



Part 6 of the iLogic Vessel Tutorial Completes the series by assembling the Vessel and Skirt components. The objective will be to assemble the skirt. Once complete, you will understand how to use parameters, and dimensions to control the shell for use in iLogic vessel assemblies.

Create a new assembly using %ProgramFiles%\Autodesk\Inventor 2011\Templates\Vessels\vessel.iam as the template. Save the file as VesselComplete.iam.

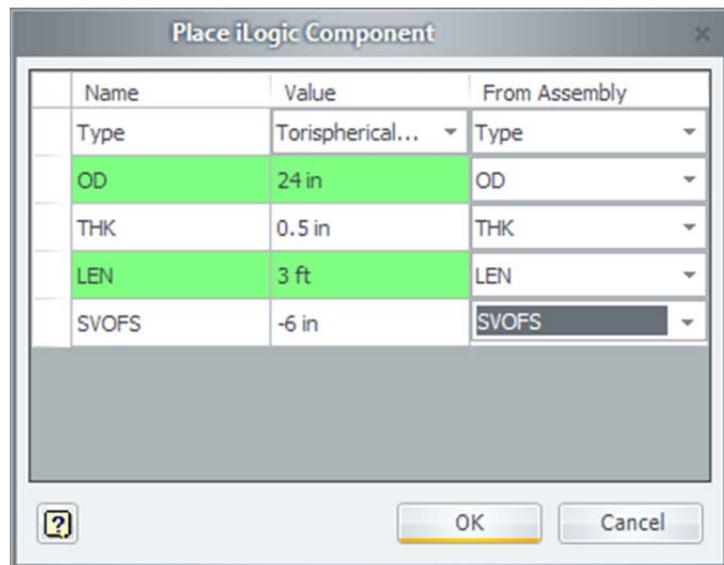
You can download the files [here](#). Extract the contents to the iLogicTutorial workspace.

Assemble Components

Place the Vessel



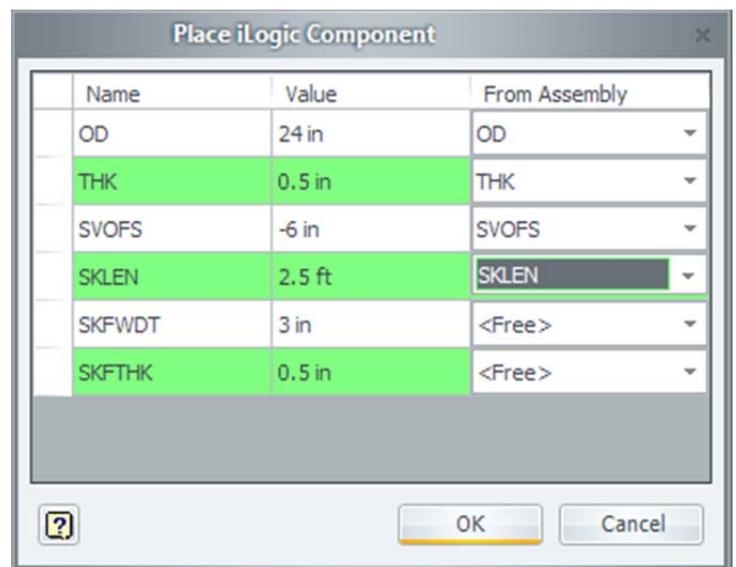
1. Click Place iLogic Component
2. Select VesselComp.iam
3. In the Place iLogic Component dialog
 - a. Set **Type** to the Assembly's Type Parameter
 - b. Set **OD** to the Assembly's OD parameter
 - c. Set **THK** to the Assembly's THK parameter
 - d. Set **LEN** to the Assembly's LEN parameter
 - e. Set **SVOFS** the Assembly's SVOFS parameter
4. Click OK
5. Right click and click Done.
6. In the parameters Dialog, set the Type to Torispherical 0.8



