PT21758: 3D Model Collaboration with AutoCAD Plant 3D and Revit

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Class summary

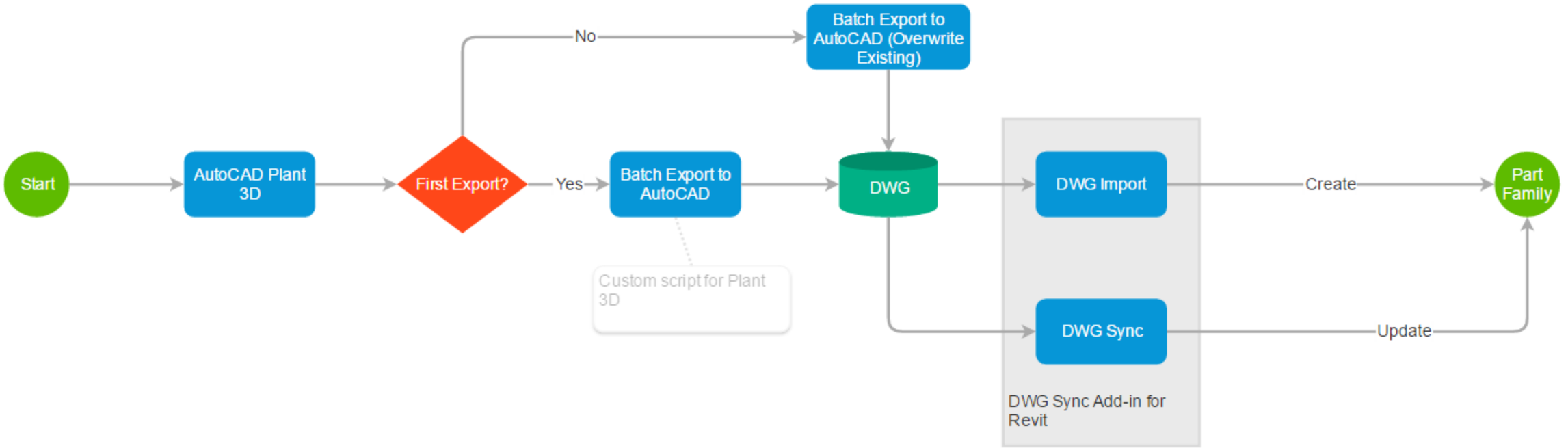
This class covers workflows for 3D model collaboration between AutoCAD Plant 3D and Revit, managing design changes, and optimizing models for performance.

