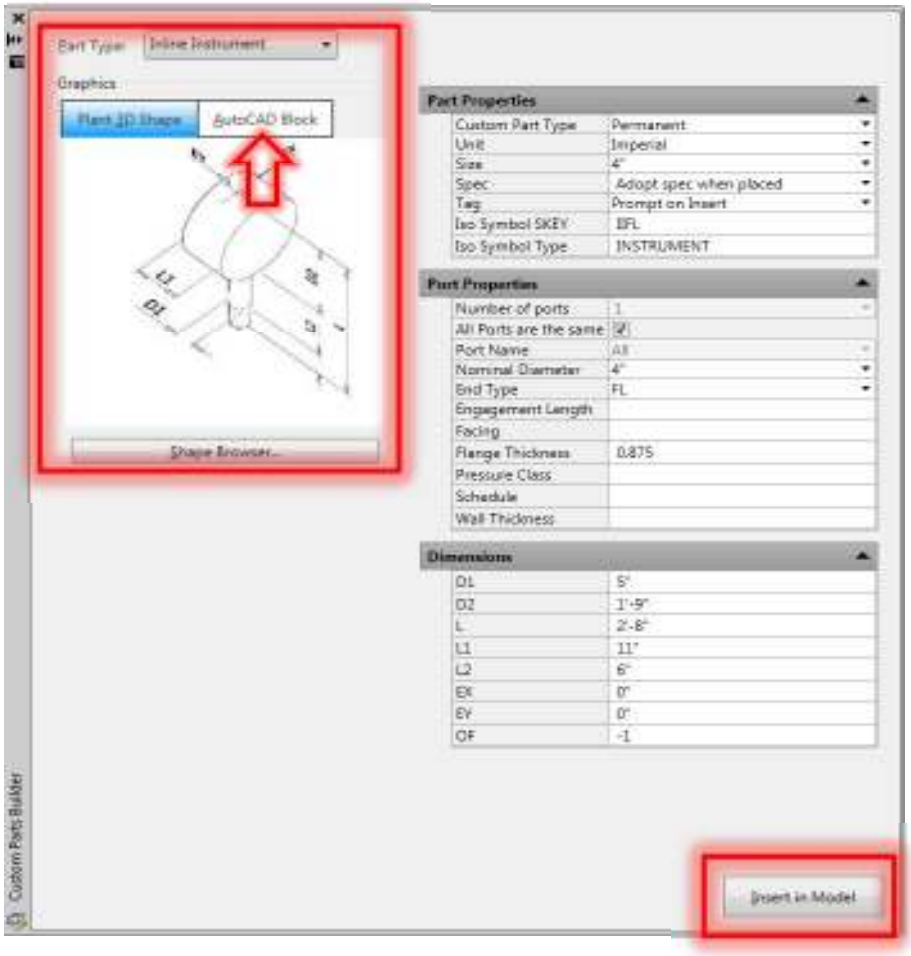
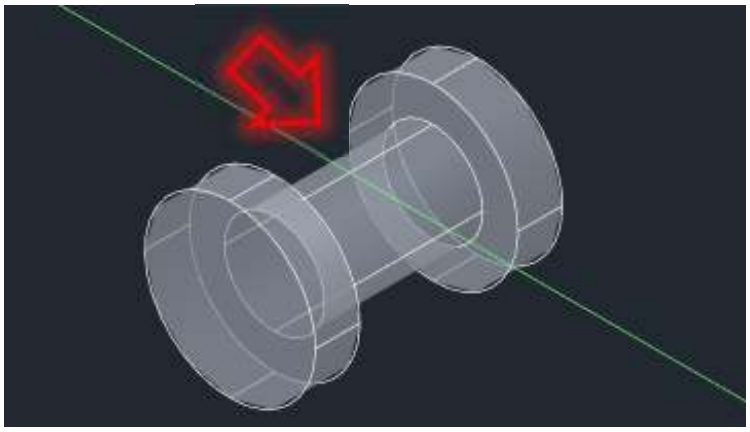
6.3.6 Specialties and Instruments Modeling

