

# CHEMPUTE SOFTWARE

Personal Computer Software for the Engineering Industry

Chempute Software (Pty) Ltd

P.O.Box 856, Kloof, 3640, South Africa

Tel : Intl +27-31-7646840 Fax : Intl +27-31-7645934 Email :sales@chempute.com

## **CADWorx Plant UserShapes Version 2013 FAQ**

### **Question:**

*How are we able to add non standard piping components to the Piping Specifications?*

### **Answer :**

CADWorx Plant Pro offers a range of standard components that can be inserted via spec editor. Not all components are always available through the specification editor. These will be components such as Sight Glass, Basket Strainers and Flow meters etc.

As with all user shapes it is necessary to have 3D or a combination of 3D and 2D objects modeled to represent our component. The USERCREATE command will then run a routine to add intelligence to the AutoCAD objects.

Start a new drawing and model the component either using normal AutoCAD tools such as Extrude, revolve etc, or you can model using a combination of CADWorx Piping components such as Blind Flanges, Pipe Components and also combine them with AutoCAD solids.

Global CEdit (3 objects selected)

Alpha size:

Short annotation:

Long annotation:

Line number:

Tag:

Code:

Sort sequence:

Weight:

**Coordinates**

World  
 Iso

**Miscellaneous**

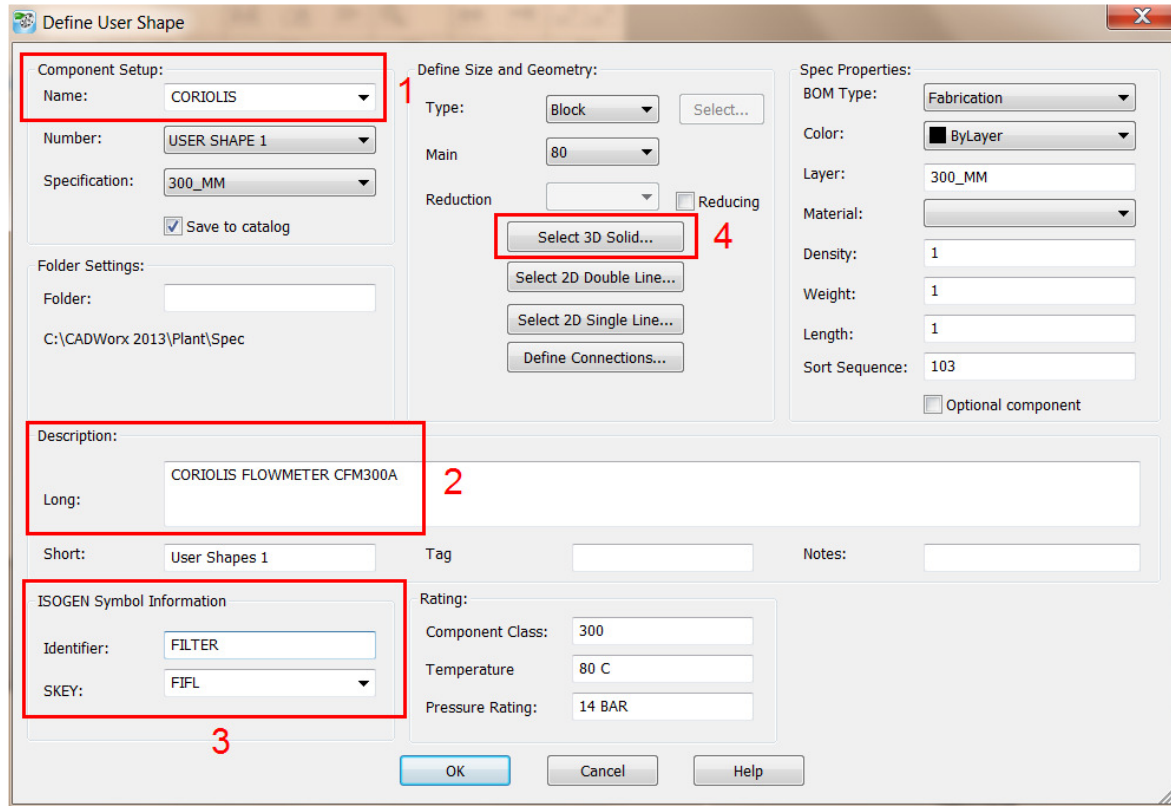
Existing

**BOM Item Type**

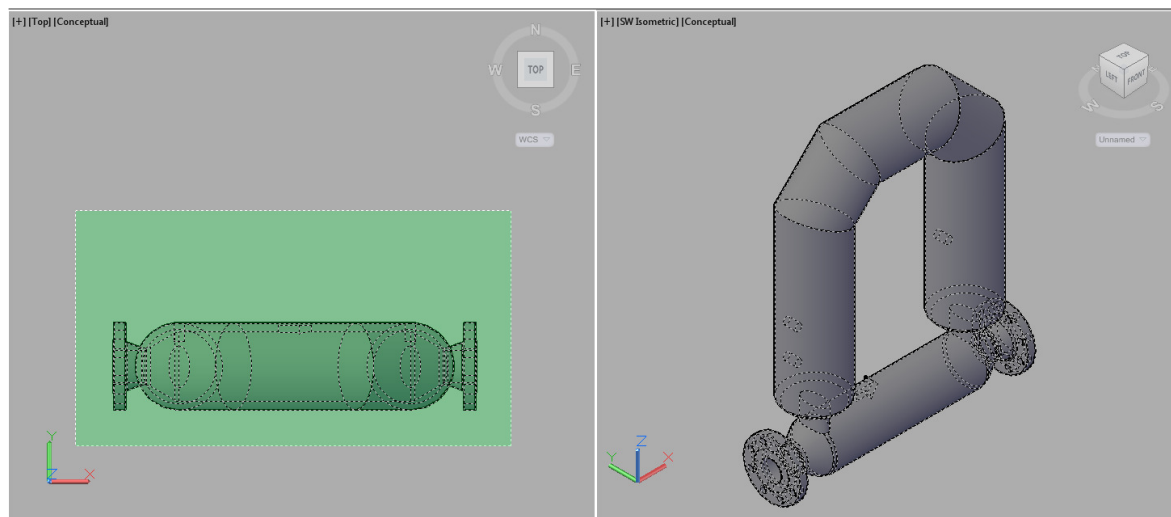
Fabrication  
 Erection  
 Offshore  
 Misc

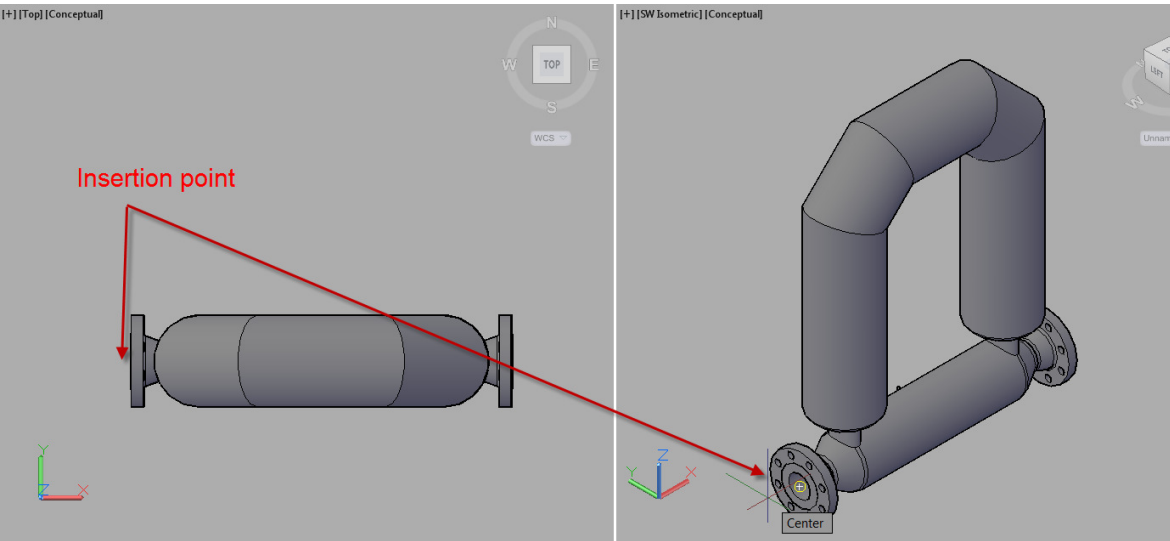
OK Cancel **Remove** Help

The important thing to remember is that we need to remove all the XDATA (Extended Application Data) from the CADWorx components before running the USERCREATE command. If the data is not removed there could be conflicting data which could be a problem later. Run the GCEDIT command, select the components and hit the Remove button. Click yes to confirm removal of all XDATA. Next run the USERCREATE command.



1. Give the usershape a name. This will be the filename that gets stored in the catalog.
2. Enter a Long Description for the component to appear on the isometric drawing
3. Update the SKEY data, this can also be done at a later stage in the PRJ file.
4. Select the 3D solid, you will also be prompted for an insertion point.





