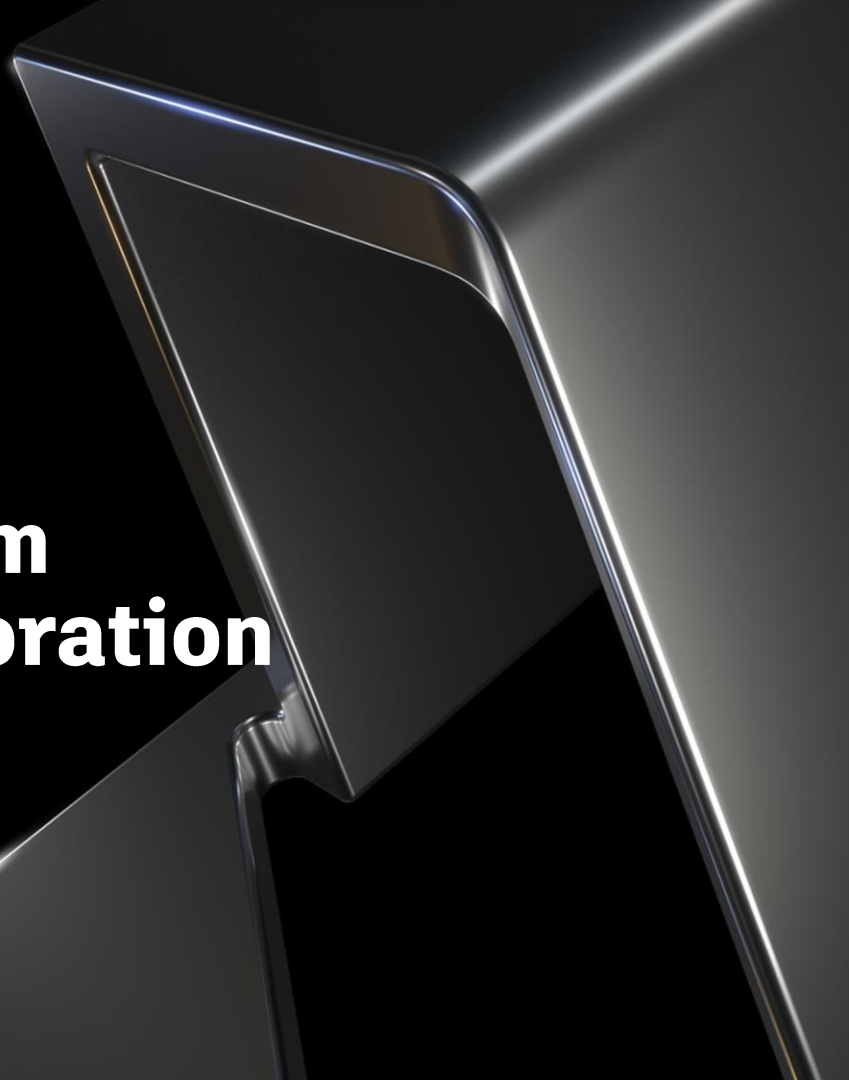
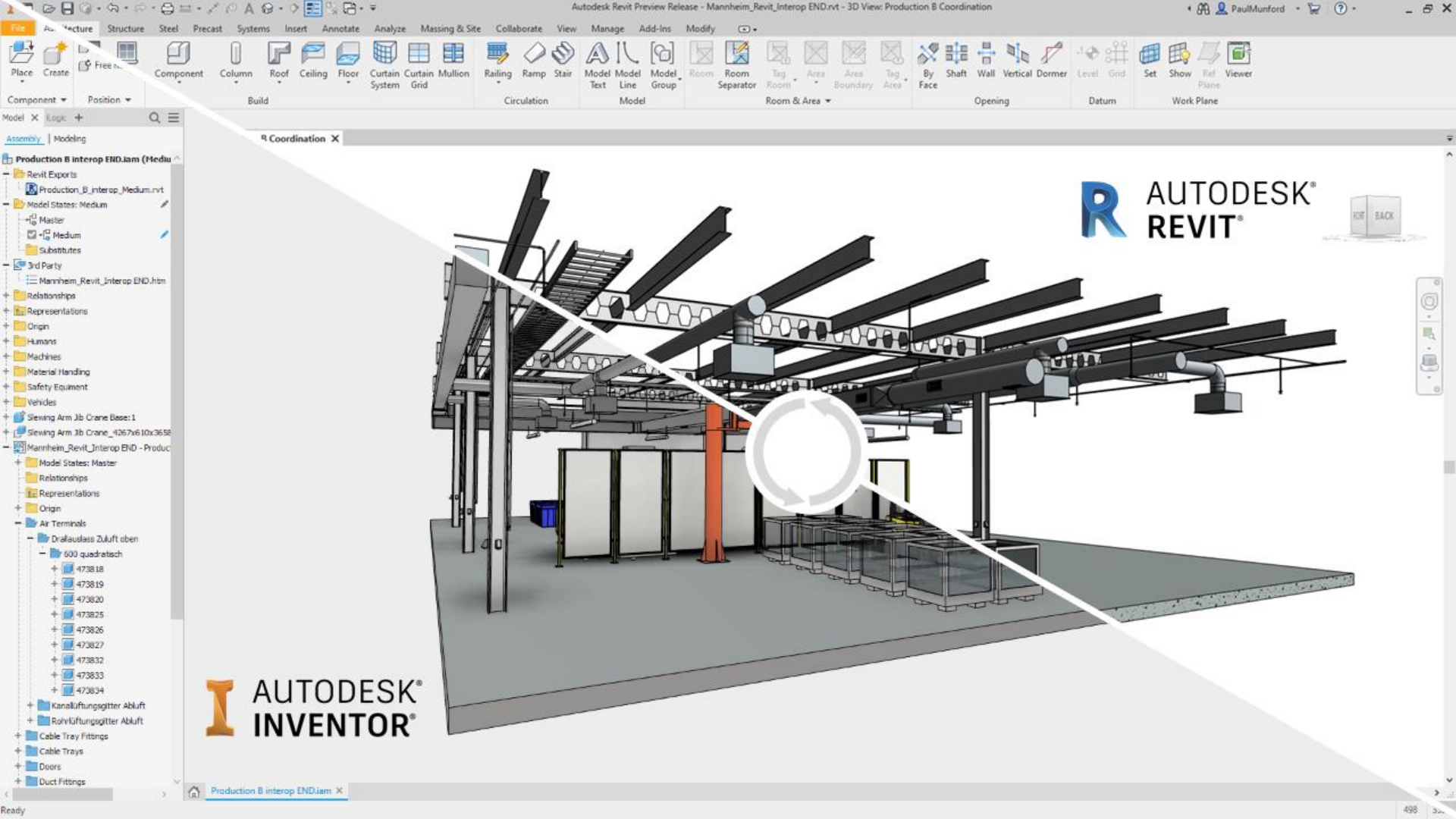
AUTODESK UNIVERSITY