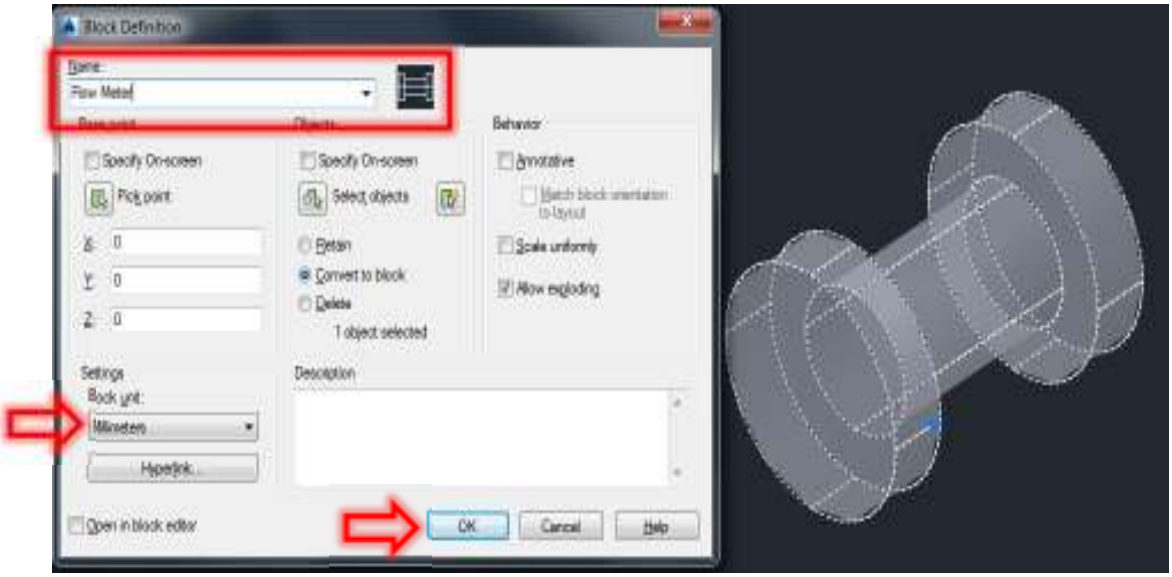
In a Project, user/designer always encounters specialty items and instruments. Most of these items and components are not yet inputted in the catalog and spec of the project therefore, custom modeling of each of the component is necessary. In Plant 3D, custom modeling of the components are made thru Autocad 3D commands and then after finalization, these components were converted to Plant 3D objects.



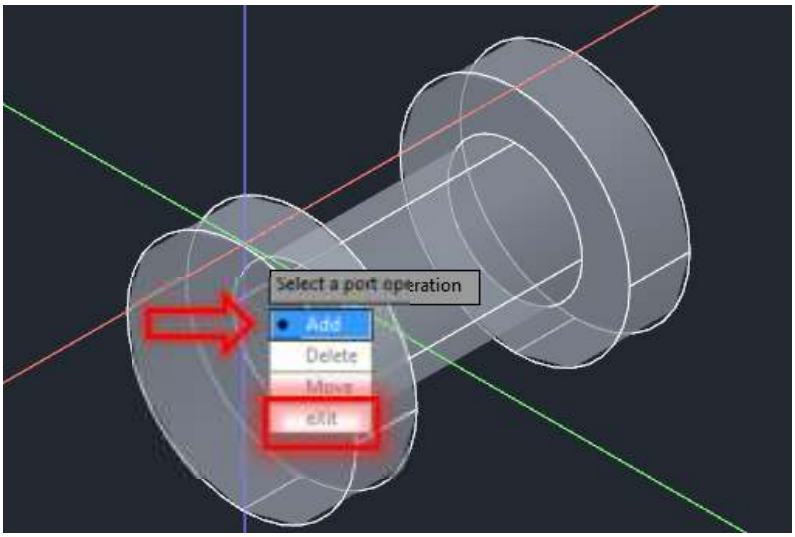
To create custom piping, specialty items, instrument and valves. First, create an AutoCAD 3d model, which is with respect to the detail of the component that is not in the spec.

