PD2299: Easier Plant Design Using The Autodesk® Plant Design Suite

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Class Summary

This class will take you through the workflows incorporated in the Autodesk Plant Design Suite. Starting with P&ID's, we will cover creating Plant Design models using all the components within the Autodesk Plant Design Suite Ultimate edition

This class is NOT a substitute for product training, but rather a quick tour through the various workflows that are supported in the Plant Design Suites.

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Learning Objectives

At the end of this class, you will be able to:

- Follow complete Plant Design workflows that are inside the Autodesk Plant Design Suite – Ultimate
- Make AutoCAD® Plant 3D and AutoCAD® P&ID work together during piping and validation
- Follow the Structural Workflow in the Plant Design Suite from Plant 3D through Revit® to AutoCAD® Structural Detailing
- Incorporate Autodesk Inventor® models in Plant 3D

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Agenda

- Overview of the Plant Design Suite – Ultimate
- Plant Design Workflow
  - Create Project (also how to use Autodesk Vault)
  - P&ID’s
  - Plant 3D
    - Structures
    - Equipment Modeling
    - Piping
  - Structural Workflow
  - Mechanical Equipment Workflow
  - Navisworks
    - Interference Checking
    - Construction Planning
  - Deliverables
- Summary

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Autodesk Plant Design Suite - Ultimate

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Autodesk Plant Design Suites 2013

Standard

- AutoCAD® 2013
- AutoCAD® P&ID 2013
- Autodesk® Showcase® 2013
- Autodesk® Sketchbook® Designer 2013

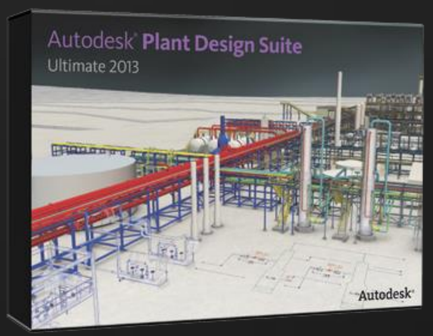
Premium

- Autodesk® Plant Design Suite Standard 2013

+

- AutoCAD® Plant 3D 2013
- AutoCAD® Structural Detailing 2013
- Autodesk® Revit® Structure 2013
- Autodesk® Navisworks® Simulate 2013

Ultimate



- Autodesk® Plant Design Suite Premium 2013

+

- Autodesk® Inventor® 2013
- Autodesk® Navisworks® Manage 2013

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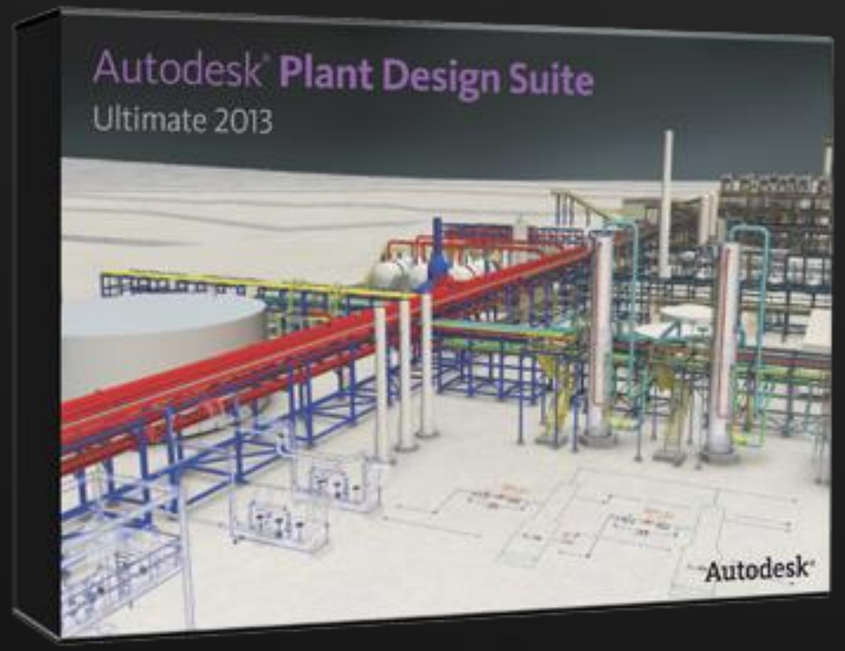
Plant Design Suite 2013 - Ultimate



Autodesk® Sketchbook® Designer 2013
Autodesk® Showcase® 2013
AutoCAD® 2013
AutoCAD® P&ID 2013
AutoCAD® Plant 3D 2013
AutoCAD® Structural Detailing 2013
Autodesk® Revit® Structure 2013
Autodesk® Navisworks® Manage 2013
Autodesk® Inventor® 2013

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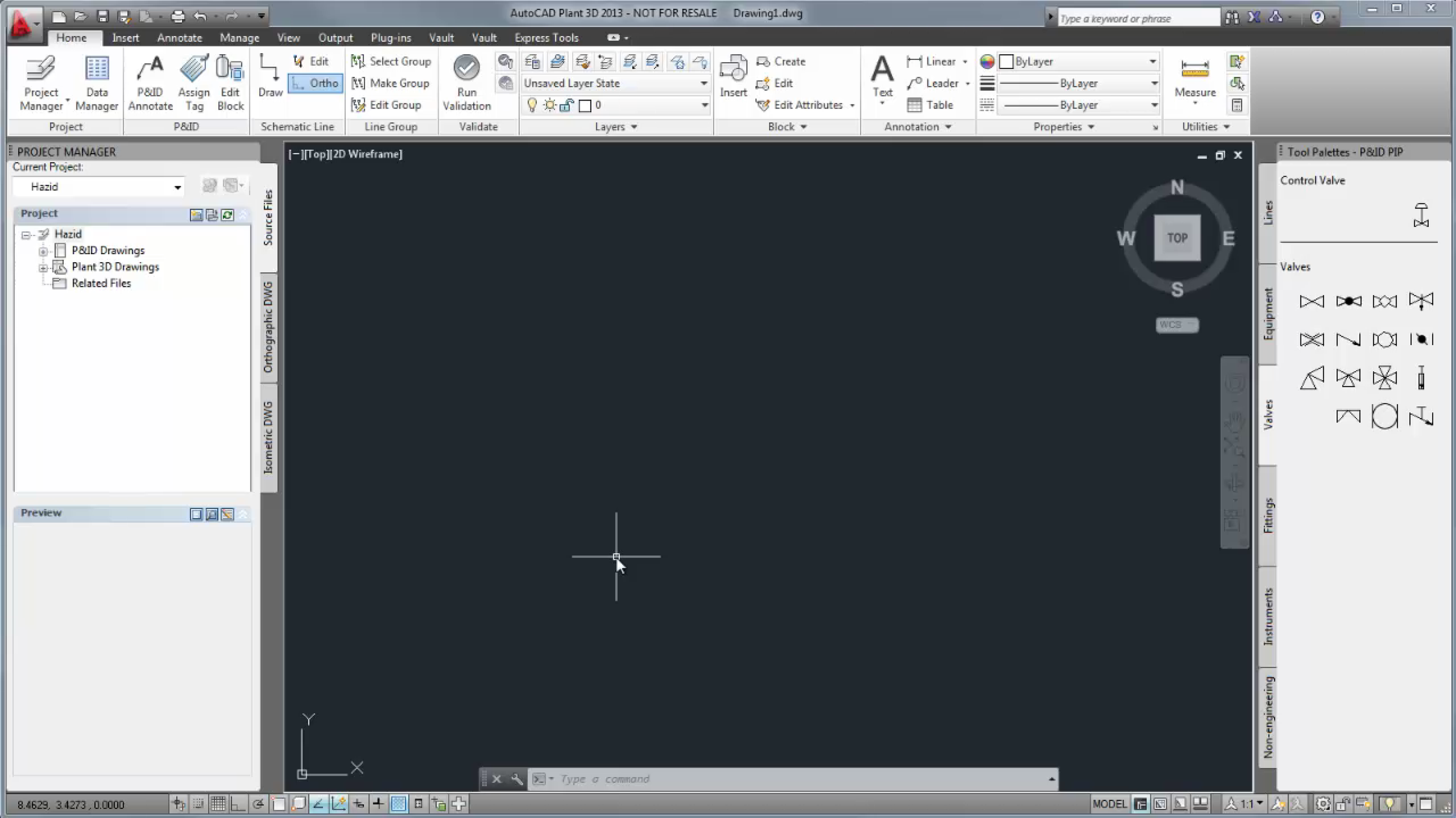
AutoCAD Plant 3D 2013 - NOT FOR RESALE
Drawing1.dwg
Type a keyword or phrase
Home
Insert
Annotate
Manage
View
Output
Plug-ins
Vault
Vault
Express Tools
Project Manager
Data Manager
P&ID Annotate
Assign Tag
Edit Block
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Select Group
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Run Validation
Unsaved Layer State
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Edit Attributes
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Properties
Utilities
PROJECT MANAGER
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Related Files
Preview
Source Files
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Tool Palettes - P&ID PIP
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Valves
Lines
Equipment
Valves
Fittings
Instruments
Non-engineering
Type a command
8.4629, 3.4273 , 0.0000
MODEL
1:1

Create Vault Project

- Need AutoCAD Plant 3D 2013 Extension 1
- Need Autodesk Vault 2013 Server:
  - Vault Workgroup
  - Vault Collaboration
  - Vault Professional
  - Vault Basic is NOT Supported

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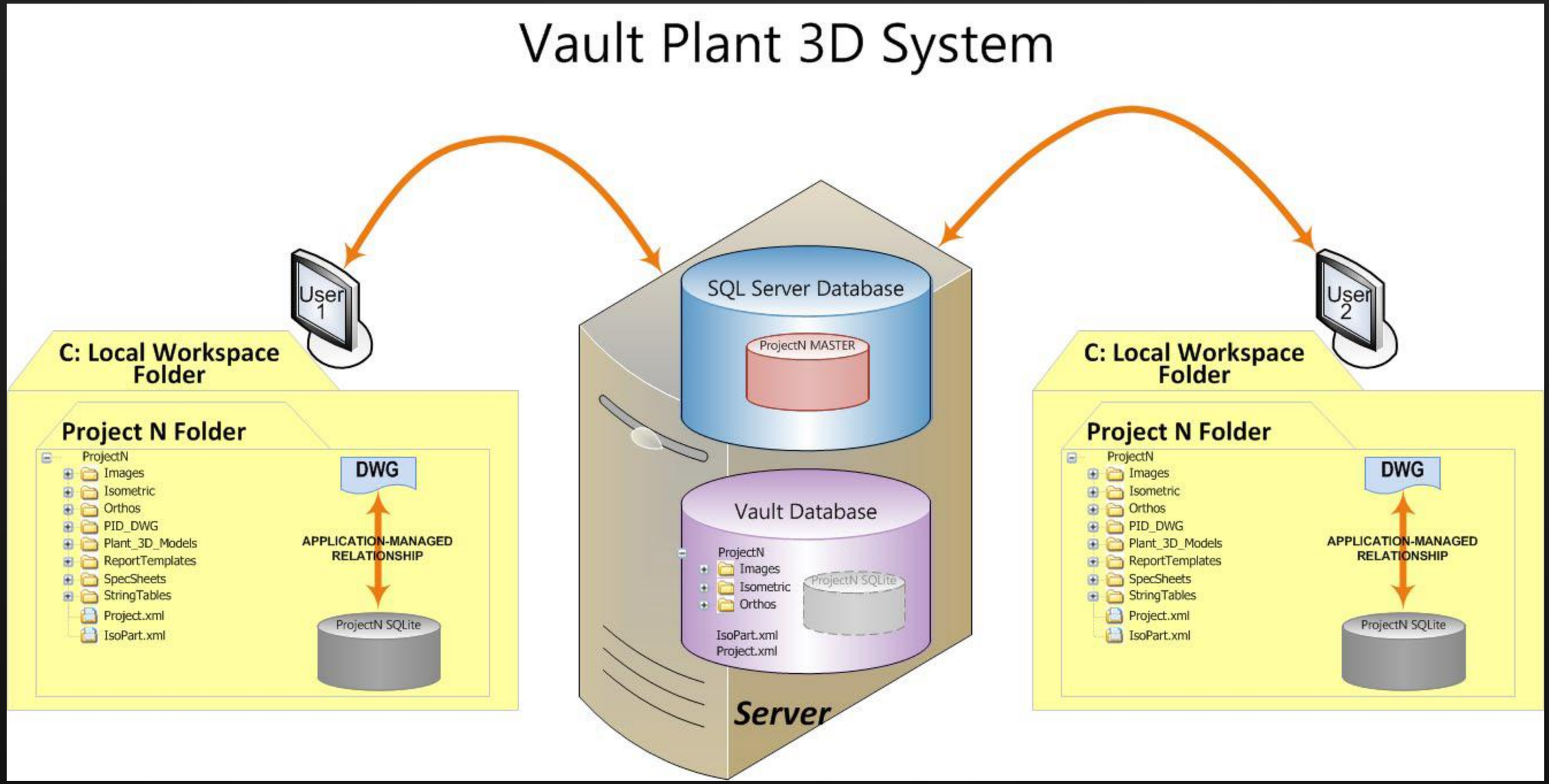
Vault Architecture for Plant 3D