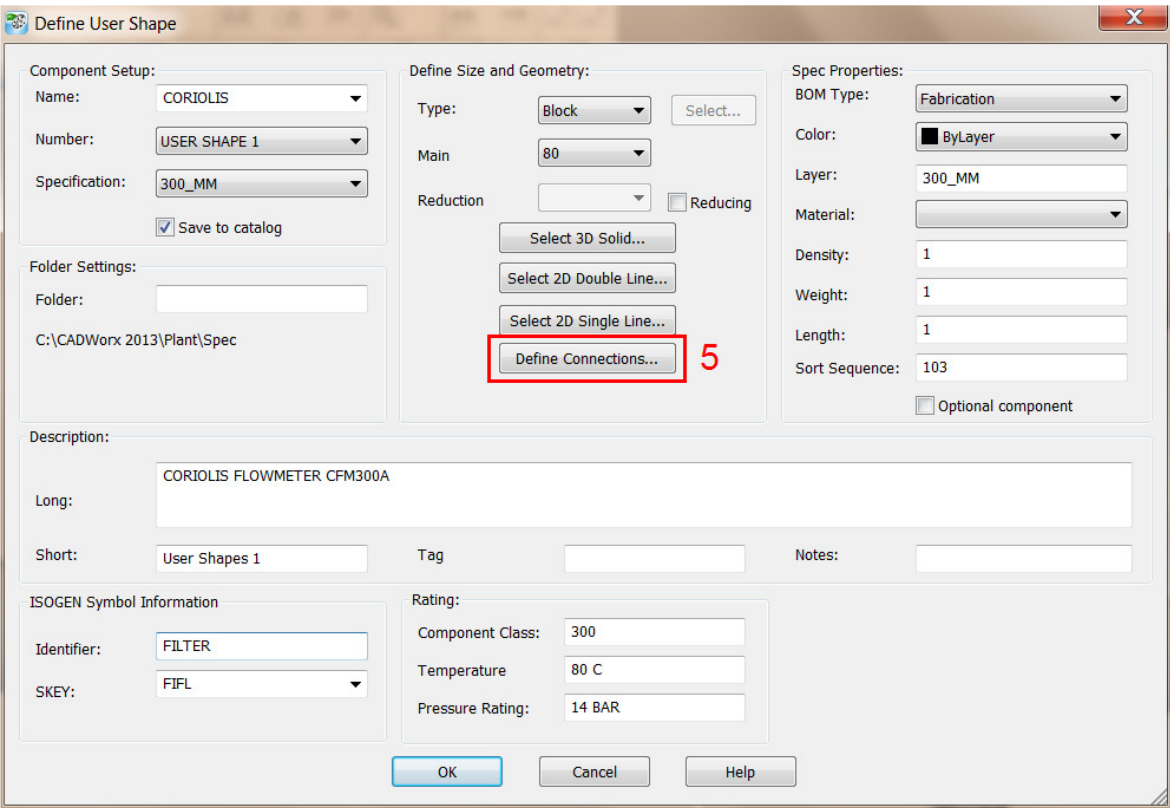
Command: `_USERCREATE`

Command:

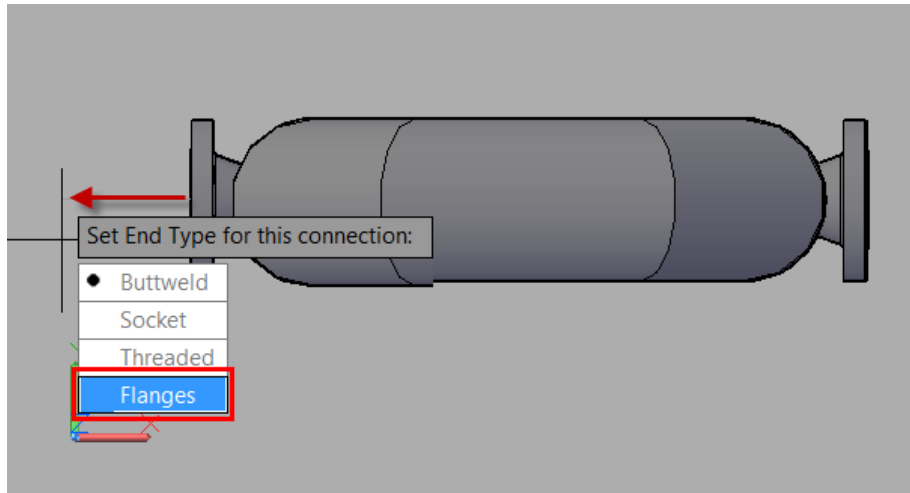
Select 3D solid representation: **Select the 3D solid**

