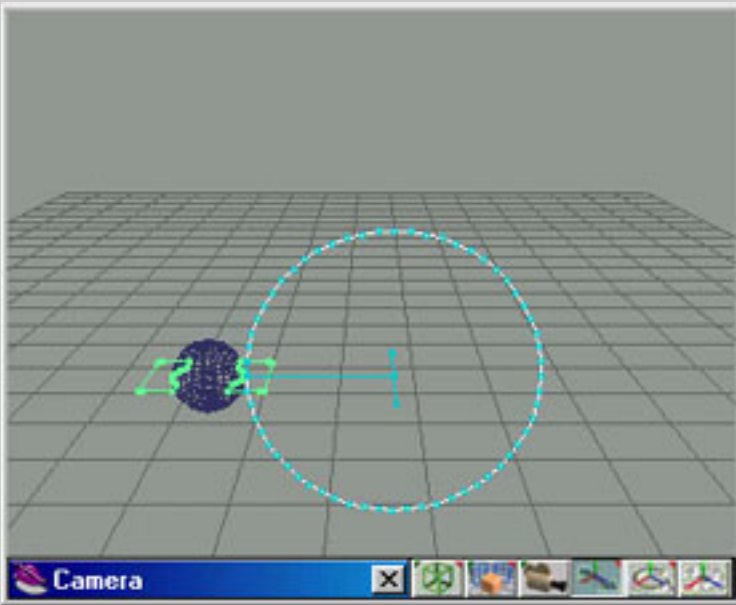
Once you have the object imported in Ts you can scale and position it as you like. But its best to keep it to the left a bit.



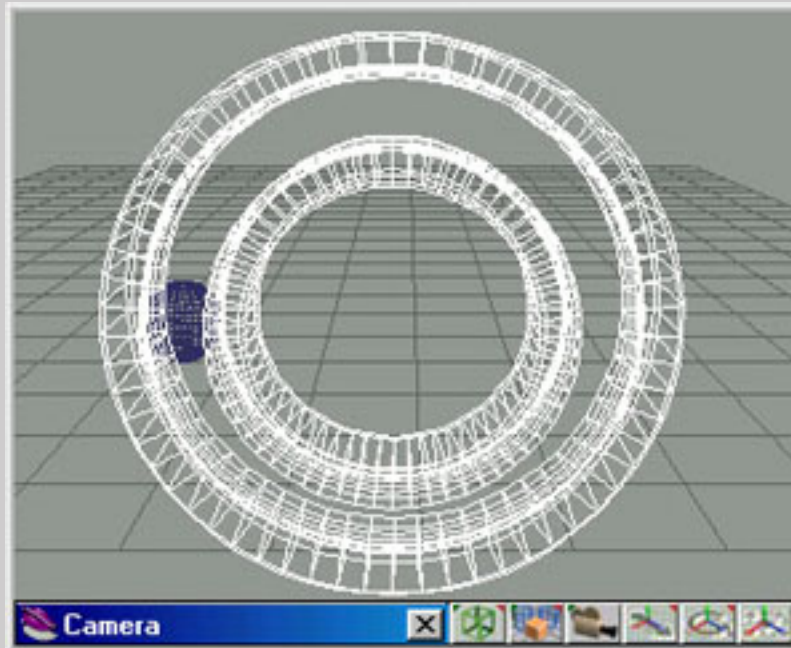
Now create a sphere which will be your first bearing. Scale and position it as shown on the left.



Note on the left view how the sphere splits the object.