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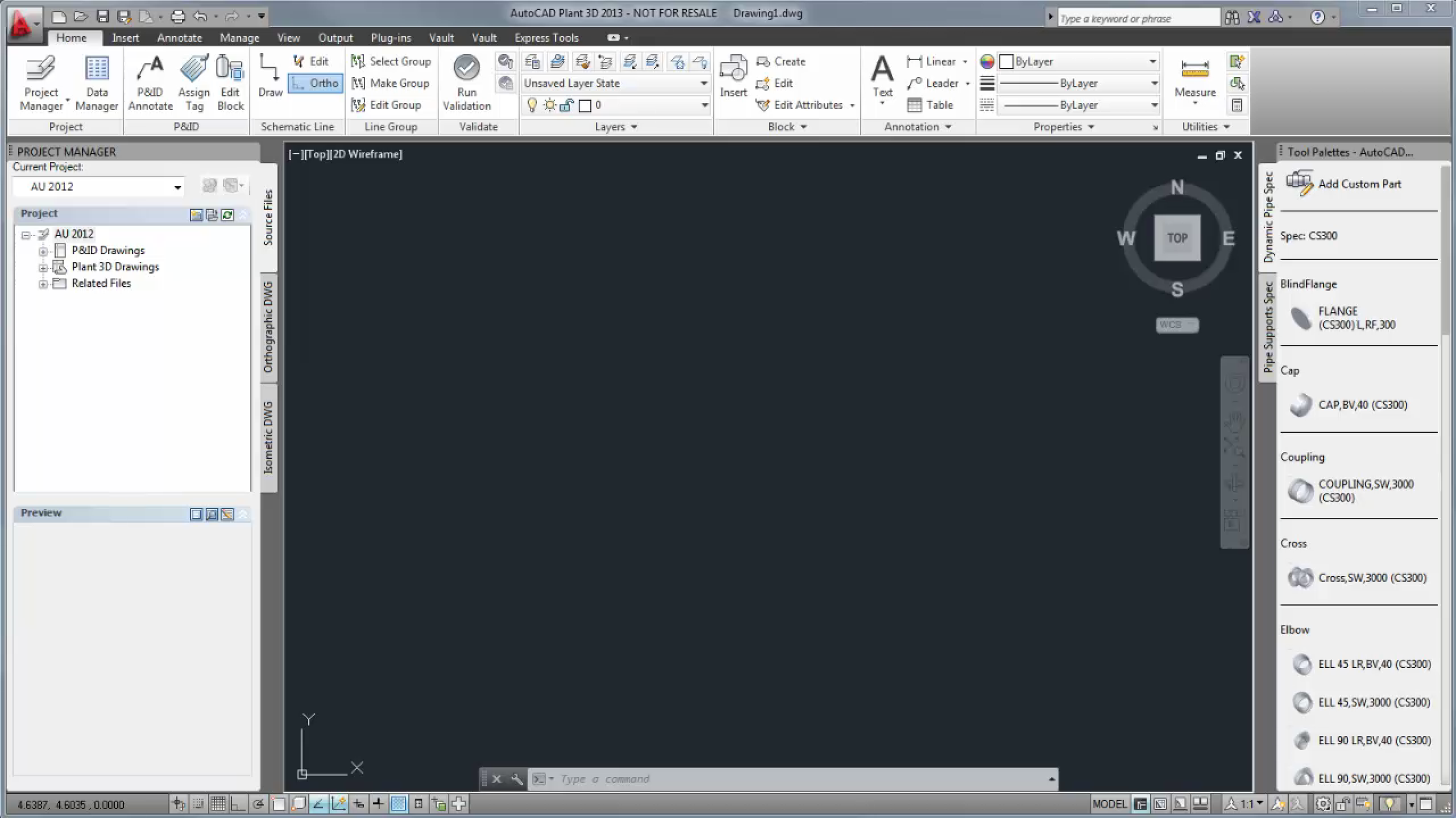
AutoCAD Plant 3D 2013 - NOT FOR RESALE
Drawing1.dwg
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Express Tools
Project Manager
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P&ID Annotate
Assign Tag
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Select Group
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Run Validation
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Annotation
Properties
Utilities
PROJECT MANAGER
Current Project:
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P&ID Drawings
Plant 3D Drawings
Related Files
Preview
Source Files
Orthographic DWG
Isometric DWG
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Tool Palettes - AutoCAD...
Dynamic Pipe Spec
Pipe Supports Spec
Add Custom Part
Spec: CS300
BlindFlange
FLANGE (CS300) L,RF,300
Cap
CAP,BV,40 (CS300)
Coupling
COUPLING,SW,3000 (CS300)
Cross
Cross,SW,3000 (CS300)
Elbow
ELL 45 LR,BV,40 (CS300)
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ELL 90 LR,BV,40 (CS300)
ELL 90,SW,3000 (CS300)
Type a command
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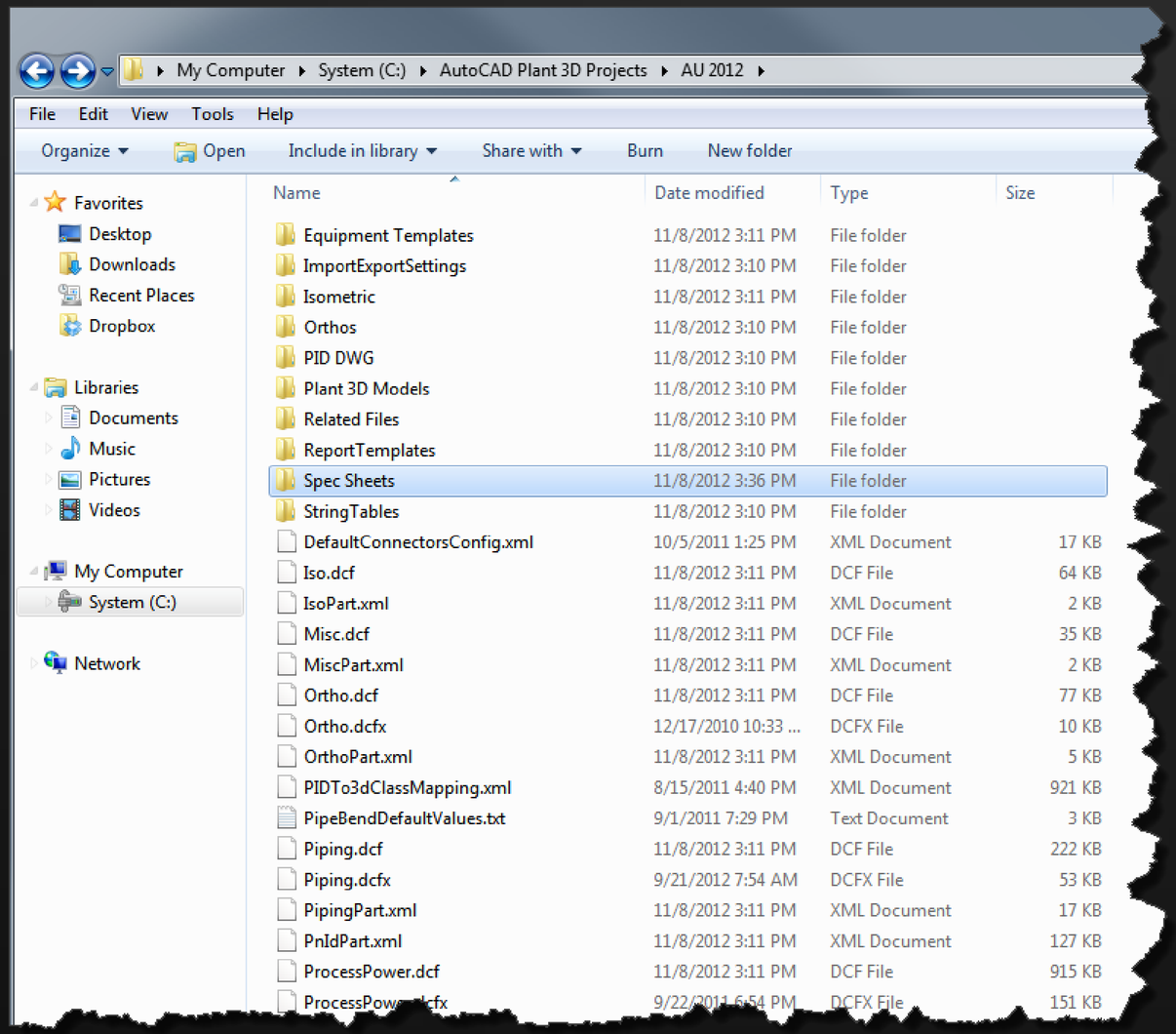
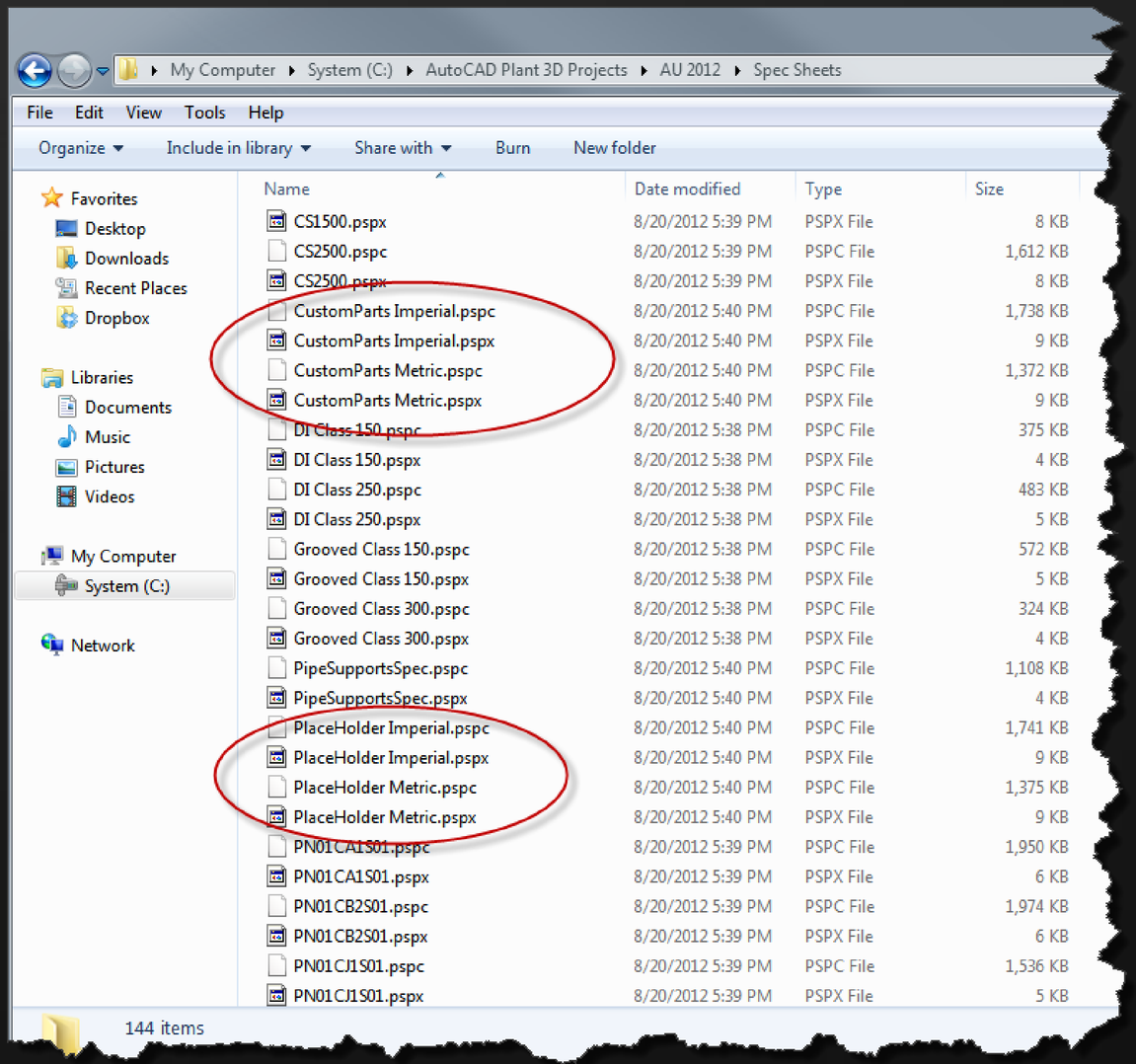
MODEL
1:1

Project Cleanup





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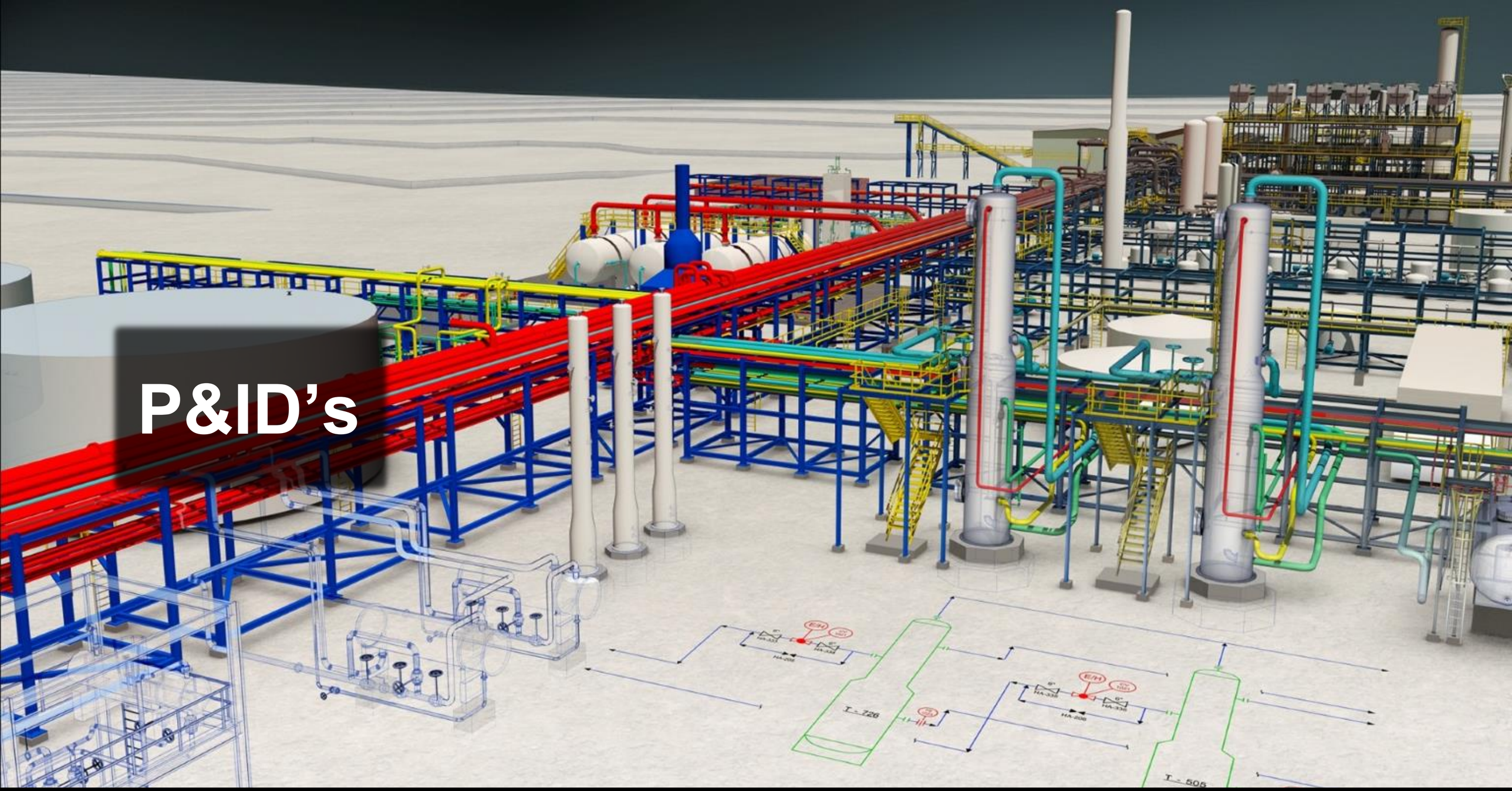

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P&ID’s

- Create P&ID Drawing
- Edit Drawing
- Create equipment from Block
- Customize Annotation
- Import / Export Data
- Reporting