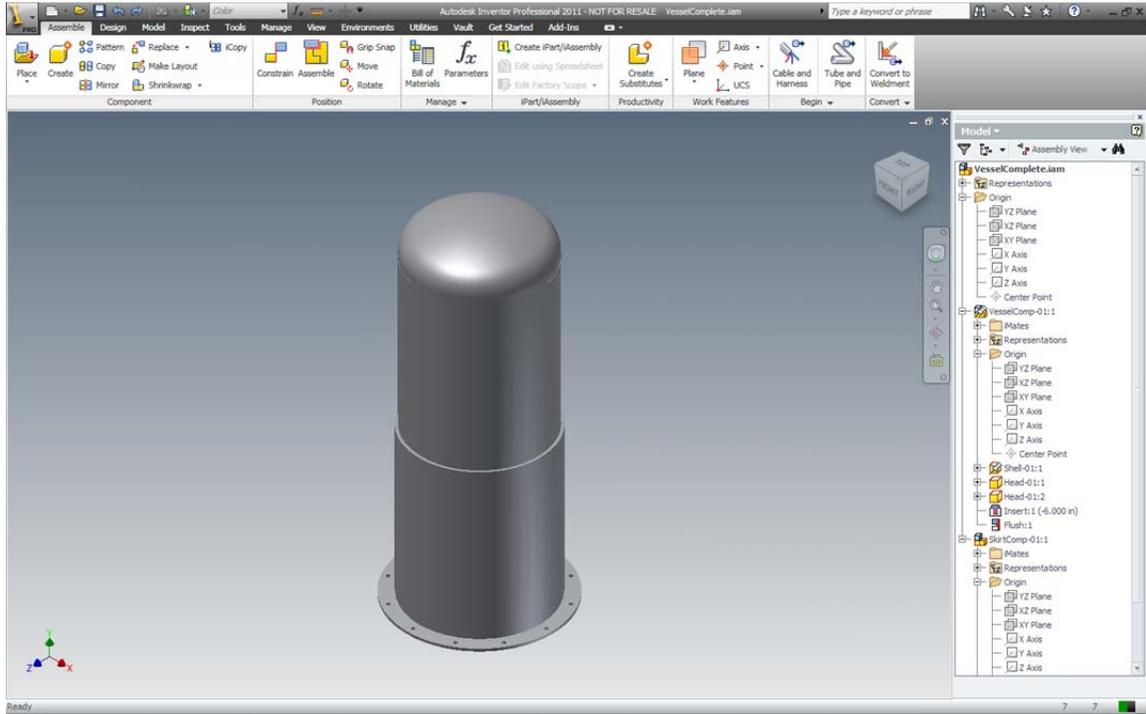
Place the Skirt



1. Click Place iLogic Component
2. Select SkirtComp.iam
3. In the Place iLogic Component dialog
 - a. Set **OD** to the Assembly's **OD** parameter
 - b. Set **THK** to the Assembly's **THK** parameter
 - c. Set **SVOFS** to the Assembly's **SVOFS** parameter
 - d. Set **SKLEN** to the Assembly's **SKLEN** parameter
 - e. Set **SKFWDT** and **SKFTHK** to <Free>
4. Click **OK**
5. Right Click, and select **Use iMate**, if it's not checked
6. Place the Skirt
7. Right Click, and select **Done**
8. Place an Insert opposed constraint between the top of the skirt, and the bottom of the shell.
9. Set the offset to **SVOFS**
10. If you wish, constrain the skirt to the origin of the vessel.



Save the file.



Testing the Assembly

Open the Parameters Dialog, and make the following changes:

- Set OD = 36 in
- Set LEN = 5 ft

By modifying the parameters, you can change as many features of the vessel assembly you like.

Conclusion

This tutorial has covered the basics of Inventor's iLogic technology. There is much more integration possible, and you are encouraged to explore the possibilities. If you have any questions, please don't hesitate to contact us at info@camansol.com