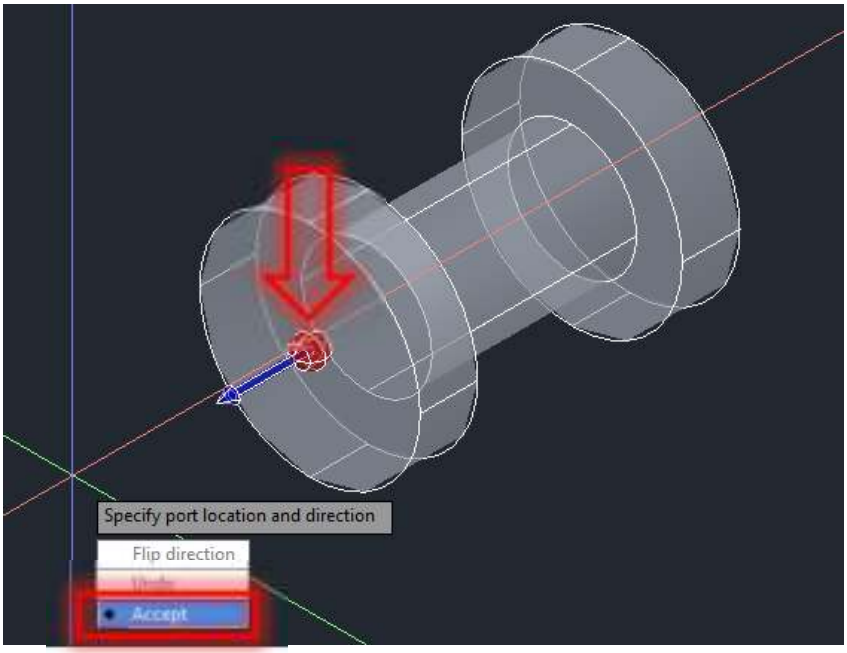


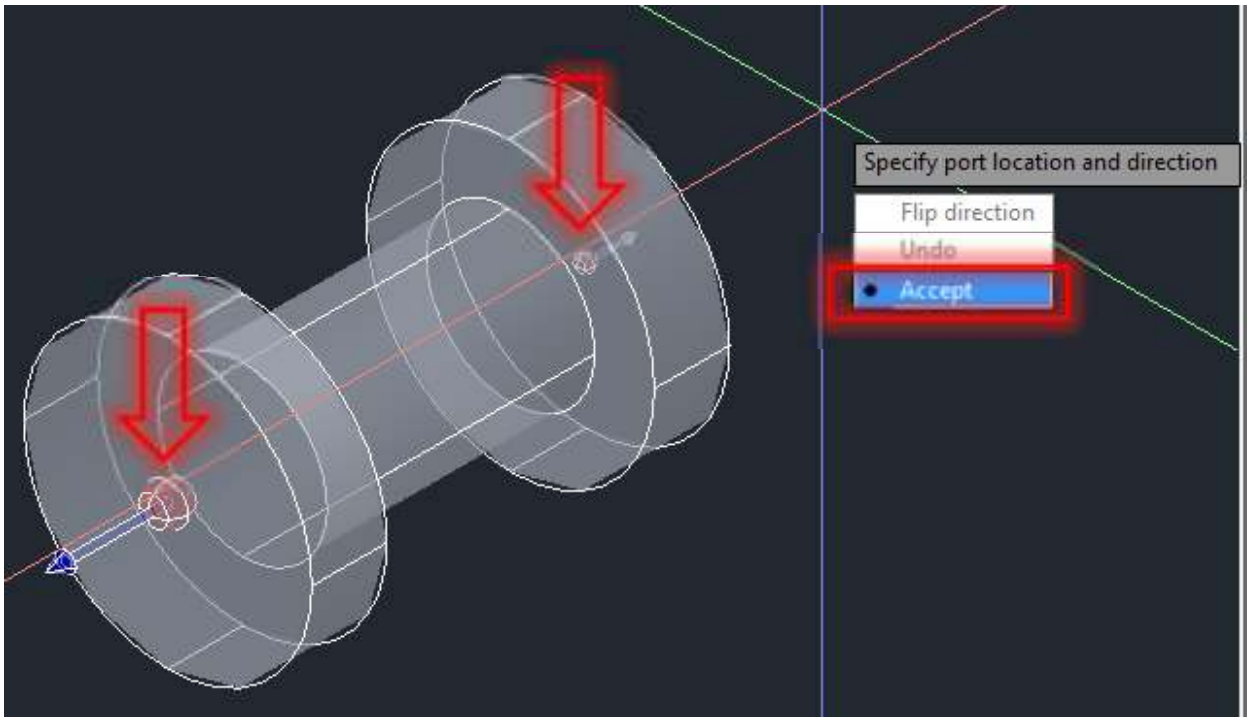
After finishing the model, convert the model into a block using the AutoCAD native "*Block*" command "*B*".