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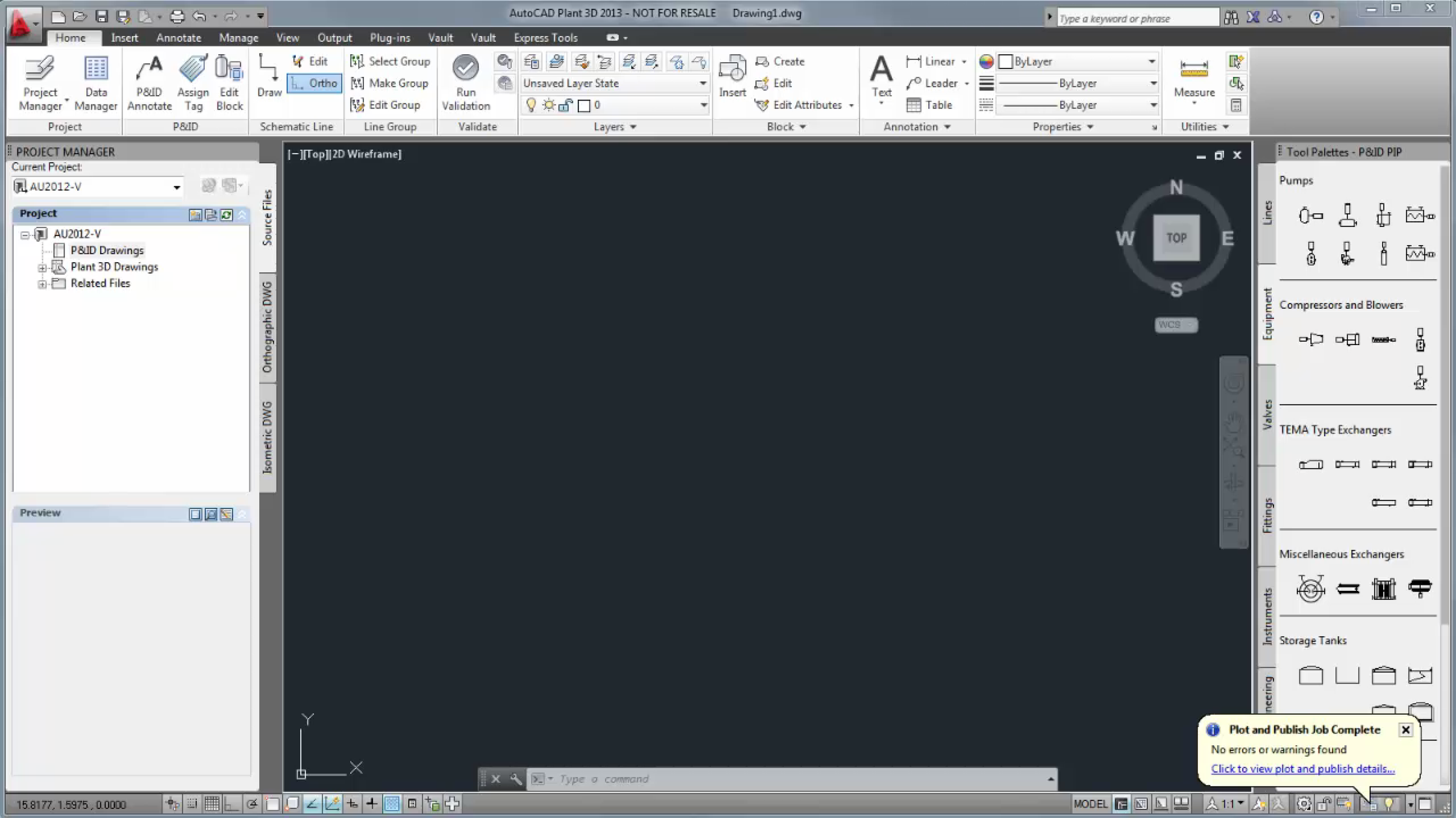
AutoCAD Plant 3D 2013 - NOT FOR RESALE
Drawing1.dwg
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Vault
Express Tools
Project Manager
Data Manager
P&ID Annotate
Assign Tag
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Ortho
Select Group
Make Group
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Run Validation
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Schematic Line
Line Group
Validate
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Properties
Utilities
PROJECT MANAGER
Current Project:
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P&ID Drawings
Plant 3D Drawings
Related Files
Preview
Source Files
Orthographic DWG
Isometric DWG
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N
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TOP
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WCS
Tool Palettes - P&ID PIP
Lines
Equipment
Valves
Fittings
Instruments
Pumps
Compressors and Blowers
TEMA Type Exchangers
Miscellaneous Exchangers
Storage Tanks
Plot and Publish Job Complete
No errors or warnings found
Click to view plot and publish details...
Type a command
15.8177, 1.5975 , 0.0000
MODEL
1:1

AutoCAD Plant 3D 2013 - NOT FOR RESALE Drawing1.dwg

Type a keyword or phrase

Home | Insert | Annotate | Manage | View | Output | Plug-ins | Express Tools

Project Manager | Data Manager | P&ID Annotate | Assign Tag | Edit Block | Draw | Edit | Ortho | Select Group | Make Group | Edit Group | Run Validation | Unsaved Layer State | Insert | Create | Edit | Edit Attributes | Text | Linear | Leader | Table | ByLayer | Measure

Project | P&ID | Schematic Line | Line Group | Validate | Layers | Block | Annotation | Properties | Utilities

PROJECT MANAGER

Current Project:

Ultimate Edition Demo Set

Project

- Ultimate Edition Demo Set
  - P&ID Drawings
    - 1-A1-1001
    - 1-A1-1002
  - Plant 3D Drawings
  - Related Files

Source Files | Orthographic DWG | Isometric DWG

Preview

[−][Top][2D Wireframe]

N W TOP E S

WCS

Tool Palettes - P&ID PIP

Lines | Equipment | Valves | Fittings | Instruments | Non-engineering

Pumps

Compressors and Blowers

TEMA Type Exchangers

Miscellaneous Exchangers

Storage Tanks

Storage Sphere and Furnace

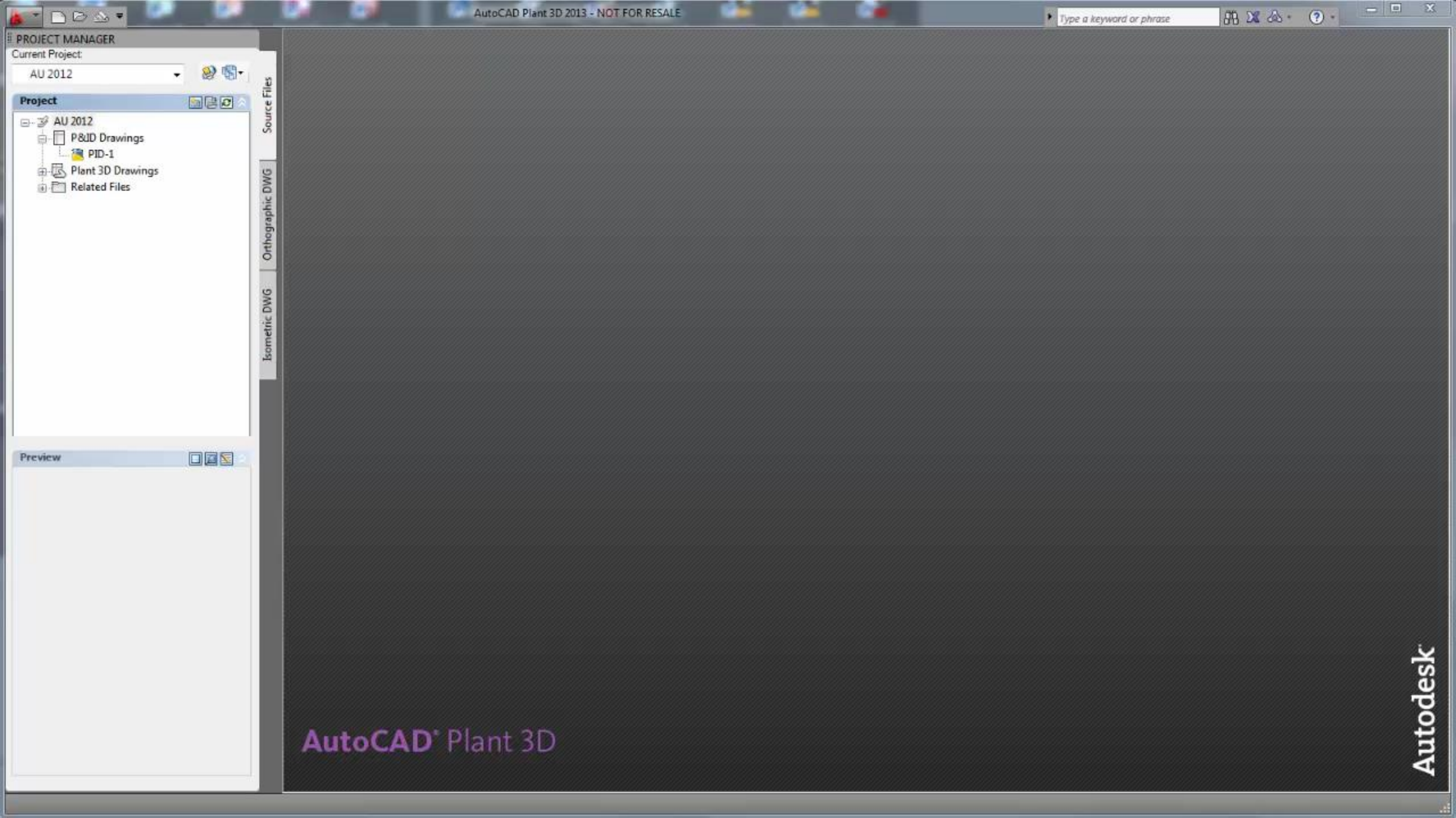
Vessel and Miscellaneous Vessel Details

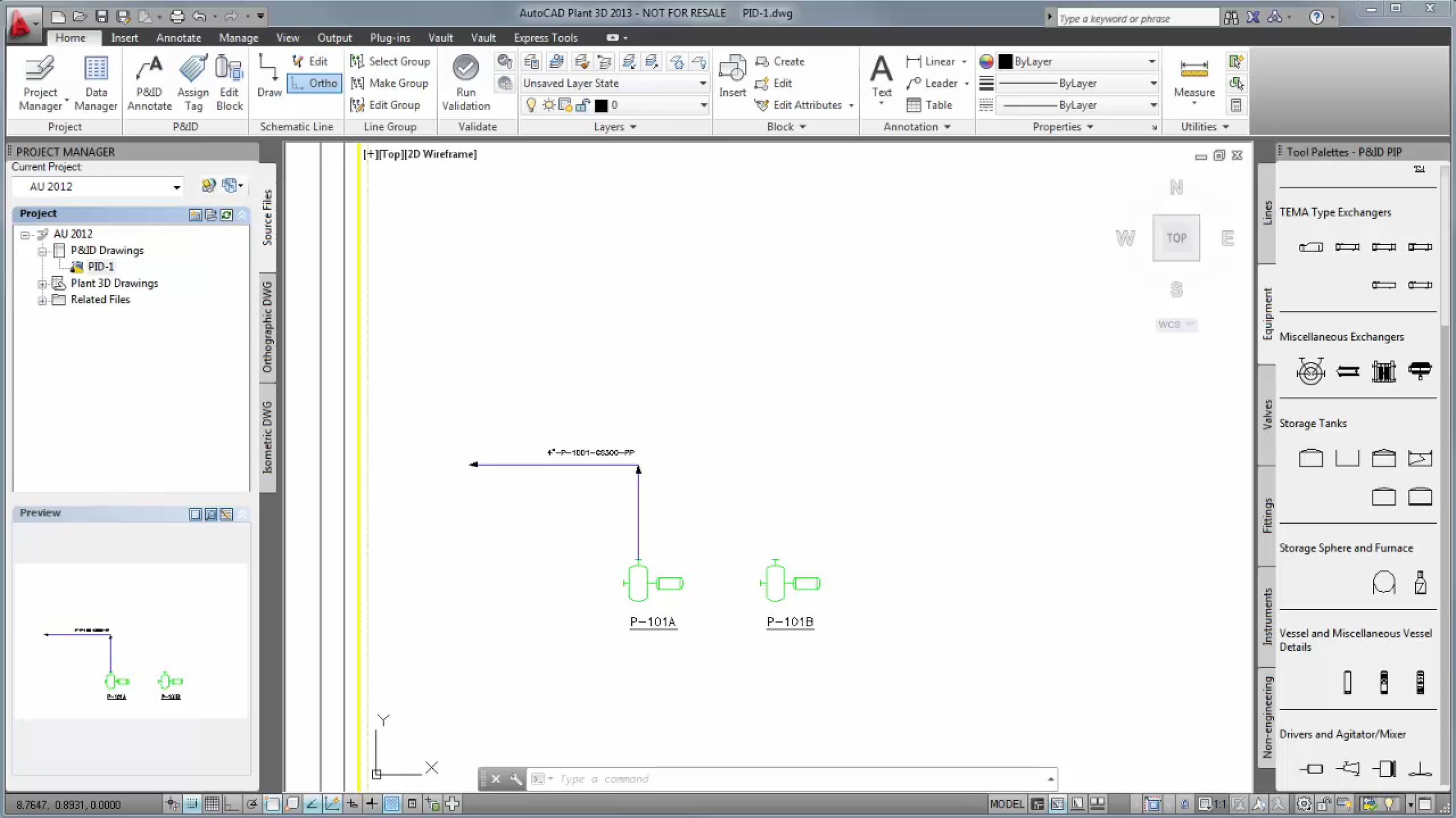
Drivers and Agitator/Mixer

Type a command

3.8005, 5.7799 , 0.0000

MODEL


AutoCAD Plant 3D 2013 - NOT FOR RESALE
Type a keyword or phrase
PROJECT MANAGER
Current Project:
AU 2012
Project
AU 2012
P&ID Drawings
PID-1
Plant 3D Drawings
Related Files
Source Files
Orthographic DWG
Isometric DWG
Preview
AutoCAD® Plant 3D
Autodesk®