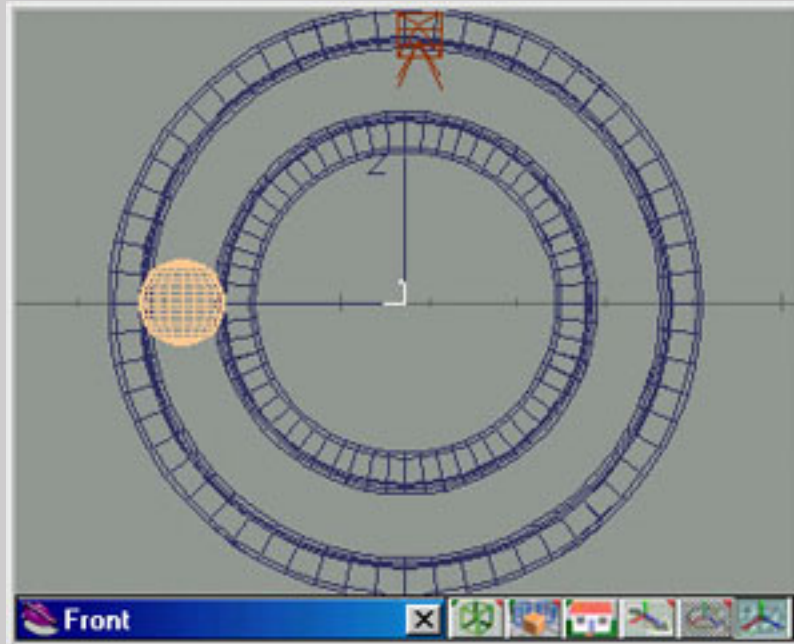
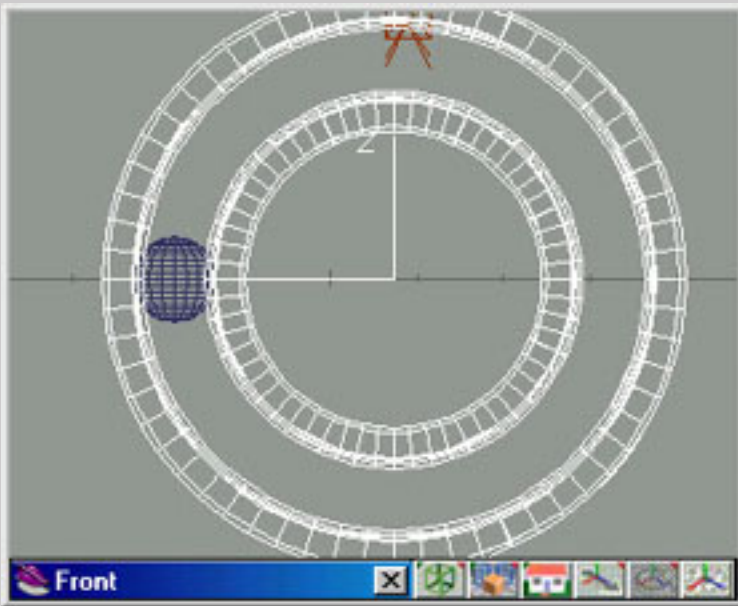


Now we can lathe the object. You can set it up as in the image on the left but you can also experiment with different settings. For the image below I set this up with about 60 segments.

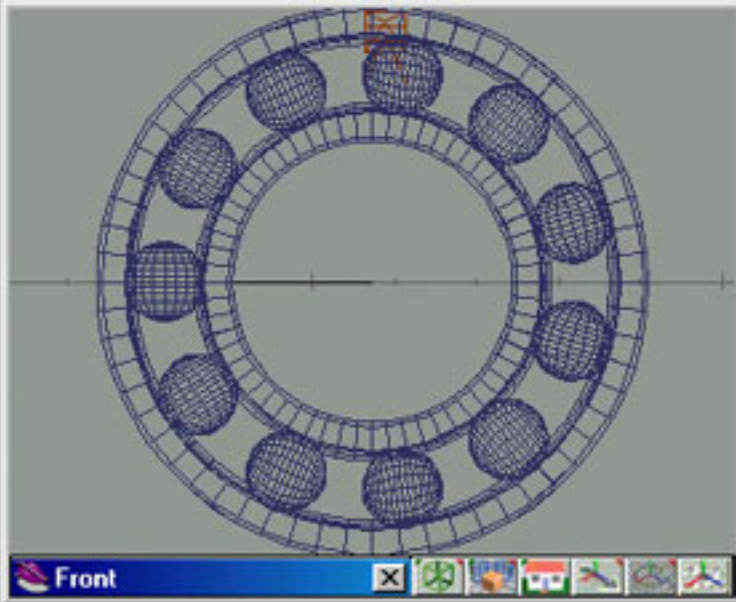


Positioning the bearing.

In the front view make the axis visible and normalize the rotation of the axis and center on object and leave it visible. Now make the axis visible for the sphere and move the axis so that it sits in the same position as the axis for the bearing. Zoom in real close for an accurate position. Then hide both the axis from view. See below.