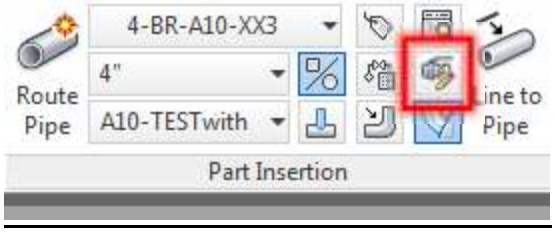
Then, use the Plant 3D command "*Plantpartconvert*" to convert the block into a Plant 3D model. In doing so, you will be prompted to specify ports for the components end connection points. Remember that if assigning the ports of the component is finished, always select the "*Exit*" in the "*Select a Port Operation*" menu, or else your ports will not be saved.

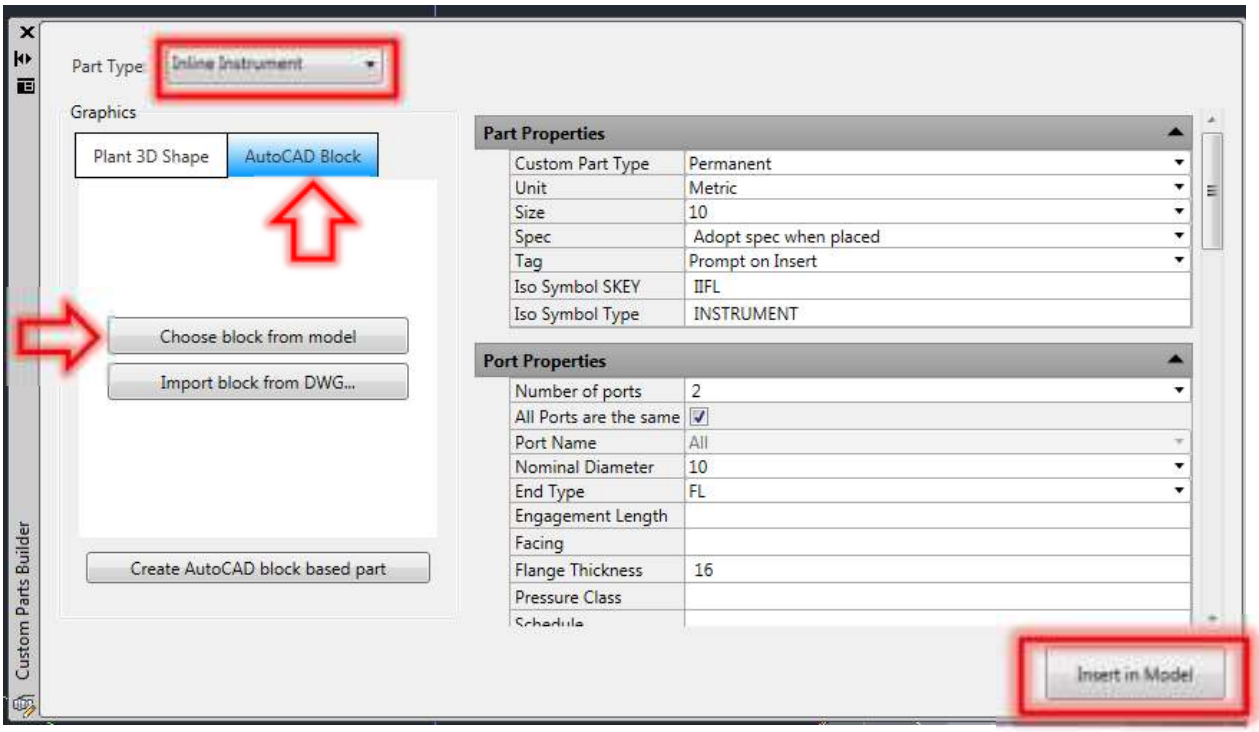