AutoCAD Plant 3D 2013 - NOT FOR RESALE PID-1.dwg
Type a keyword or phrase
Home Insert Annotate Manage View Output Plug-ins Vault Vault Express Tools
Project Manager Data Manager
P&ID Annotate Assign Tag Edit Block
Draw Edit Ortho
Select Group Make Group Edit Group
Run Validation
Unsaved Layer State
Insert Create Edit Edit Attributes
Text Linear Leader Table
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Measure
Project P&ID Schematic Line Line Group Validate Layers Block Annotation Properties Utilities
PROJECT MANAGER
Current Project:
AU 2012
Project
AU 2012
P&ID Drawings
PID-1
Plant 3D Drawings
Related Files
Source Files
Orthographic DWG
Isometric DWG
Preview
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N W TOP E S WCS
4"-P-1001-CS300-PP
P-101A
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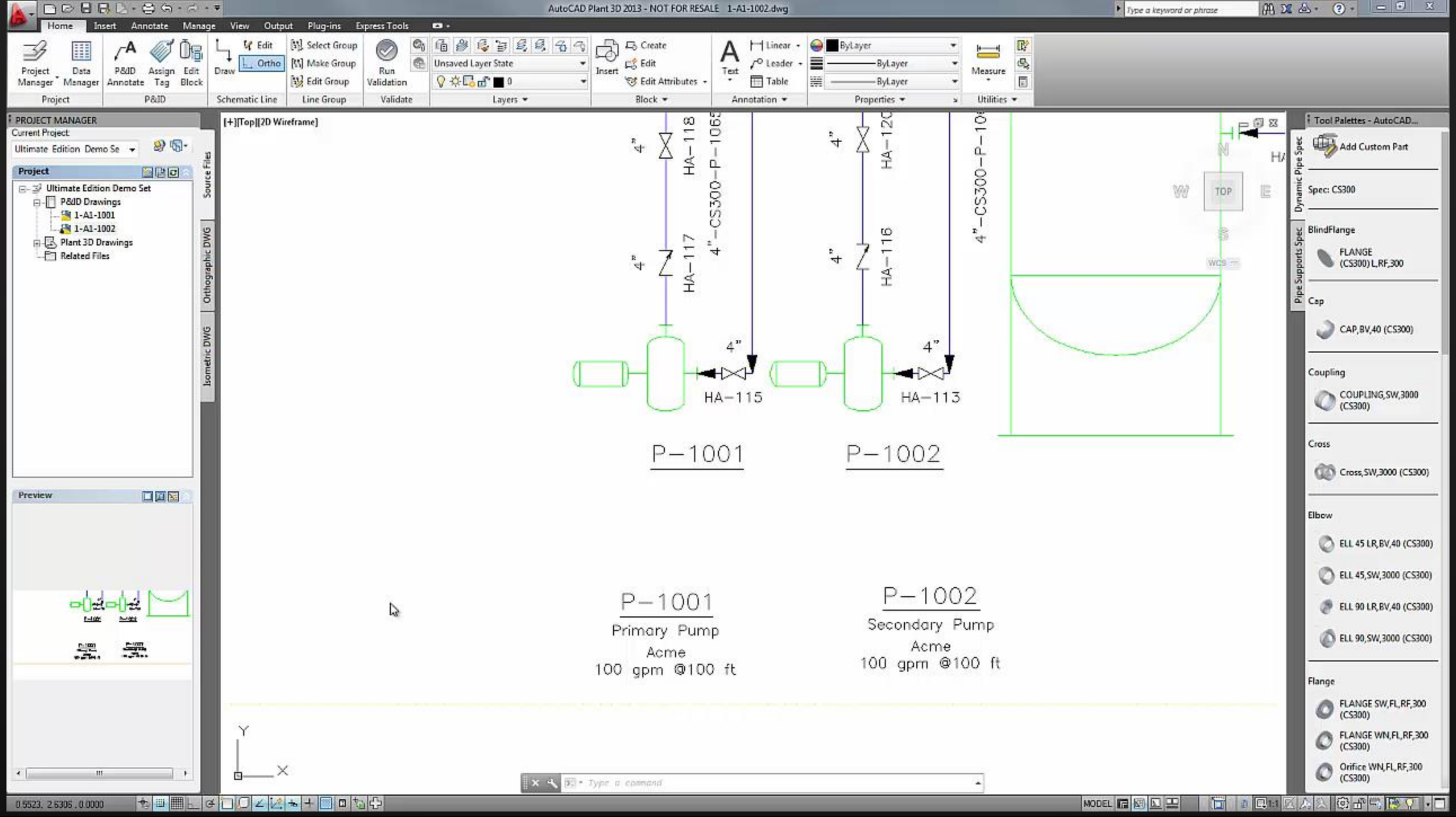
Type a command
Tool Palettes - P&ID PIP
Lines
Equipment
Valves
Fittings
Instruments
Non-engineering
TEMA Type Exchangers
Miscellaneous Exchangers
Storage Tanks
Storage Sphere and Furnace
Vessel and Miscellaneous Vessel Details
Drivers and Agitator/Mixer
8.7647, 0.8931, 0.0000
MODEL
1:1



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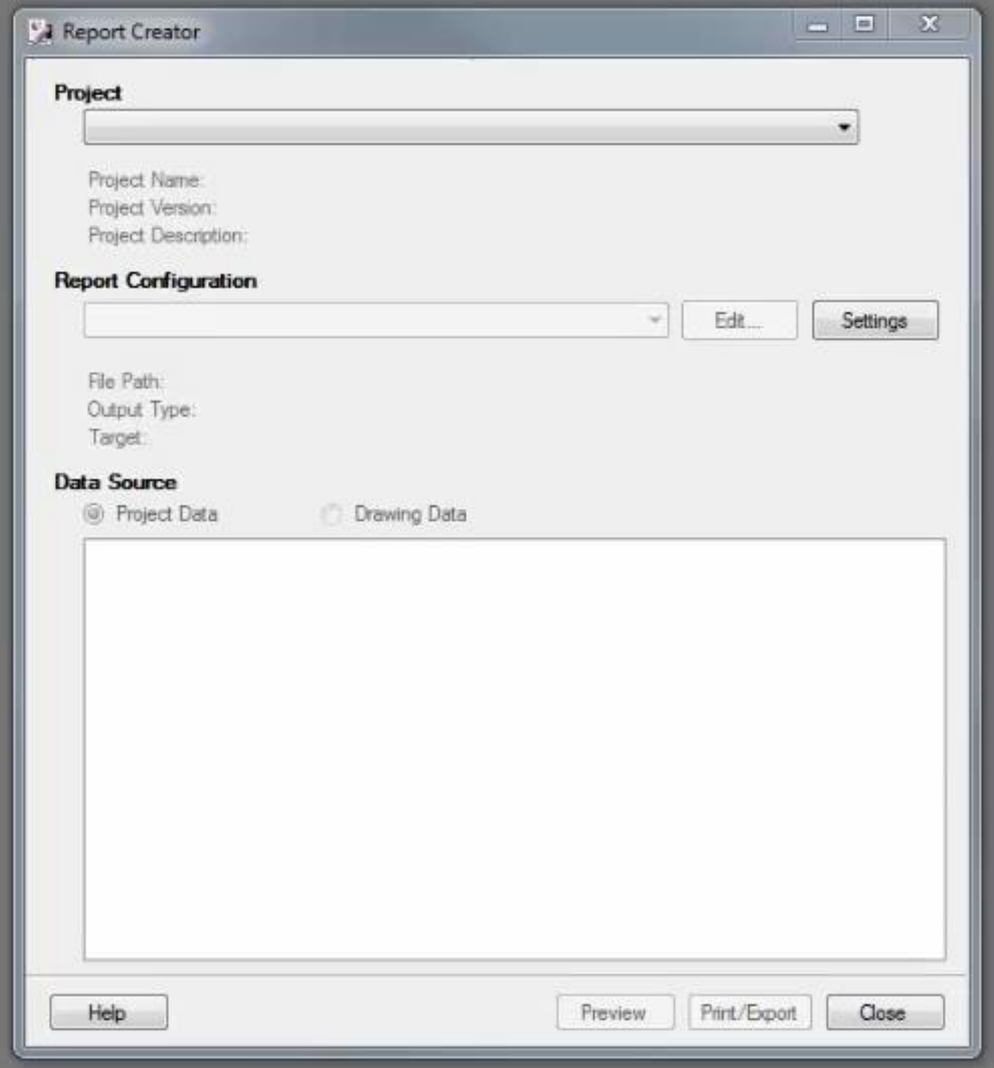
Report Creator
Project
Project Name:
Project Version:
Project Description:
Report Configuration
Edit...
Settings
File Path:
Output Type:
Target:
Data Source
Project Data
Drawing Data
Help
Preview
Print/Export
Close

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Plant Modeling

- Structures
- Equipment
- Piping

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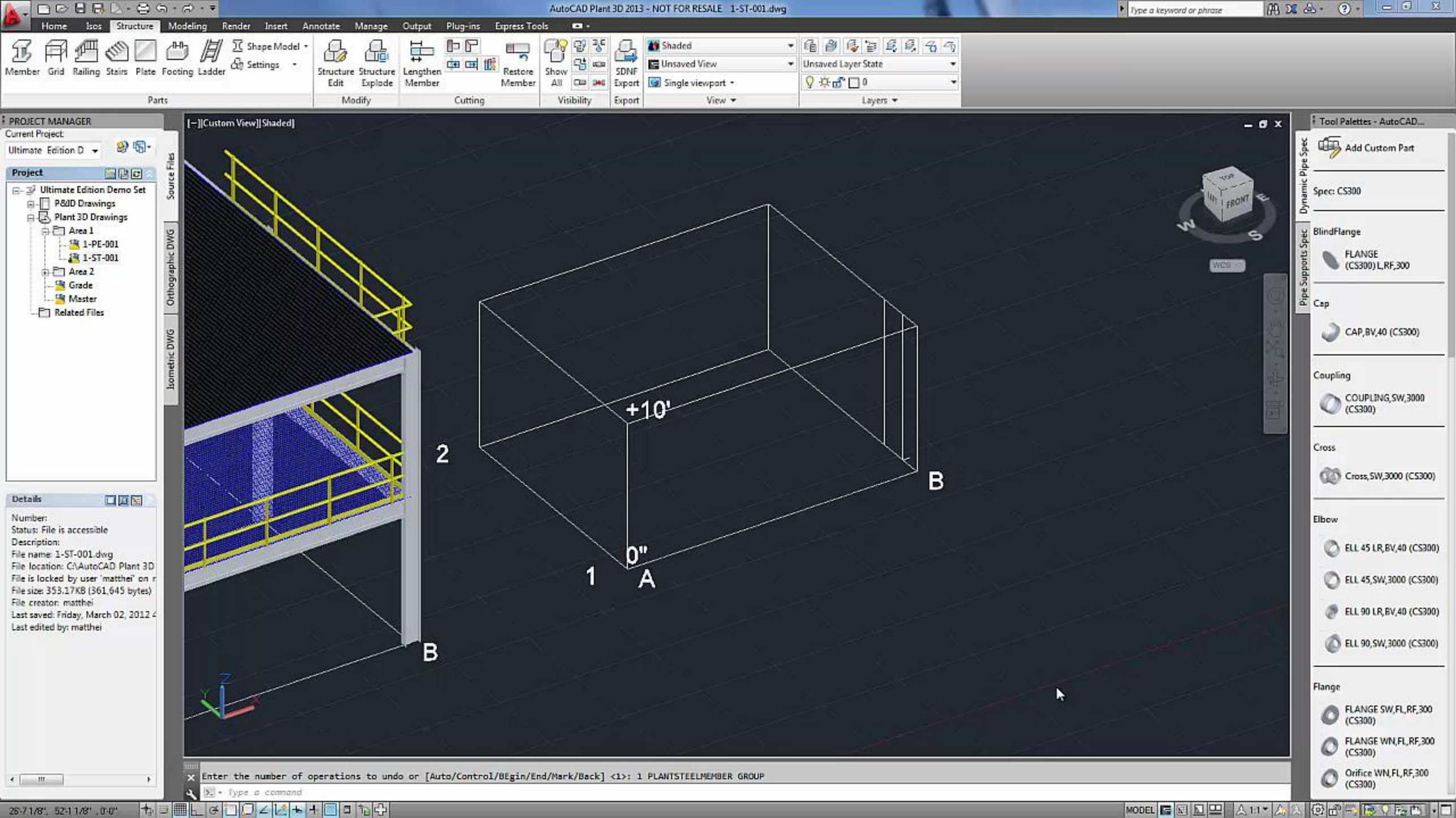
AutoCAD Plant 3D 2013 - NOT FOR RESALE 1-ST-001.dwg
Home Isos Structure Modeling Render Insert Annotate Manage Output Plug-ins Express Tools
Member Grid Railing Stairs Plate Footing Ladder Shape Model Settings
Parts
Structure Edit Structure Explode
Modify
Lengthen Member Restore Member
Cutting
Show All
Visibility
SDNF Export
Export
Shaded Unsaved View Single viewport
View
Unsaved Layer State
Layers
PROJECT MANAGER
Current Project
Ultimate Edition D
Project
Ultimate Edition Demo Set
P&ID Drawings
Plant 3D Drawings
Area 1
1-PE-001
1-ST-001
Area 2
Grade
Master
Related Files
Source Files
Orthographic DWG
Isometric DWG
Details
Number:
Status: File is accessible
Description:
File name: 1-ST-001.dwg
File location: C:\AutoCAD Plant 3D
File is locked by user 'matthei' on
File size: 353.17KB (361,645 bytes)
File creator: matthei
Last saved: Friday, March 02, 2012
Last edited by: matthei
[−][Custom View][Shaded]
+10'
0"
2
1
A
B
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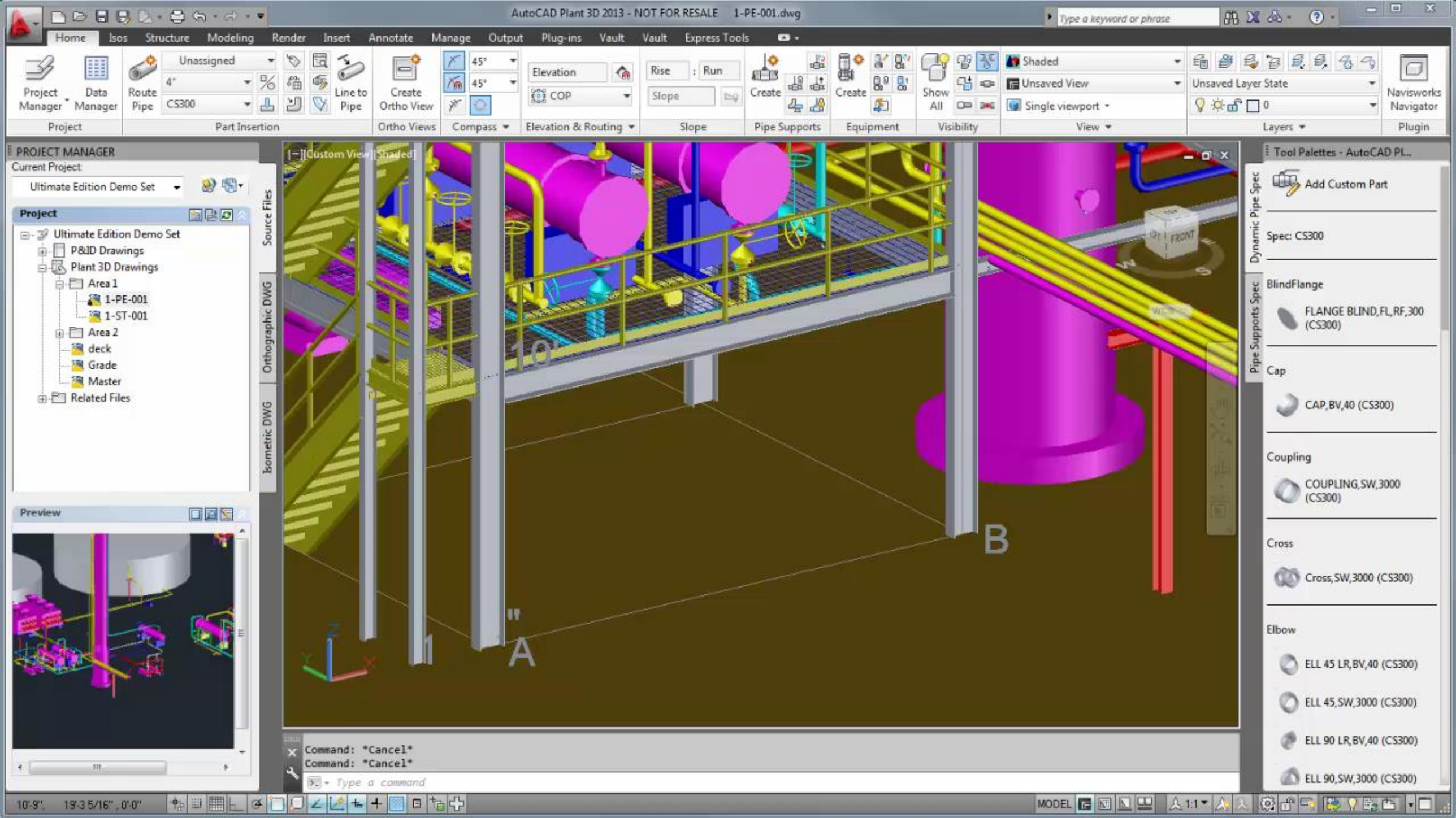
FRONT
WCS
Tool Palettes - AutoCAD...
Dynamic Pipe Spec
Pipe Supports Spec
Add Custom Part
Spec: CS300
BlindFlange
FLANGE (CS300) L,RF,300
Cap
CAP,BV,40 (CS300)
Coupling
COUPLING,SW,3000 (CS300)
Cross
Cross,SW,3000 (CS300)
Elbow
ELL 45 LR,BV,40 (CS300)
ELL 45,SW,3000 (CS300)
ELL 90 LR,BV,40 (CS300)
ELL 90,SW,3000 (CS300)
Flange
FLANGE SW,FL,RF,300 (CS300)
FLANGE WN,FL,RF,300 (CS300)
Orifice WN,FL,RF,300 (CS300)
Enter the number of operations to undo or [Auto/Control/BEgin/End/Mark/Back] <1>: 1 PLANTSTEELMEMBER GROUP
Type a command
MODEL