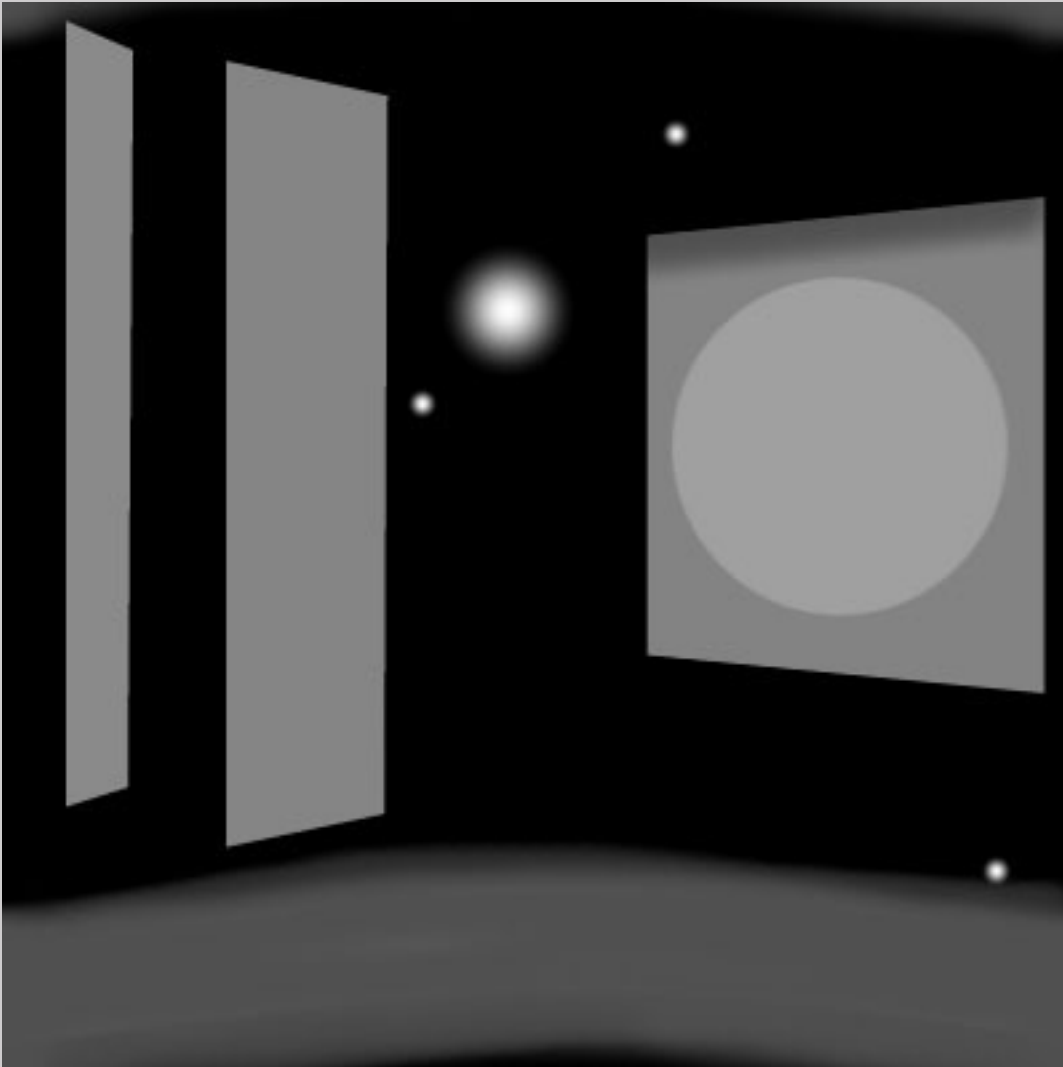


To copy and position the bearings we will need to do a little math. Since 360 degrees makes a full circle we will divide this by 11. Why 11? That's how many bearings we will use. That gives us 32.72. Select the bearing and toggle grid mode on. Select the rotation tool and right click the grid icon and enter 32.72 in the z field, then close this panel. Make sure you're in the front view and copy the bearing CTRL-C. In the front view right click and drag the mouse to your bearing snaps to its new position. Keep copying and moving till you have all 11 made. See image on the left.

And now for the finish.

I have used an environmental map in the scene and I'm giving you the environmental map and the mlb file for the settings to be used on the bearing or any other

scenes you wish to use it with. The final rendering I did was in tS 4.1. So if you have an earlier version and cannot use the mlb file use the environmental map and the metal shader. Play with the shader settings no matter what version of tS you have. I like crisp reflections with lots of contrast that are not washed out, this my personal preference - you can do what looks pleasing to your eyes.



[Bearing mlb file](#)

Close