Key learning objectives

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

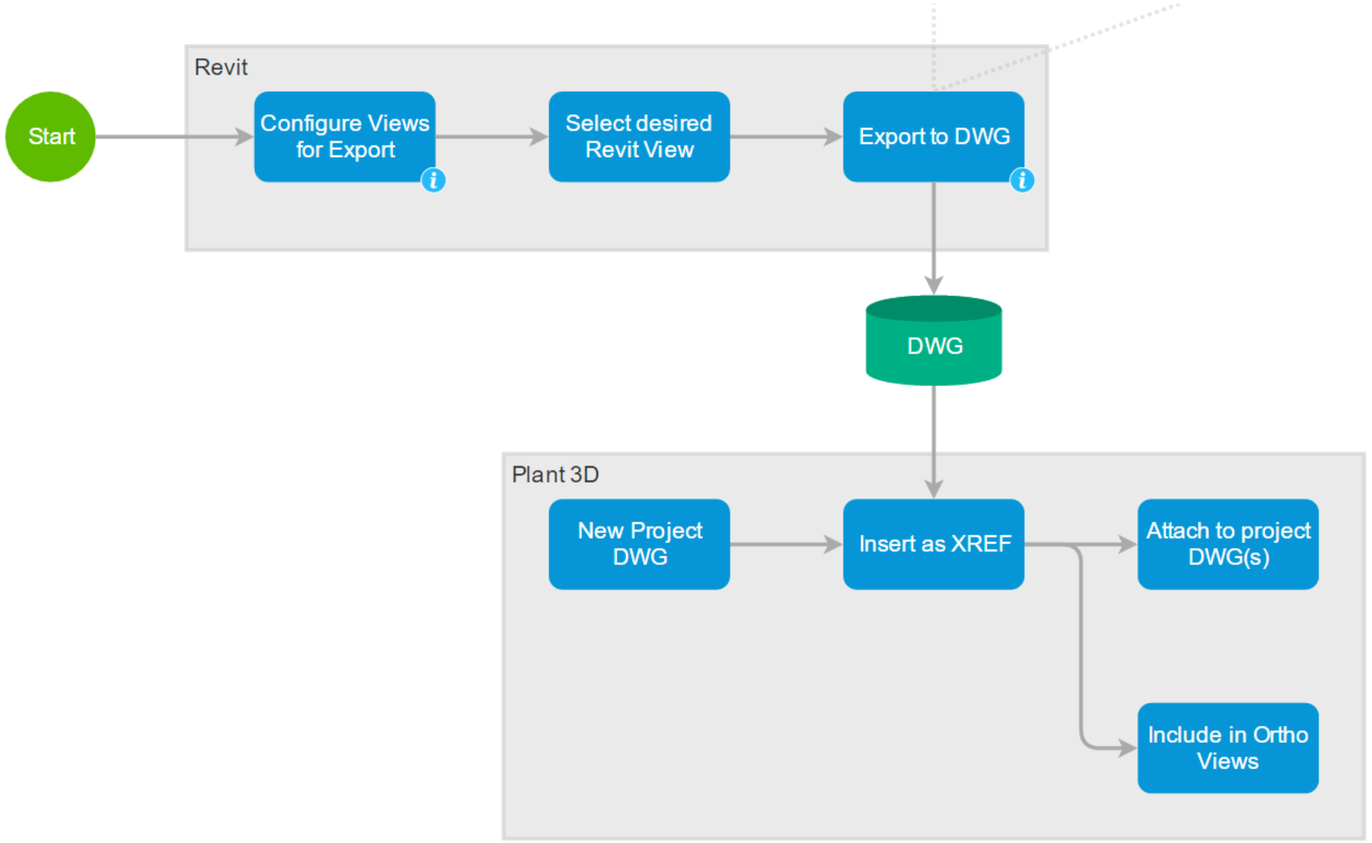
- Export models from Plant 3D and import into Revit
- Export models from Revit and import into Plant 3D
- Update models with design changes
- Optimize models for performance