AutoCAD Plant 3D 2013 - NOT FOR RESALE 1-PE-001.dwg
Type a keyword or phrase
Home Isos Structure Modeling Render Insert Annotate Manage Output Plug-ins Vault Vault Express Tools
Project Manager
Data Manager
Project
Route Pipe
Unassigned
4"
CS300
Line to Pipe
Part Insertion
Create Ortho View
Ortho Views
45°
45°
Compass
Elevation
COP
Elevation & Routing
Rise
Run
Slope
Slope
Create
Pipe Supports
Create
Equipment
Show All
Visibility
Shaded
Unsaved View
Single viewport
View
Unsaved Layer State
Layers
Navisworks Navigator
Plugin
PROJECT MANAGER
Current Project:
Ultimate Edition Demo Set
Project
Ultimate Edition Demo Set
P&ID Drawings
Plant 3D Drawings
Area 1
1-PE-001
1-ST-001
Area 2
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Related Files
Source Files
Orthographic DWG
Isometric DWG
Preview
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Tool Palettes - AutoCAD Pl...
Dynamic Pipe Spec
Pipe Supports Spec
Add Custom Part
Spec: CS300
BlindFlange
FLANGE BLIND,FL,RF,300 (CS300)
Cap
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Coupling
COUPLING,SW,3000 (CS300)
Cross
Cross,SW,3000 (CS300)
Elbow
ELL 45 LR,BV,40 (CS300)
ELL 45,SW,3000 (CS300)
ELL 90 LR,BV,40 (CS300)
ELL 90,SW,3000 (CS300)
Command: *Cancel*
Command: *Cancel*
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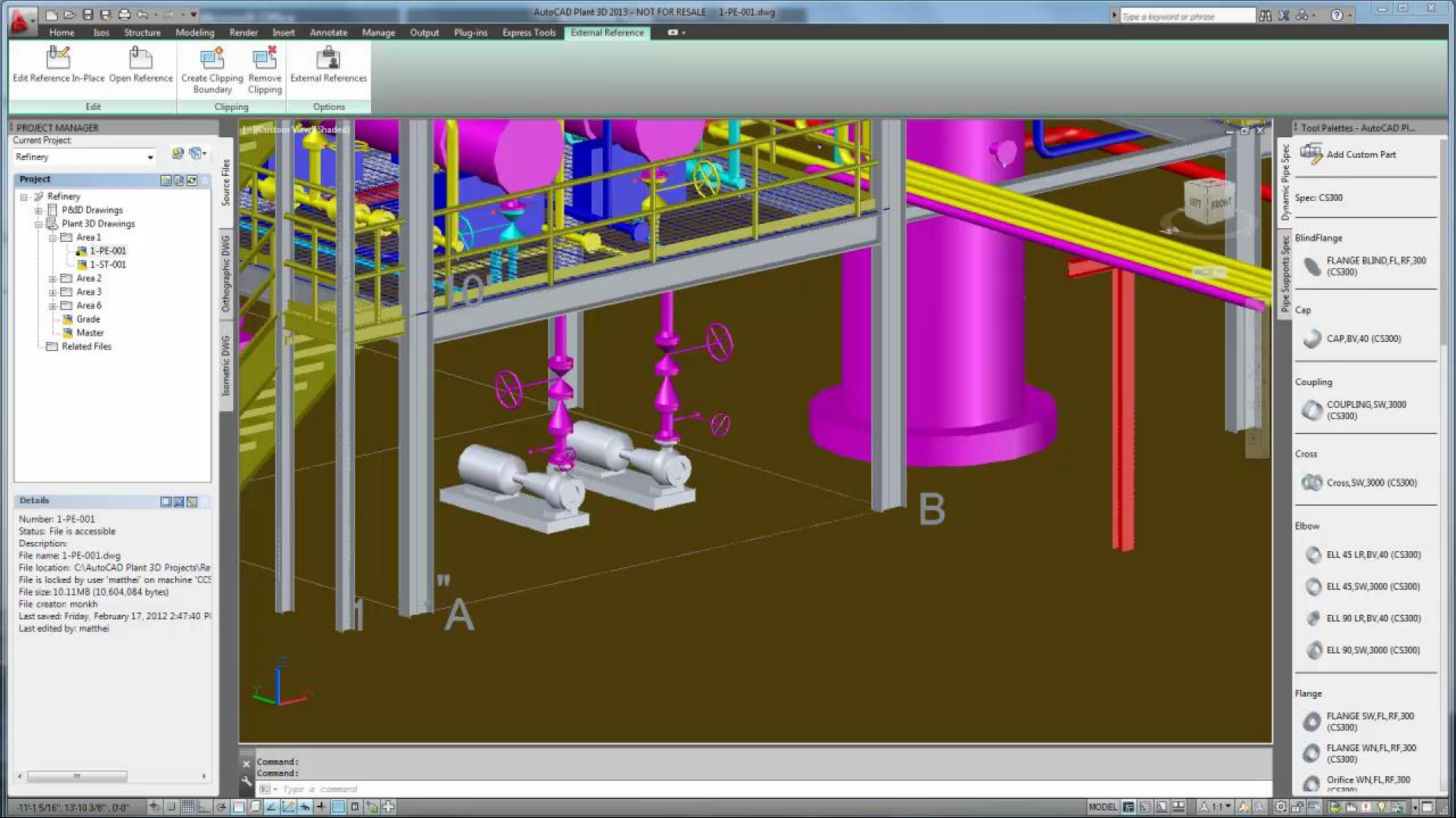
MODEL


AutoCAD Plant 3D 2013 - NOT FOR RESALE 1-PE-001.dwg
Home Isos Structure Modeling Render Insert Annotate Manage Output Plug-ins Express Tools External Reference
Edit Reference In-Place
Open Reference
Create Clipping Boundary
Remove Clipping
External References
Edit
Clipping
Options
PROJECT MANAGER
Current Project:
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Refinery
P&ID Drawings
Plant 3D Drawings
Area 1
1-PE-001
1-ST-001
Area 2
Area 3
Area 6
Grade
Master
Related Files
Source Files
Orthographic DWG
Isometric DWG
Details
Number: 1-PE-001
Status: File is accessible
Description:
File name: 1-PE-001.dwg
File location: C:\AutoCAD Plant 3D Projects\Re
File is locked by user 'matthei' on machine 'CCS
File size: 10.11MB (10,604,084 bytes)
File creator: monkh
Last saved: Friday, February 17, 2012 2:47:40 P
Last edited by: matthei
[-][Custom View][Shaded]
B
A
Command:
Command:
Type a command
Tool Palettes - AutoCAD Pl...
Dynamic Pipe Spec
Pipe Supports Spec
Add Custom Part
Spec: CS300
BlindFlange
FLANGE BLIND,FL,RF,300 (CS300)
Cap
CAP,BV,40 (CS300)
Coupling
COUPLING,SW,3000 (CS300)
Cross
Cross,SW,3000 (CS300)
Elbow
ELL 45 LR,BV,40 (CS300)
ELL 45,SW,3000 (CS300)
ELL 90 LR,BV,40 (CS300)
ELL 90,SW,3000 (CS300)
Flange
FLANGE SW,FL,RF,300 (CS300)
FLANGE WN,FL,RF,300 (CS300)
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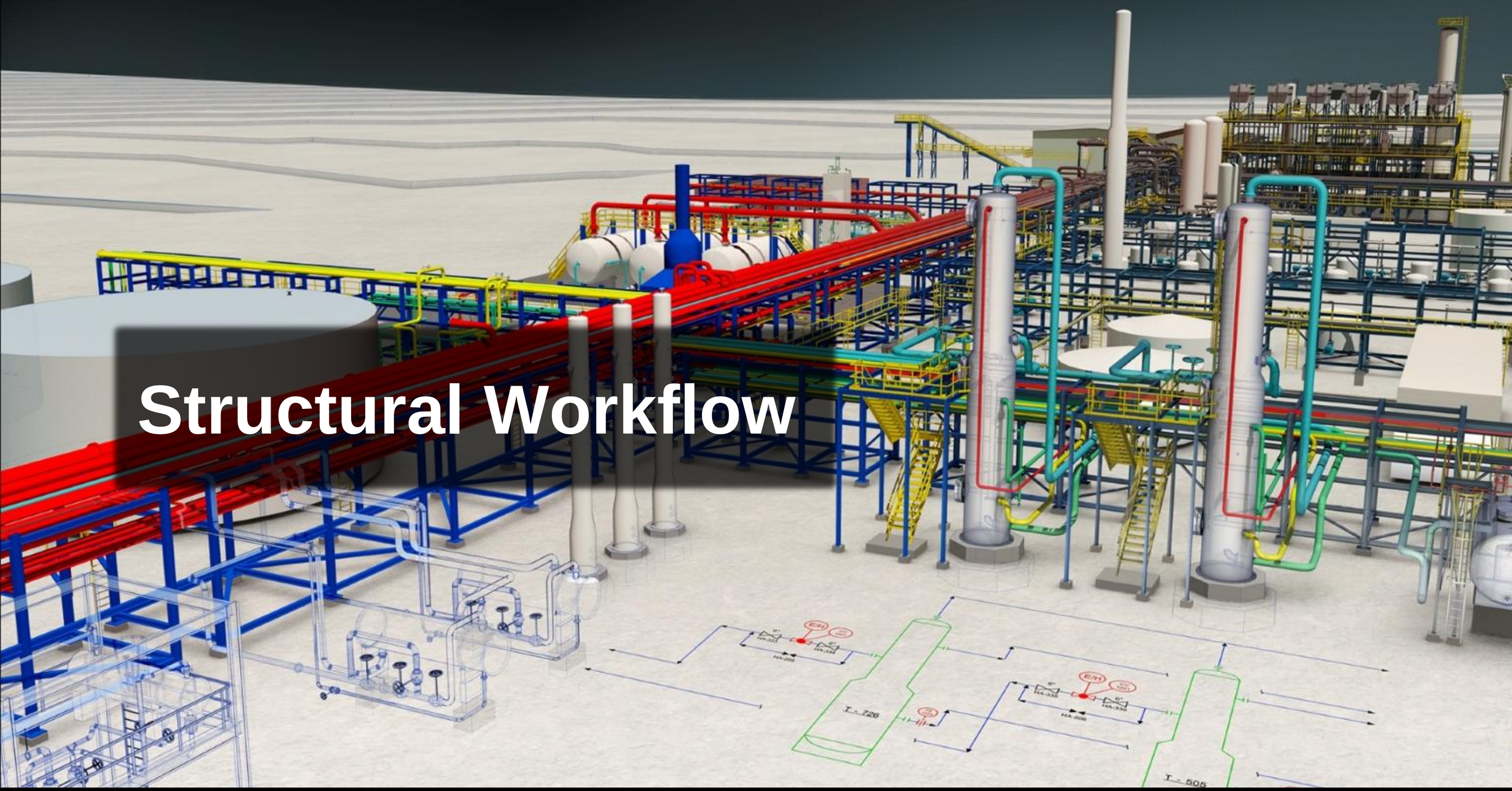
MODEL



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Workflow

- Preliminary Modeling – Plant 3D
  - Export to SDNF file
- Detailed Structural Modeling – Revit Structure
  - Interface to Analysis
- Structural Detailing – AutoCAD Structural Detailing
  - Fabrication Drawings

