Plant 3D: Overcoming the Challenges for Bringing in 3D Equip. from Other Sources

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About the speaker

Jason Dillbeck

I am an Implementation Consultant at D3 Technologies, an Autodesk Platinum Partner, and have been working with AutoCAD professionally since 1989, starting as a drafter for architects & engineers, and over 12 years with an Autodesk partner. I have worked in all aspects of construction services with many AutoCAD vertical products including AutoCAD's Plant 3D, Advance Steel, AutoCAD Architecture, & AutoCAD MEP, along with the Revit and Navisworks products. I have helped numerous customers set up and customize AutoCAD P&ID/Plant 3D, Advance Steel, and other products listed above.
Plant 3D: Overcoming the Challenges for Bringing in 3D Equipment from Other Sources

Go beyond the standard ‘globular’ shapes for equipment in Plant 3D and harness the alternative options to convey your piping design more accurately.

We will work on understanding the ins-and-outs with using standard equipment, but also get in-depth with options of creating more complex 3D solids or bring in designs from outside sources. Finally, for equipment configurations that constantly change during the design of the project, use the power of AutoCAD’s external references (XREF) to keep your designs up to date with the latest changes to the equipment.
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**OBJECTIVE #1**
Explain the benefits and drawbacks to using AutoCAD Plant 3D’s equipment.

**OBJECTIVE #2**
Discover how to use AutoCAD’s 3D solids or imported models as Plant 3D equipment.

**OBJECTIVE #3**
Create AutoCAD Plant 3D equipment from Inventor BIM Content.

**OBJECTIVE #4**
Harness the power of AutoCAD’s external references (XREF) with Plant 3D equipment.
Objective #1

Explain the benefits and drawbacks to using AutoCAD Plant 3D’s equipment.

• Benefits
  o Dialog driven
  o Parametric
  o Add Trim
    ▪ Platforms, skirts, legs, etc.
  o Save Equipment Templates

• Drawbacks
  o ‘Globular’ (not very detailed)
  o Recreate models already in another program
  o Revisions to models are manual
Using Plant 3D Equipment
Objective #1  COMPLETE

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Objective #2

Discover how to use AutoCAD's 3D solids or imported models as AutoCAD Plant 3D equipment.

• **Benefits**
  - Make exact models of equipment
  - Convert models direct from vendors
  - Designate piping/nozzle connections for Plant 3D pipe routing

• **Drawbacks**
  - Static models (not parametric)
  - Very detailed models can slow down Plant 3D
Solids as Plant 3D Equipment
Objective #2  COMPLETE

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Objective #3

Create AutoCAD Plant 3D equipment from Inventor BIM Content.

- **Benefits**
  - Make exact models of equipment
  - Shrinkwrap (simplify the model without ‘globularizing’)
  - Designate piping/nozzle connections for Plant 3D pipe routing within Inventor

- **Drawbacks**
  - Revision require recreation of BIM Content
  - Very detailed models can slow down AutoCAD Plant 3D (use Shrinkwrap)
Equipment from Inventor
Objective #3  COMPLETE

Create AutoCAD Plant 3D equipment from Inventor BIM Content.

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  o Make exact models of equipment
  o Shrinkwrap (simplify the model without ‘globularizing’)
  o Designate piping/nozzle connections for Plant 3D pipe routing within Inventor

• Drawbacks
  o Revision require recreation of BIM Content
  o Very detailed models can slow down AutoCAD Plant 3D (use Shrinkwrap)
Objective #4

Harness the power of AutoCAD's external references (XREF) with Plant 3D equipment.

• **Benefits**
  - Have up-to-date models of equipment
  - Retention of equipment properties assigned even after model changes

• **Drawbacks**
  - Re-assign piping/nozzle locations for Plant 3D's piping connections if the design shifts their position.
Equipment using External Reference (XREF)
Objective #4  COMPLETE

Harness the power of AutoCAD’s external references (XREF) with Plant 3D equipment.

• **Benefits**
  - Have up-to-date models of equipment
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THANK YOU EVERYONE FOR ATTENDING!