Workflow Overview



AutoCAD Plant 3D to Revit

Workflow Overview



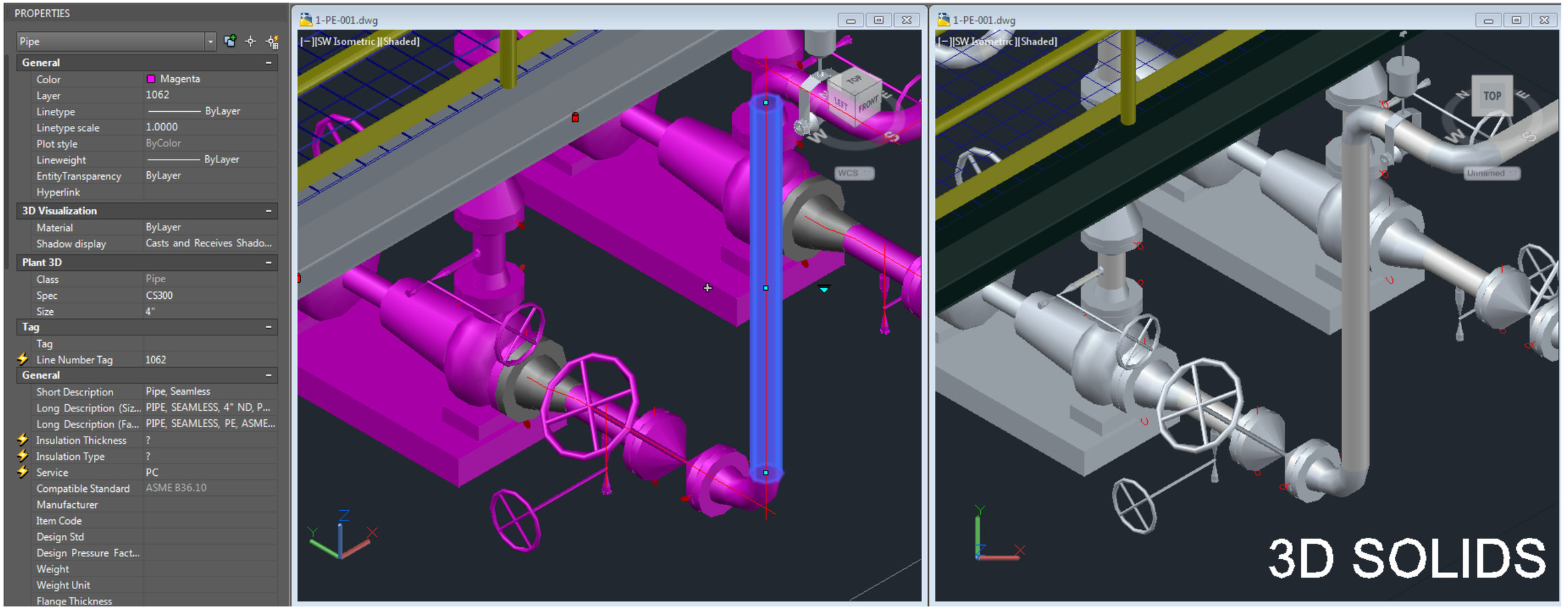
Revit to AutoCAD Plant 3D

AutoCAD Plant 3D to Revit

Export from Plant 3D

- Live Demo
  - EXPORTTOAUTOCAD
  - Batch Export to AutoCAD

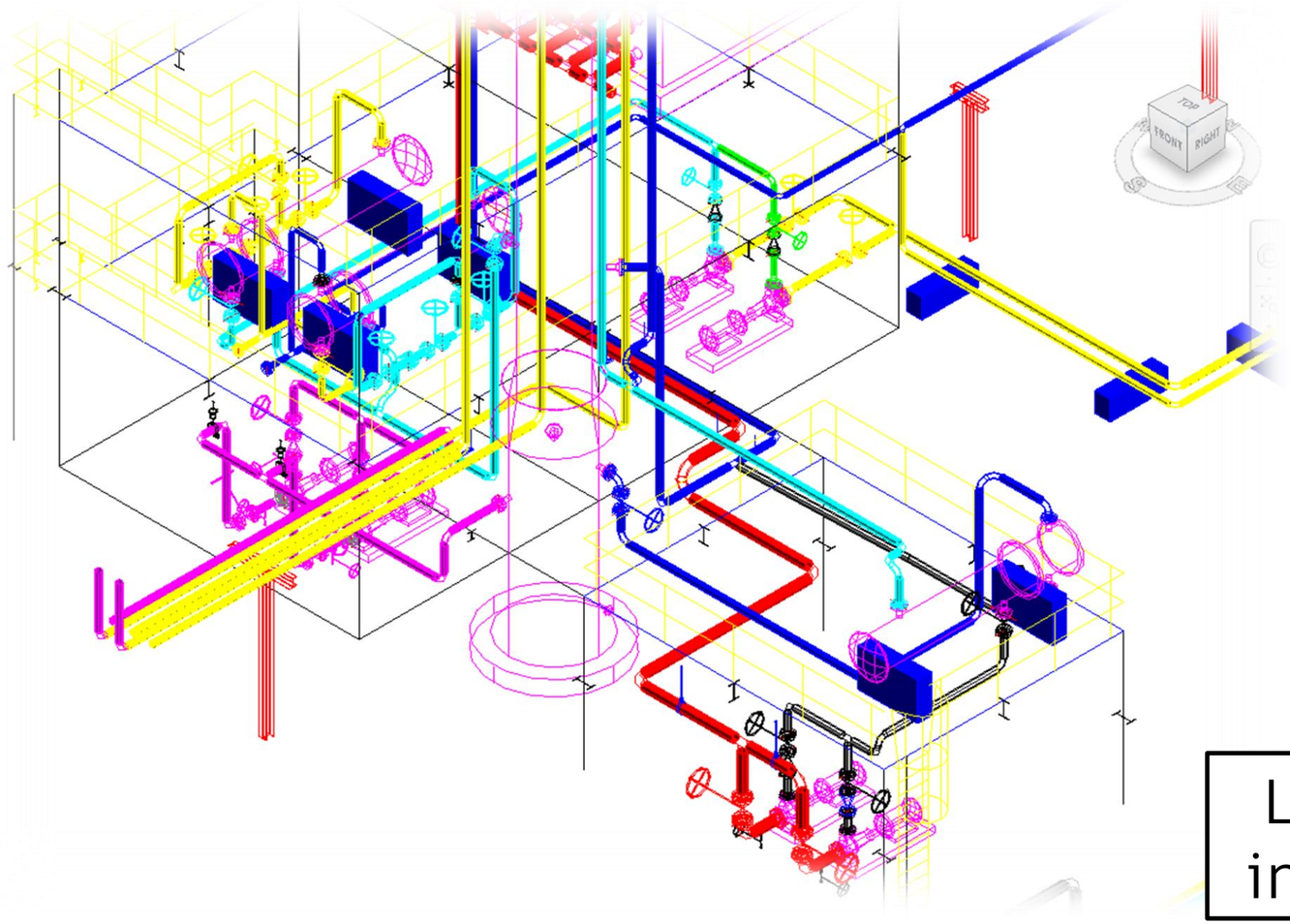
Export from Plant 3D