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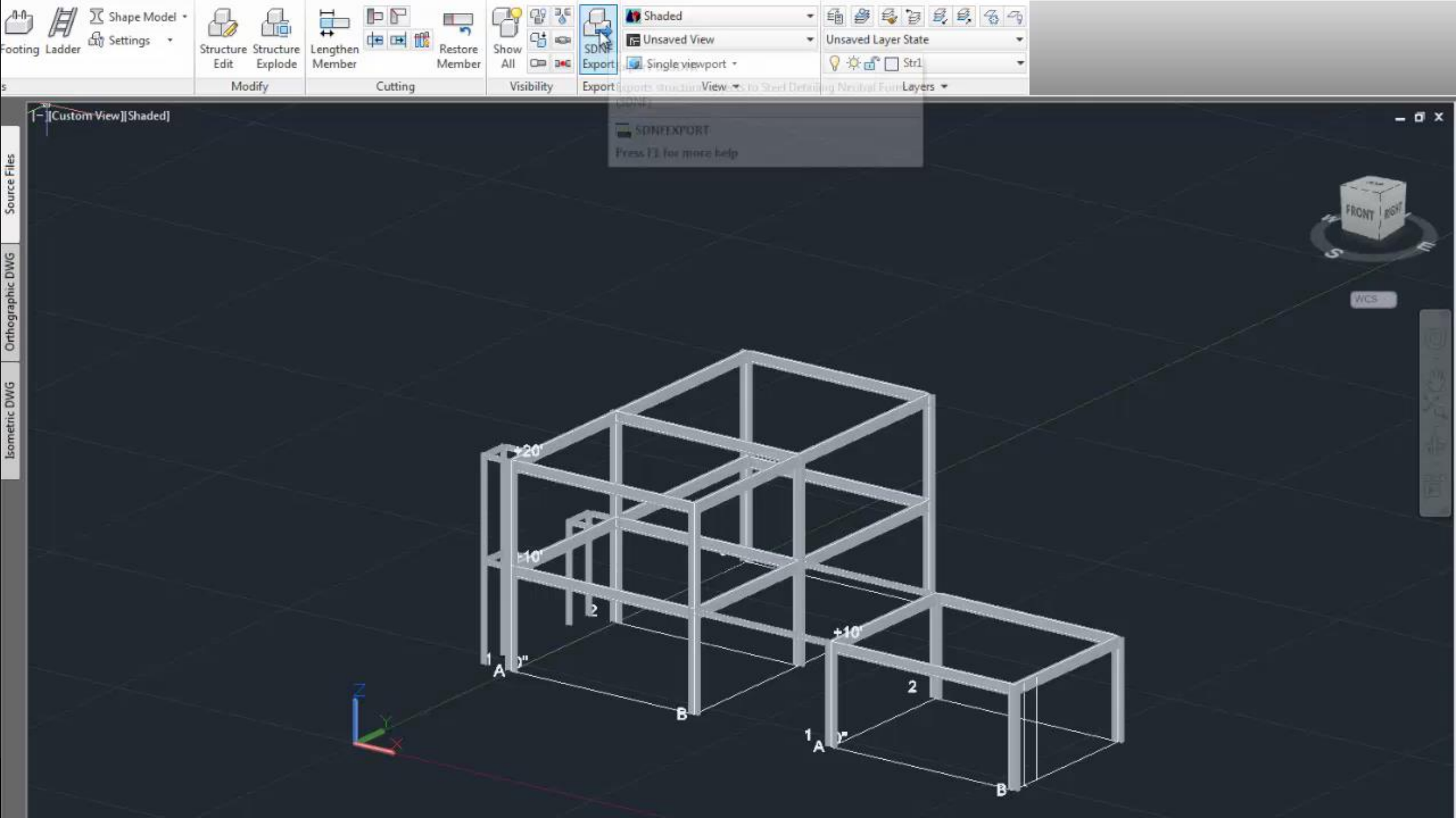
Footing
Ladder
Shape Model
Settings
Structure Edit
Structure Explode
Modify
Lengthen Member
Restore Member
Cutting
Show All
Visibility
SDNF Export
Export
Shaded
Unsaved View
Single viewport
View
Unsaved Layer State
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SDNFEXPORT
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[-][Custom View][Shaded]
Source Files
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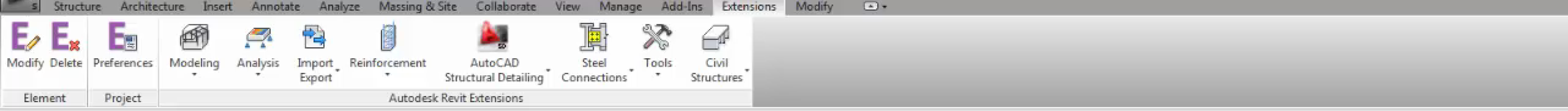
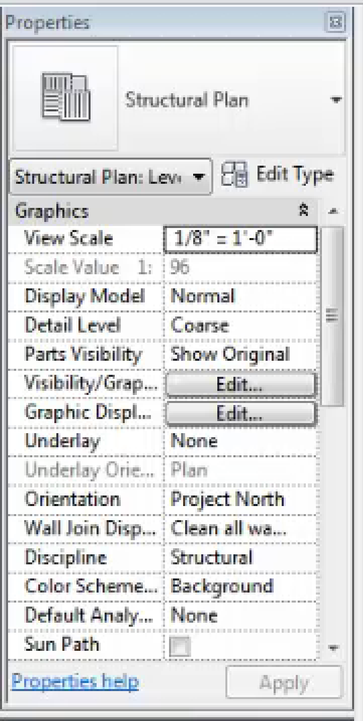
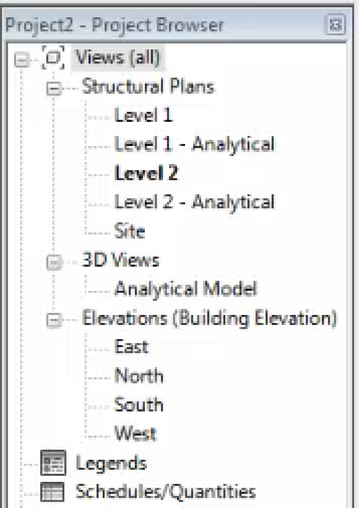
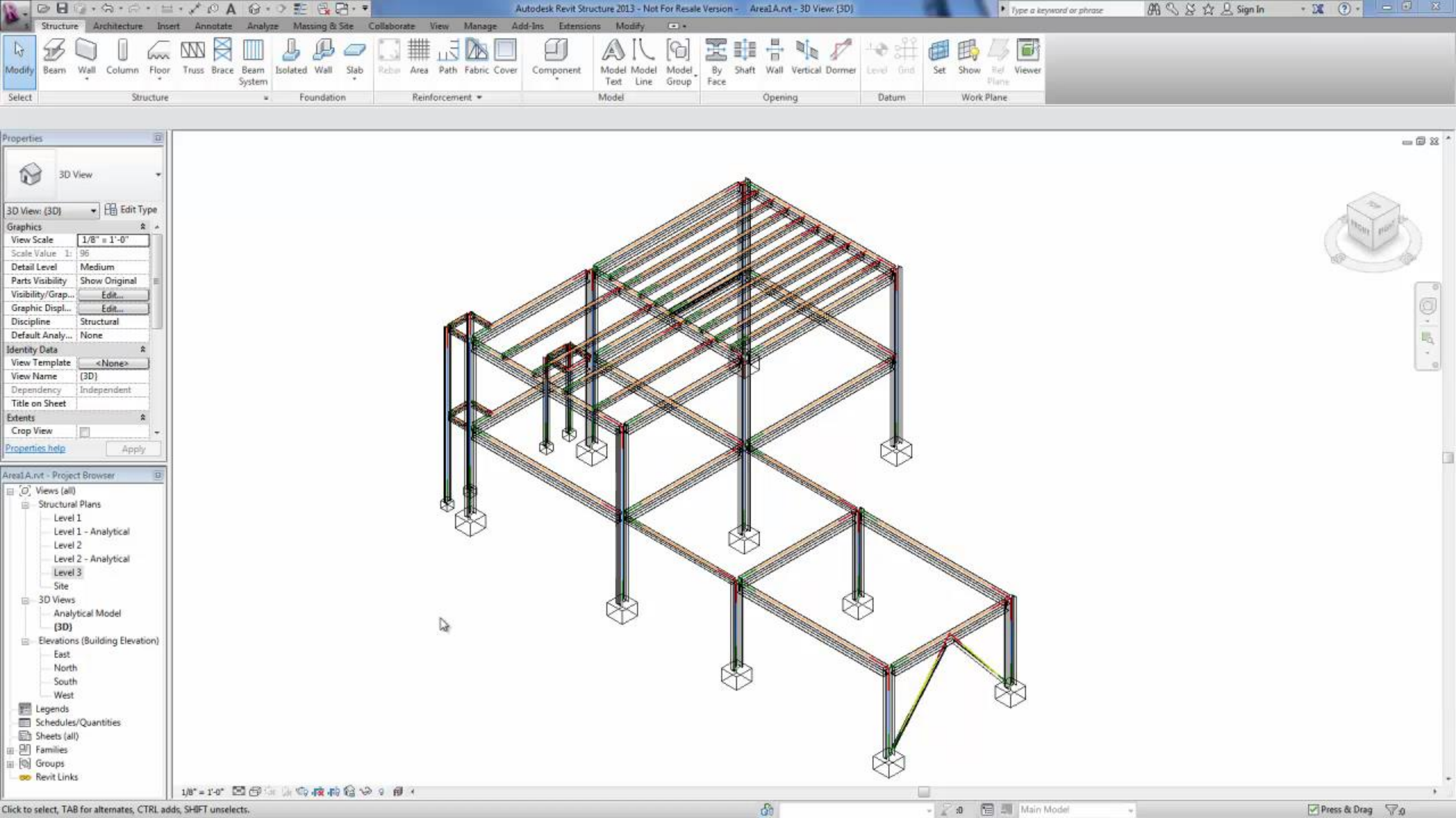

Structure
Architecture
Insert
Annotate
Analyze
Massing & Site
Collaborate
View
Manage
Add-Ins
Extensions
Modify
Modify
Delete
Preferences
Modeling
Analysis
Import Export
Reinforcement
AutoCAD Structural Detailing
Steel Connections
Tools
Civil Structures
Element
Project
Autodesk Revit Extensions


Properties
Structural Plan
Structural Plan: Lev
Edit Type
Graphics
View Scale
1/8" = 1'-0"
Scale Value 1:
96
Display Model
Normal
Detail Level
Coarse
Parts Visibility
Show Original
Visibility/Grap...
Edit...
Graphic Displ...
Edit...
Underlay
None
Underlay Orie...
Plan
Orientation
Project North
Wall Join Disp...
Clean all wa...
Discipline
Structural
Color Scheme...
Background
Default Analy...
None
Sun Path
Properties help
Apply


Project2 - Project Browser
Views (all)
Structural Plans
Level 1
Level 1 - Analytical
Level 2
Level 2 - Analytical
Site
3D Views
Analytical Model
Elevations (Building Elevation)
East
North
South
West
Legends
Schedules/Quantities


Autodesk Revit Structure 2013 - Not For Resale Version - Area1A.rvt - 3D View: {3D}
Structure
Architecture
Insert
Annotate
Analyze
Massing & Site
Collaborate
View
Manage
Add-Ins
Extensions
Modify
Modify
Beam
Wall
Column
Floor
Truss
Brace
Beam System
Isolated
Wall
Slab
Rebar
Area
Path
Fabric
Cover
Component
Model Text
Model Line
Model Group
By Face
Shaft
Wall
Vertical
Dormer
Level
Grid
Set
Show
Ref Plane
Viewer
Select
Structure
Foundation
Reinforcement
Model
Opening
Datum
Work Plane
Properties
3D View
3D View: (3D)
Edit Type
Graphics
View Scale
1/8" = 1'-0"
Scale Value 1:
96
Detail Level
Medium
Parts Visibility
Show Original
Visibility/Grap...
Edit...
Graphic Displ...
Edit...
Discipline
Structural
Default Analy...
None
Identity Data
View Template
<None>
View Name
{3D}
Dependency
Independent
Title on Sheet
Extents
Crop View
Properties help
Apply
Area1A.rvt - Project Browser
Views (all)
Structural Plans
Level 1
Level 1 - Analytical
Level 2
Level 2 - Analytical
Level 3
Site
3D Views
Analytical Model
{3D}
Elevations (Building Elevation)
East
North
South
West
Legends
Schedules/Quantities
Sheets (all)
Families
Groups
Revit Links
1/8" = 1'-0"
Click to select, TAB for alternates, CTRL adds, SHIFT unselects.
Main Model
Press & Drag

Packaged Equipment / Skid Units

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Autodesk Inventor / AutoCAD Plant 3D

- Taking Inventor Models into Plant 3D with Intelligence
  - Retain Inventor Accuracy
  - Use Plant 3D Piping Connectivity
- 4 Stages
  1. Remove unimportant modeling from Inventor Model
  2. Shrinkwrap
  3. Use BIM Exchange For Connections and AutoCAD Import
  4. Import into Plant 3D