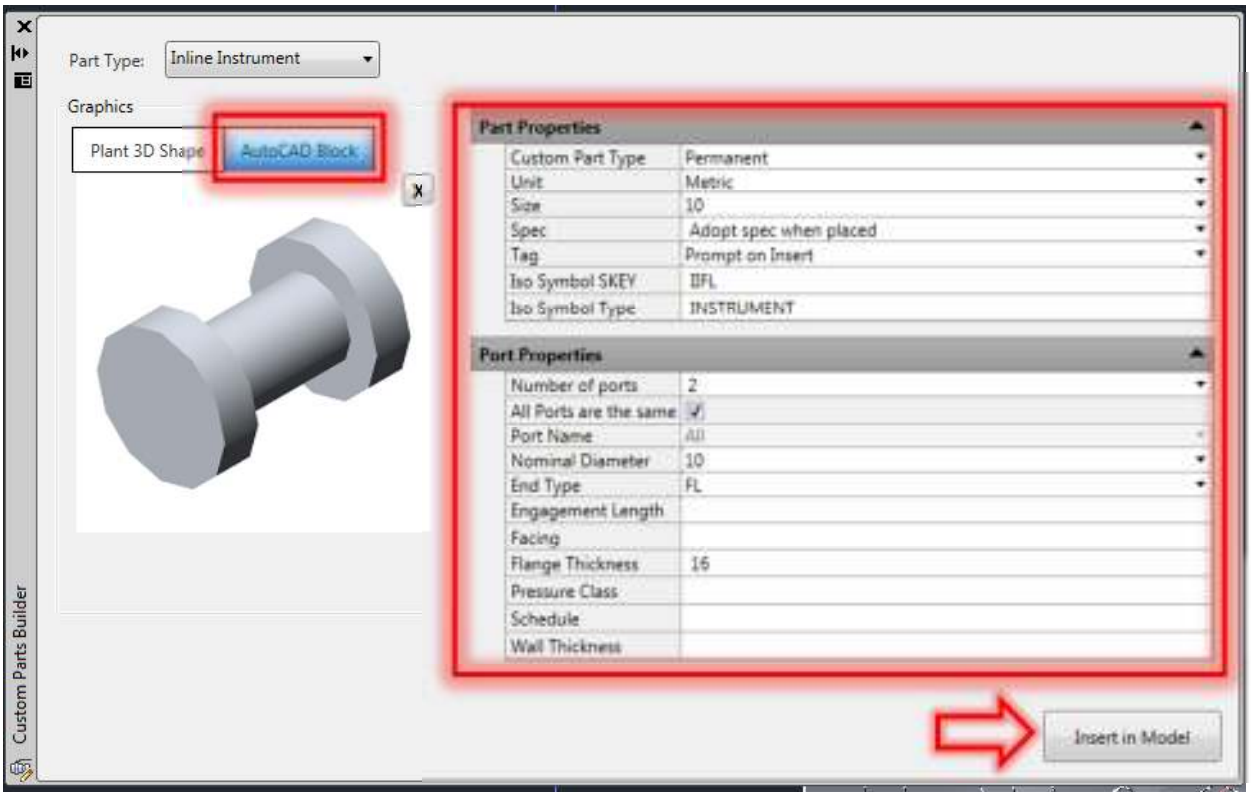

Select a port operation
Add
Delete
Move
exit


Specify port location and direction
Flip direction
Undo
Accept



When defining these ports is finished, use the pull down menu "*Custom Part*". Choose the "*Autocad Block", then choose the* "*Select from model*" option and select the block you had converted.





Define the data required and pick the "*Insert in Model"* button to place the customized component.