Import into Revit

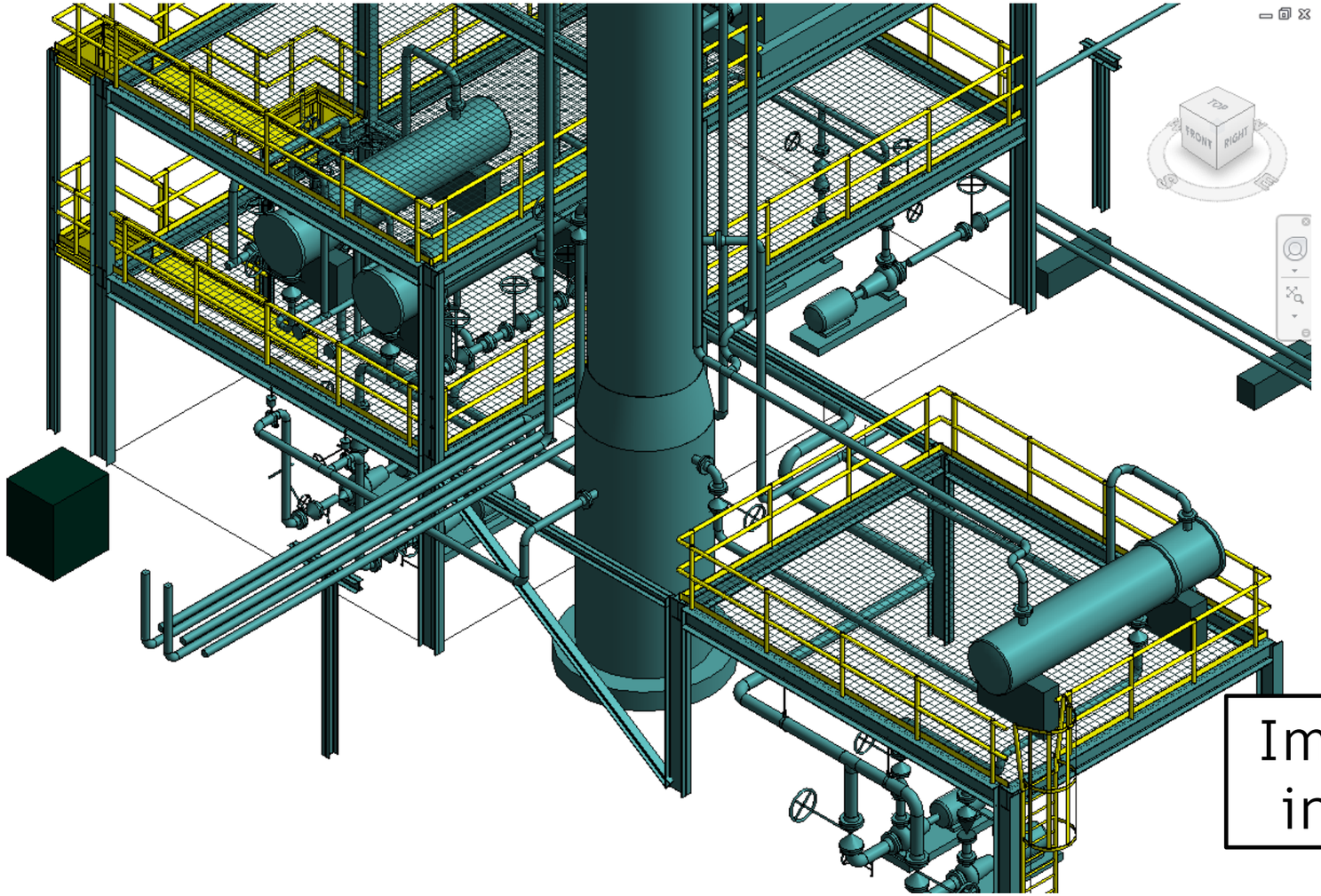
- Overview

Import into Revit



Link CAD into Revit

Import into Revit



Import CAD into Revit

Import into Revit

- Live Demo
  - Import into Revit using DWG Sync

Revit to AutoCAD Plant 3D

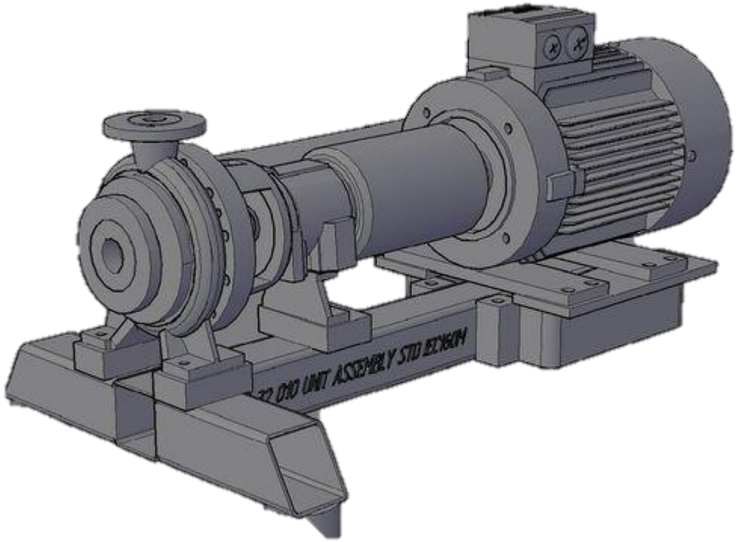
Export from Revit / Import into Plant 3D

- Live Demo
  - Revit View Configuration for Export
  - Export Revit Views to DWG
  - Attach as XREF in Plant Project

Model Management and Optimization

3D Model Complexity – Plant 3D

- Tips for Plant Models
  - Avoid complex vendor models for valves and equipment
  - “Shrink-wrap” models if possible