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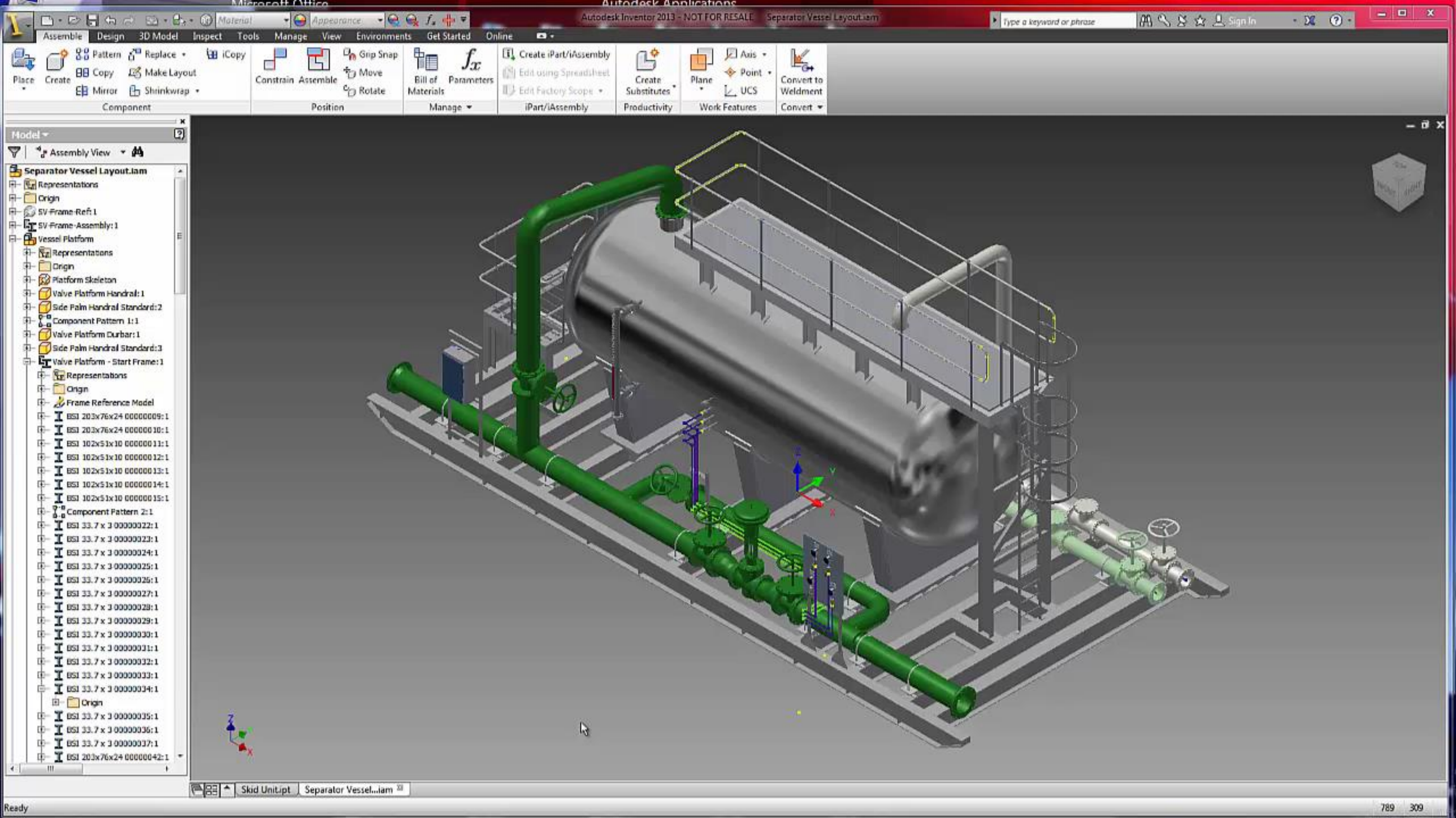
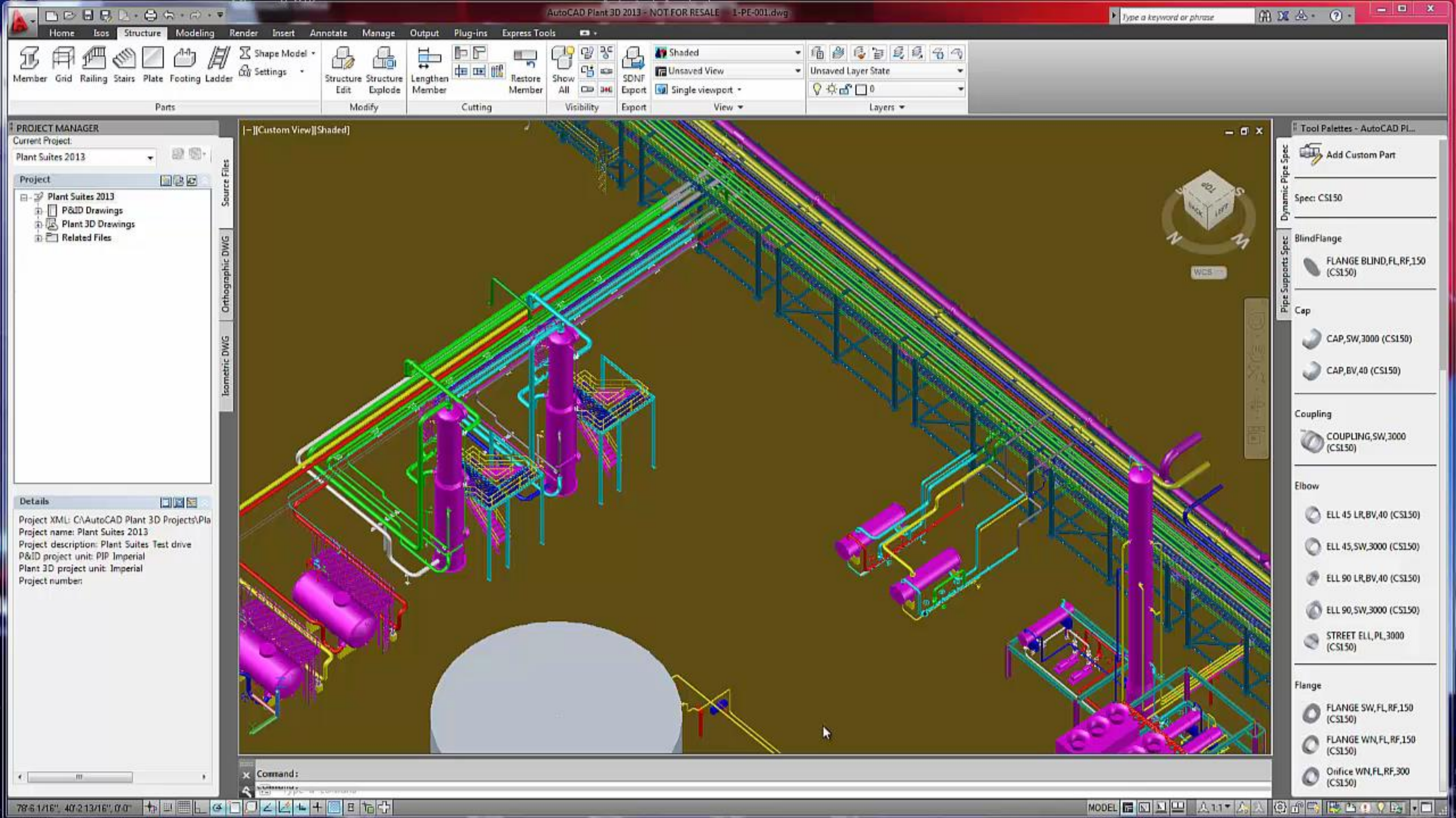
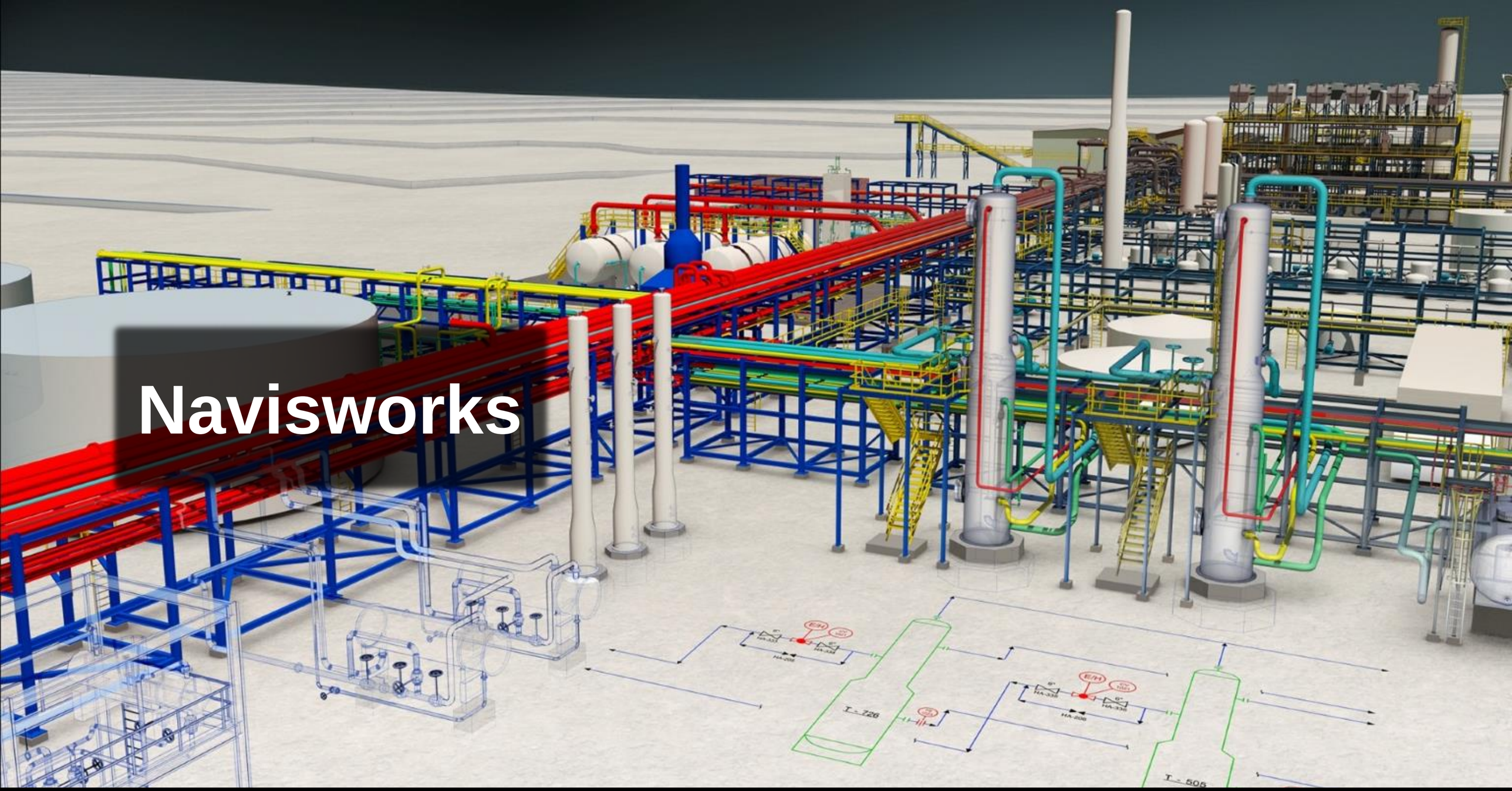

Autodesk Inventor 2013 - NOT FOR RESALE
Separator Vessel Layout.iam
Assemble
Design
3D Model
Inspect
Tools
Manage
View
Environments
Get Started
Online
Place
Create
Pattern
Copy
Mirror
Replace
Make Layout
Shrinkwrap
iCopy
Component
Constrain
Assemble
Grip Snap
Move
Rotate
Position
Bill of Materials
Parameters
Manage
Create iPart/iAssembly
Edit using Spreadsheet
Edit Factory Scope
iPart/iAssembly
Create Substitutes
Productivity
Plane
Axis
Point
UCS
Work Features
Convert to Weldment
Convert
Model
Assembly View
Separator Vessel Layout.iam
Representations
Origin
SV Frame Ref:1
SV Frame Assembly:1
Vessel Platform
Representations
Origin
Platform Skeleton
Valve Platform Handrail:1
Side Palm Handrail Standard:2
Component Pattern 1:1
Valve Platform Durbar:1
Side Palm Handrail Standard:3
Valve Platform - Start Frame:1
Representations
Origin
Frame Reference Model
Component Pattern 2:1
Origin
Skid Unit.ipt
Separator Vessel...iam
Ready
789
309


AutoCAD Plant 3D 2013 - NOT FOR RESALE 1-PE-001.dwg
Home Isos Structure Modeling Render Insert Annotate Manage Output Plug-ins Express Tools
Member Grid Railing Stairs Plate Footing Ladder
Shape Model
Settings
Parts
Structure Edit
Structure Explode
Modify
Lengthen Member
Restore Member
Cutting
Show All
Visibility
SDNF Export
Export
Shaded
Unsaved View
Single viewport
View
Unsaved Layer State
Layers
PROJECT MANAGER
Current Project:
Plant Suites 2013
Project
Plant Suites 2013
P&ID Drawings
Plant 3D Drawings
Related Files
Source Files
Orthographic DWG
Isometric DWG
Details
Project XML: C:\AutoCAD Plant 3D Projects\Pla
Project name: Plant Suites 2013
Project description: Plant Suites Test drive
P&ID project unit: PIP Imperial
Plant 3D project unit: Imperial
Project number:
[-][Custom View][Shaded]
Command:
Tool Palettes - AutoCAD Pl...
Add Custom Part
Spec: CS150
BlindFlange
FLANGE BLIND,FL,RF,150 (CS150)
Cap
CAP,SW,3000 (CS150)
CAP,BV,40 (CS150)
Coupling
COUPLING,SW,3000 (CS150)
Elbow
ELL 45 LR,BV,40 (CS150)
ELL 45,SW,3000 (CS150)
ELL 90 LR,BV,40 (CS150)
ELL 90,SW,3000 (CS150)
STREET ELL,PL,3000 (CS150)
Flange
FLANGE SW,FL,RF,150 (CS150)
FLANGE WN,FL,RF,150 (CS150)
Orifice WN,FL,RF,300 (CS150)
Dynamic Pipe Spec
Pipe Supports Spec
MODEL



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Navisworks

- Project Reviews & Collaboration
- Interference Checking
- Construction Planning

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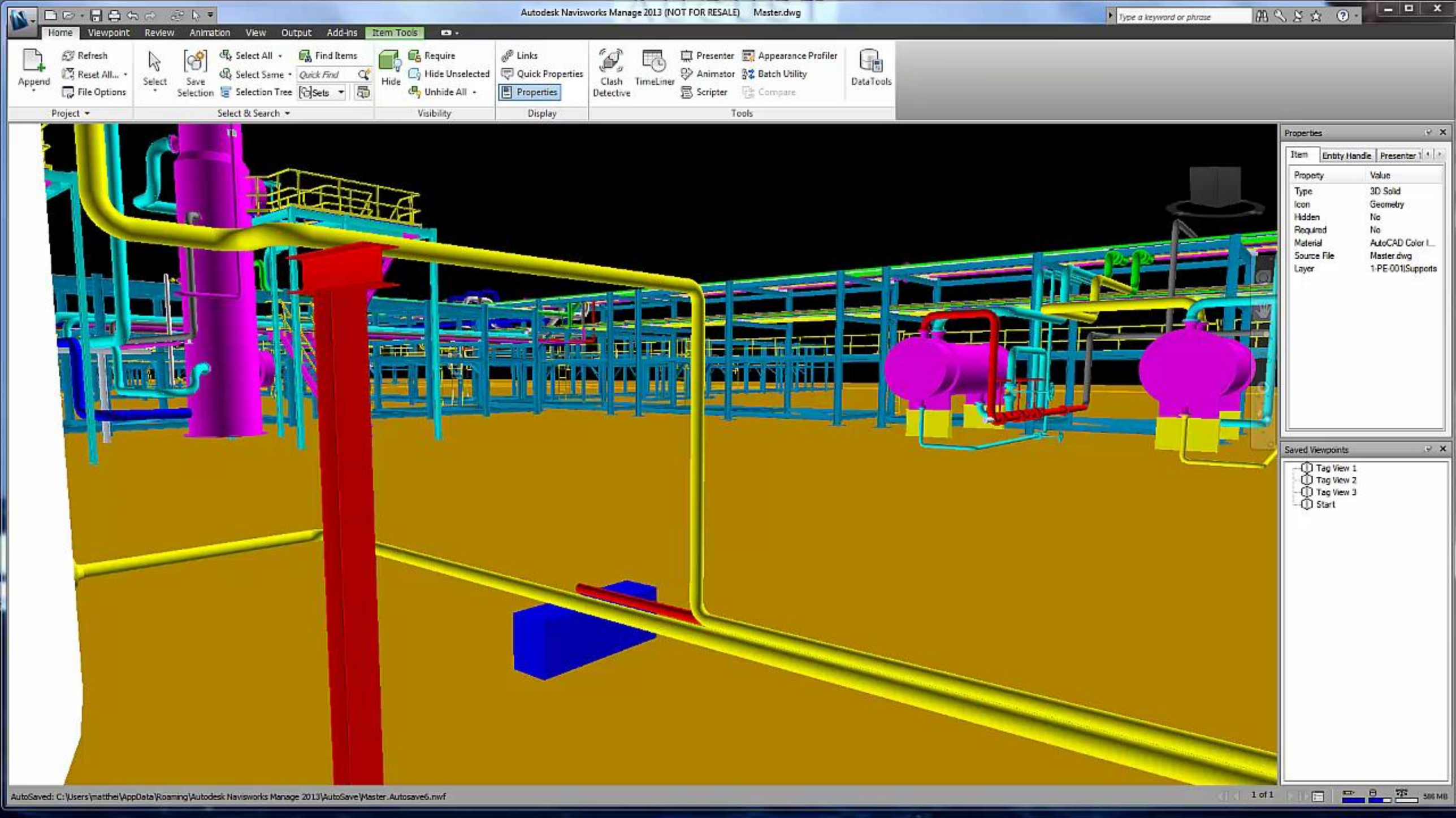
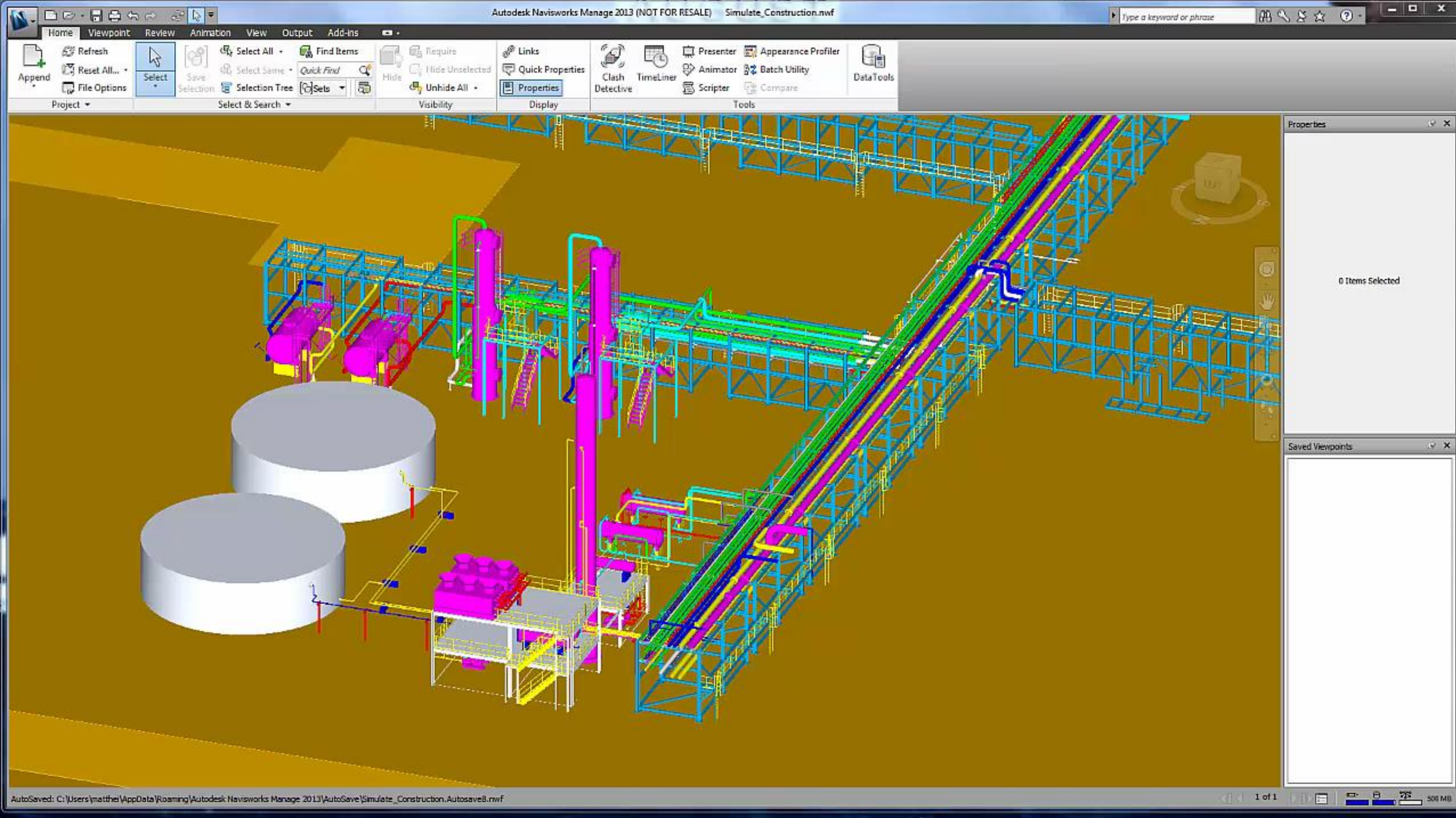