Select 3D solid representation: **Enter**

Pick insert point: **Pick Center of Flange**



5. Lastly we will need to define connections points and types.

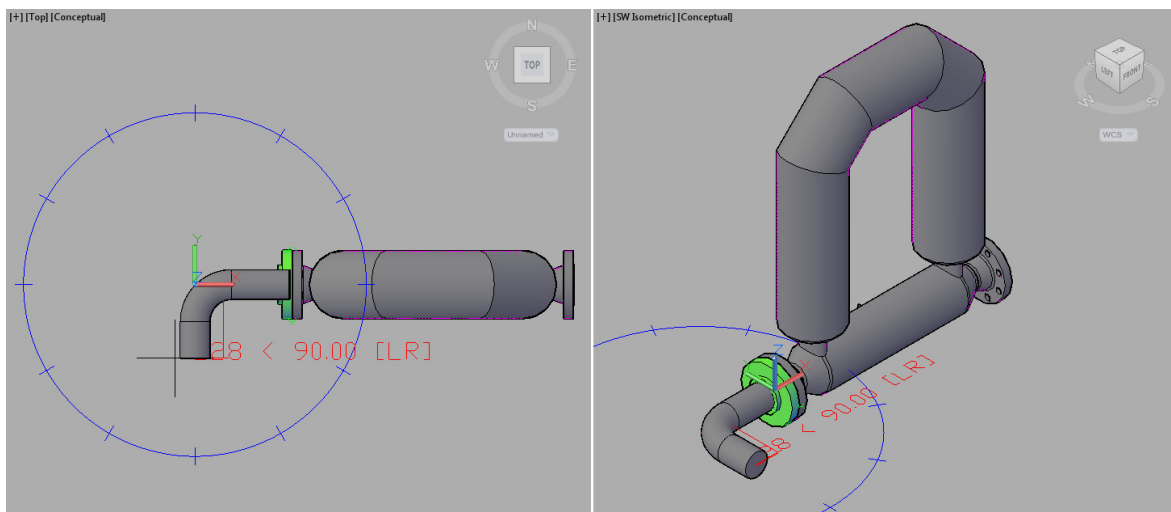


The previous connection point also doubles as the first connection point, choose a direction away from the flowmeter in the direction of the arrow and also confirm the connection type, in our example this is flanges.

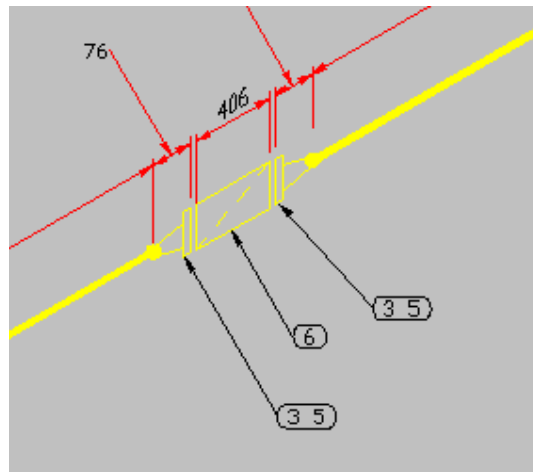
Repeat the same process for the other side and hit enter to finish the selection.

- GASKET, 3MM THK, 300LB [50-600]
- BALL VALVE, 300LB FLG [50-600]
- BUTTERFLY VALVE, 300LB FLG. [50-600]
- CHECK VALVE, 300LB FLG [50-600]
- GATE VALVE, 300LB FLG [50-600]
- GLOBE VALVE, 300LB FLG [50-600]
- PLUG VALVE, 300LB FLG [50-600]
- 3-WAY VALVE, 300LB FLG [15-600]
- CORIOLIS METER CFM300A [80]**
- 4-WAY VALVE, 300LB FLG [15-600]
- CONTROL VALVE, 300LB FLG [15-600]
- STRAINER, 300LB FLG [15-600]
- ANGLE VALVE, 300LB FLG [65-600]
- BLIND, SPECTACLE, 300LB, ASTM A-105 [65-600]
- JOINT EXPANSTION, 150LB, FLG [65-600]

The User Component will then be available through the Specview palette or from the miscellaneous toolbar. The routing features and piperules for automatic flanges will also work with this usershape.



Complete the Pipe Run and extract an iso of the pipeline...



....and the user component will be shown with the SKEYS we have selected. It is also possible to create user defined SKEYS with the isogen symbols editor.

Chempute Software (Durban)

Tel: 031-764 6840

Fax: 031 764 5934

Chempute Software (Johannesburg)

Tel: 011 803 6559

Fax: 011 803 6569

<http://chemputesoftware.blogspot.com/>

[www.chempute.com](http://www.chempute.com)