3D Model Complexity – Plant 3D

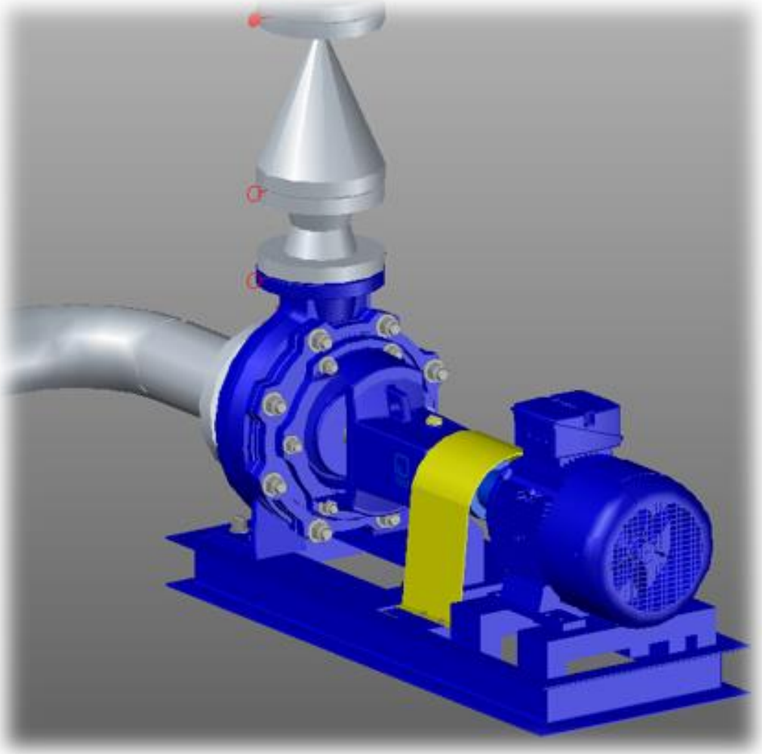


Figure 1. Detailed Vendor Equipment Model

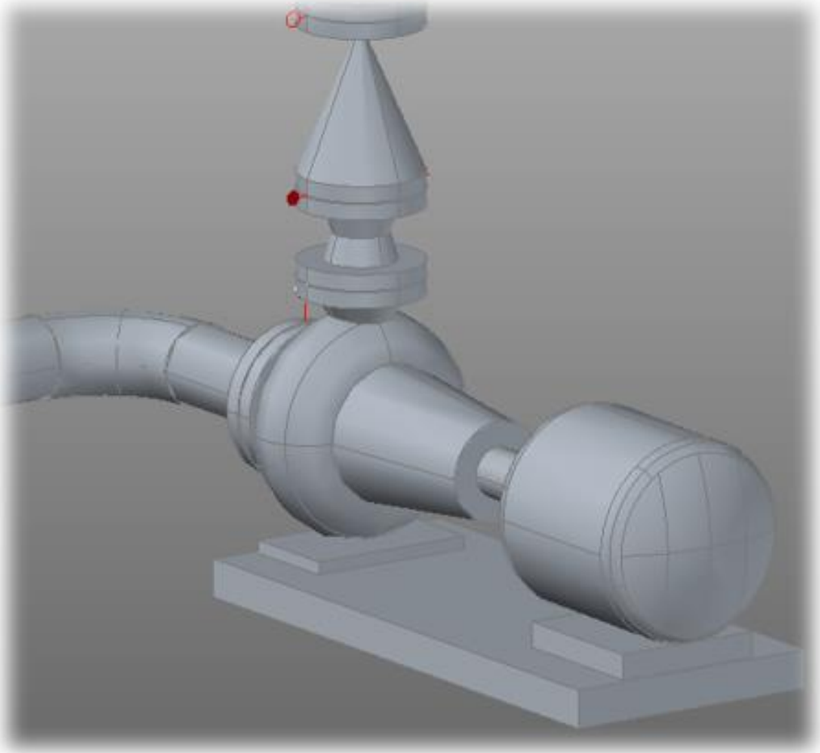
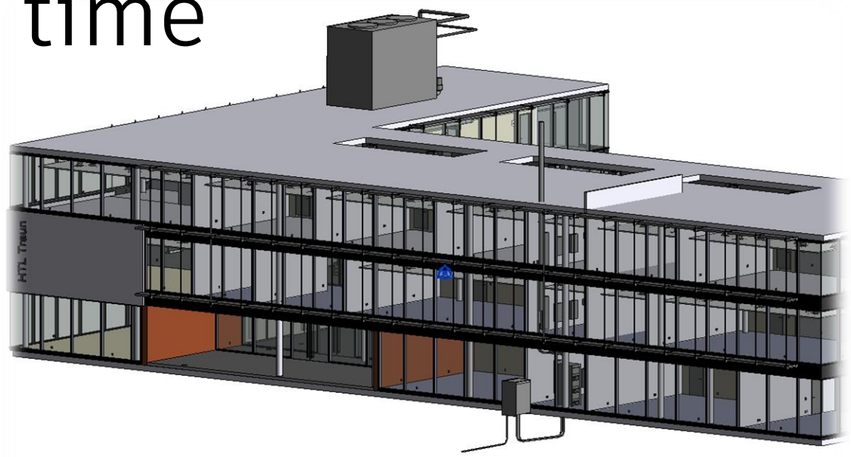