Autodesk Navisworks Manage 2013 (NOT FOR RESALE) Master.dwg
Type a keyword or phrase
Home
Viewpoint
Review
Animation
View
Output
Add-Ins
Item Tools
Append
Refresh
Reset All...
File Options
Project
Select
Save Selection
Select All
Select Same
Selection Tree
Find Items
Quick Find
Sets
Select & Search
Hide
Require
Hide Unselected
Unhide All
Visibility
Links
Quick Properties
Properties
Display
Clash Detective
TimeLiner
Presenter
Animator
Scripter
Appearance Profiler
Batch Utility
Compare
Tools
DataTools
Properties
Item
Entity Handle
Presenter 1
Property
Value
Type
3D Solid
Icon
Geometry
Hidden
No
Required
No
Material
AutoCAD Color I...
Source File
Master.dwg
Layer
1-PE-001|Supports
Saved Viewpoints
Tag View 1
Tag View 2
Tag View 3
Start
AutoSaved: C:\Users\matthei\AppData\Roaming\Autodesk Navisworks Manage 2013\AutoSave\Master.Autosave6.nwf
1 of 1


Autodesk Navisworks Manage 2013 (NOT FOR RESALE) Simulate_Construction.nwf
Type a keyword or phrase
Home
Viewpoint
Review
Animation
View
Output
Add-ins
Append
Refresh
Reset All...
File Options
Project
Select
Save Selection
Select All
Select Same
Selection Tree
Find Items
Quick Find
Sets
Select & Search
Hide
Require
Hide Unselected
Unhide All
Visibility
Links
Quick Properties
Properties
Display
Clash Detective
TimeLiner
Presenter
Animator
Scripter
Appearance Profiler
Batch Utility
Compare
Tools
DataTools
Properties
0 Items Selected
Saved Viewpoints
AutoSaved: C:\Users\matthei\AppData\Roaming\Autodesk Navisworks Manage 2013\AutoSave\Simulate_Construction.Autosave8.nwf
1 of 1

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Drawing Production

- Piping Isometrics
- Orthographic Drawings

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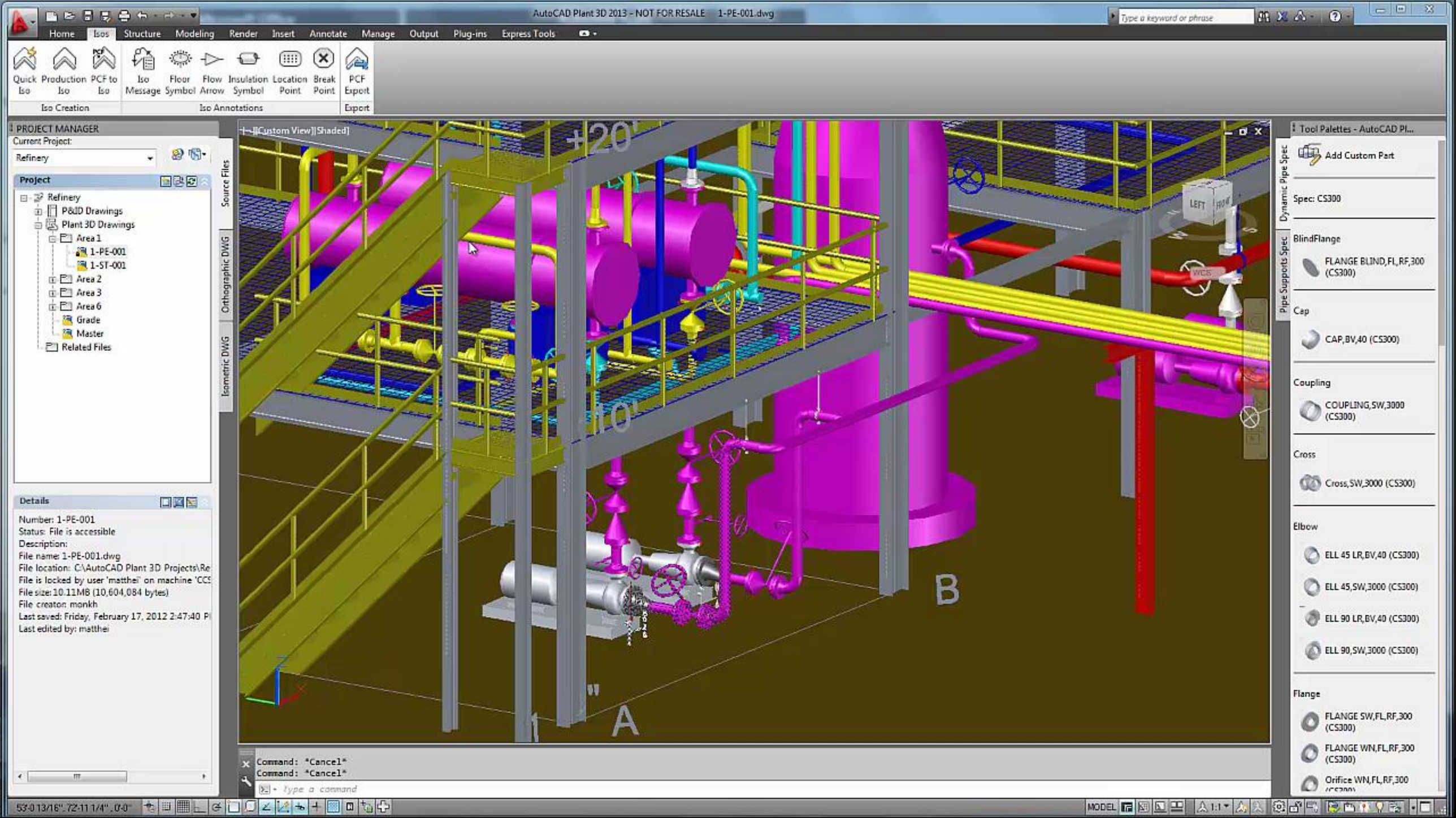
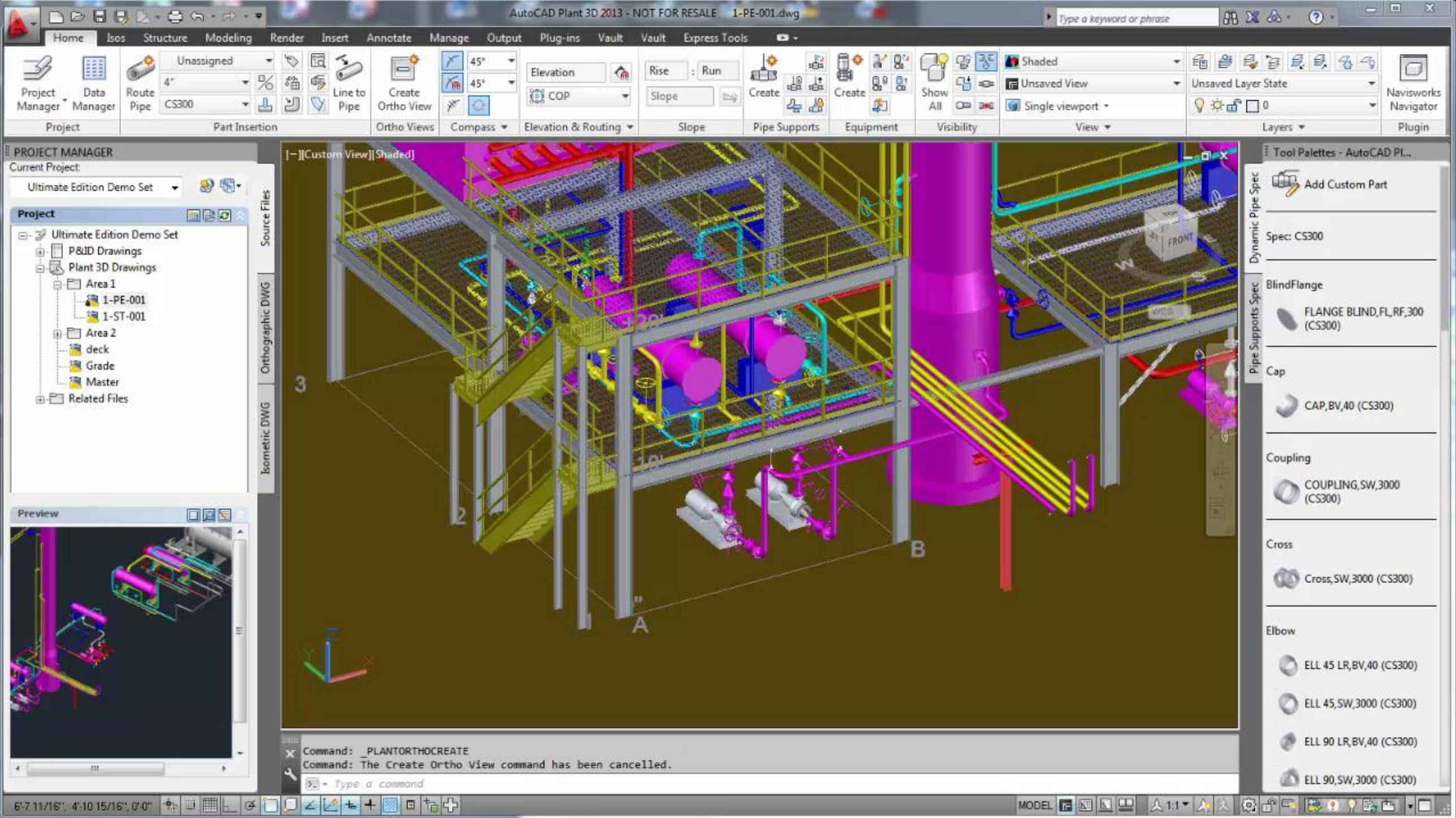

AutoCAD Plant 3D 2013 - NOT FOR RESALE 1-PE-001.dwg
Home
Isos
Structure
Modeling
Render
Insert
Annotate
Manage
Output
Plug-ins
Express Tools
Quick Iso
Production Iso
PCF to Iso
Iso Message
Floor Symbol
Flow Arrow
Insulation Symbol
Location Point
Break Point
PCF Export
Iso Creation
Iso Annotations
Export
PROJECT MANAGER
Current Project:
Refinery
Project
Refinery
P&ID Drawings
Plant 3D Drawings
Area 1
1-PE-001
1-ST-001
Area 2
Area 3
Area 6
Grade
Master
Related Files
Details
Number: 1-PE-001
Status: File is accessible
Description:
File name: 1-PE-001.dwg
File location: C:\AutoCAD Plant 3D Projects\Re
File is locked by user 'matthei' on machine 'CC
File size: 10.11MB (10,604,084 bytes)
File creator: monkh
Last saved: Friday, February 17, 2012 2:47:40 P
Last edited by: matthei
Source Files
Orthographic DWG
Isometric DWG
[-][Custom View][Shaded]
+20'
+10'
B
A
Command: *Cancel*
Command: *Cancel*
Type a command
Tool Palettes - AutoCAD Pl...
Dynamic Pipe Spec
Pipe Supports Spec
Add Custom Part
Spec: CS300
BlindFlange
FLANGE BLIND,FL,RF,300 (CS300)
Cap
CAP,BV,40 (CS300)
Coupling
COUPLING,SW,3000 (CS300)
Cross
Cross,SW,3000 (CS300)
Elbow
ELL 45 LR,BV,40 (CS300)
ELL 45,SW,3000 (CS300)
ELL 90 LR,BV,40 (CS300)
ELL 90,SW,3000 (CS300)
Flange
FLANGE SW,FL,RF,300 (CS300)
FLANGE WN,FL,RF,300 (CS300)
Orifice WN,FL,RF,300
MODEL


AutoCAD Plant 3D 2013 - NOT FOR RESALE 1-PE-001.dwg
Type a keyword or phrase
Home Isos Structure Modeling Render Insert Annotate Manage Output Plug-ins Vault Vault Express Tools
Project Manager
Data Manager
Project
Route Pipe
Unassigned
4"
CS300
Line to Pipe
Part Insertion
Create Ortho View
Ortho Views
45°
45°
Compass
Elevation
COP
Elevation & Routing
Rise
Run
Slope
Slope
Create
Pipe Supports
Create
Equipment
Show All
Visibility
Shaded
Unsaved View
Single viewport
View
Unsaved Layer State
Layers
Navisworks Navigator
Plugin
PROJECT MANAGER
Current Project:
Ultimate Edition Demo Set
Project
Ultimate Edition Demo Set
P&ID Drawings
Plant 3D Drawings
Area 1
1-PE-001
1-ST-001
Area 2
deck
Grade
Master
Related Files
Source Files
Orthographic DWG
Isometric DWG
Preview
[-][Custom View][Shaded]
Tool Palettes - AutoCAD Pl...
Dynamic Pipe Spec
Pipe Supports Spec
Add Custom Part
Spec: CS300
BlindFlange
FLANGE BLIND,FL,RF,300 (CS300)
Cap
CAP,BV,40 (CS300)
Coupling
COUPLING,SW,3000 (CS300)
Cross
Cross,SW,3000 (CS300)
Elbow
ELL 45 LR,BV,40 (CS300)
ELL 45,SW,3000 (CS300)
ELL 90 LR,BV,40 (CS300)
ELL 90,SW,3000 (CS300)
Command: _PLANTORTHOCREATE
Command: The Create Ortho View command has been cancelled.
Type a command
6'-7 11/16", 4'-10 15/16", 0'-0"
MODEL
1:1

Summary

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What we covered

- Overview of the Plant Design Suite – Ultimate
- Plant Design Workflow
  - Created Project (with and without Autodesk Vault)
  - P&ID’s
  - Plant 3D
    - Structures
    - Equipment Modeling
    - Piping
  - Structural Workflow
  - Mechanical Equipment Workflow
  - Navisworks
    - Interference Checking
    - Construction Planning
  - Deliverables

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