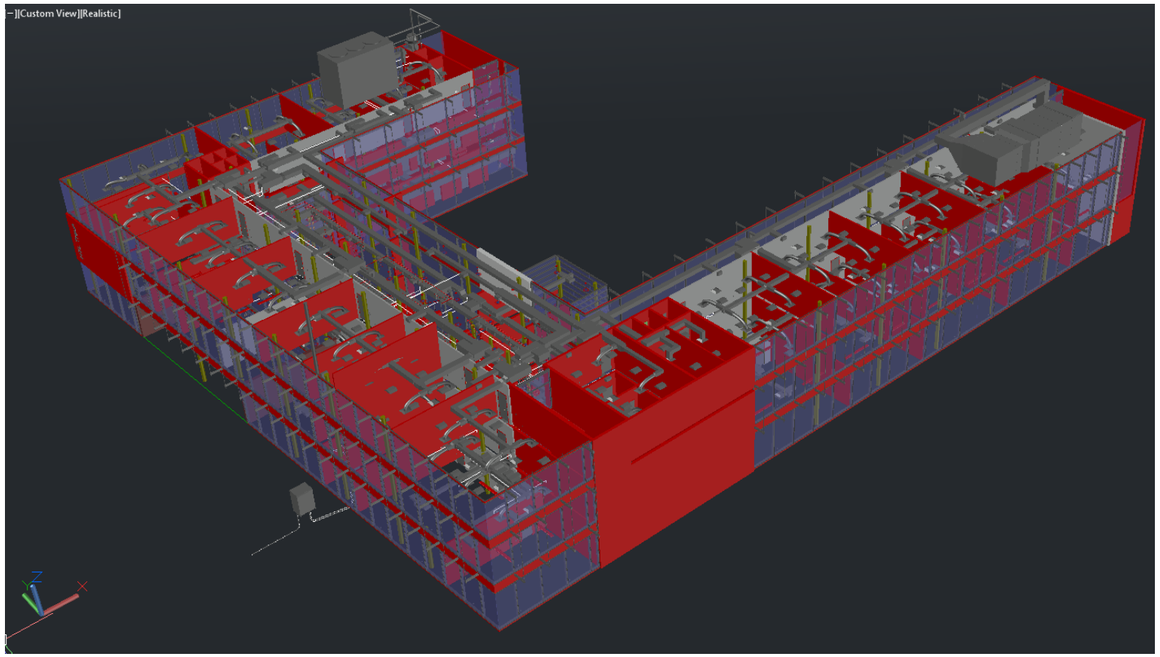
Figure 2. Parametric Plant 3D Equipment

3D Model Complexity – Revit

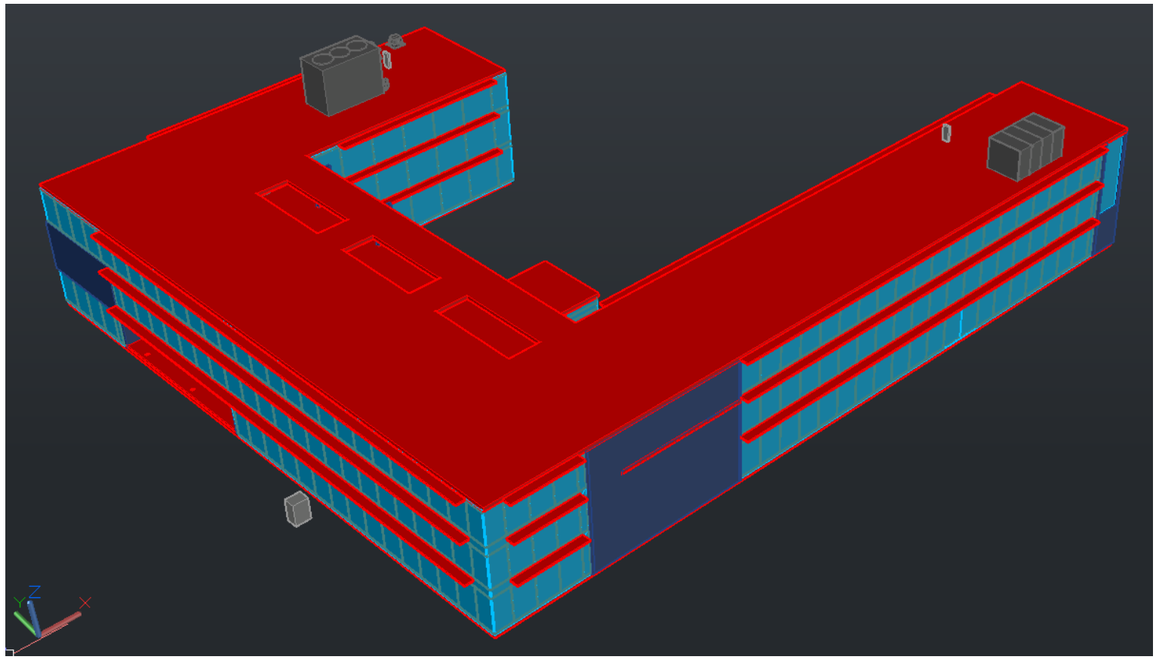
- Tips for Revit Models
  - Only export the objects that are required for the design in Plant
  - Excessive geometry from Revit will increase Plant ortho view generation time



3D Model Complexity – Revit



Full Revit Model Export
12.6 MB



Simplified Revit Model Export
3.82 MB

Questions

Conclusion

Enjoy the rest of Autodesk University 2016 and we hope to see you again next year!

Reminder:

- Autodesk Labs – DWG Sync for Revit
- Batch Export to AutoCAD utility
- Download class handout
- AU Class Survey

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