Inventor to Revit: Revit Project Export from Inventor for BIM Collaboration

Paul Munford

Industry Marketing Manager | @PaulCADmunford




Autodesk Revit Preview Release - Mannheim_Revit_Interop END.rvt - 3D View: Production B Coordination
PaulMunford
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Ready


THINK SAFETY
JOERIS
THINK SAFETY

Paul Munford

@PaulCADmunford

Carpenter

Drafter (AutoCAD & Inventor)

CAD/CAM Manager

Trainer & Consultant

Industry Marketing Manager for Autodesk

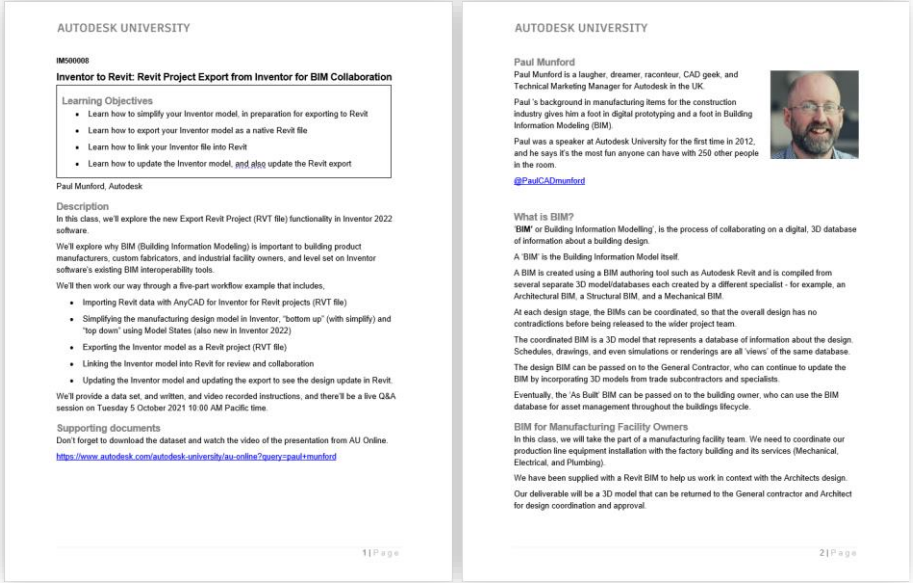
Inventor to Revit

Revit Project Export from Inventor for BIM Collaboration

Learning Objectives

- Learn how to simplify your Inventor model, in preparation for exporting to Revit.
- Learn how to export your Inventor model as a native Revit file.
- Learn how to link your Inventor file into Revit.
- Learn how to update the Inventor model, and update the Revit export.

Downloads



AUTODESK UNIVERSITY

IM500008

Inventor to Revit: Revit Project Export from Inventor for BIM Collaboration

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- Learn how to update the Inventor model, and also update the Revit export

Paul Munford, Autodesk

Description

In this class, we'll explore the new Export Revit Project (RVT file) functionality in Inventor 2022 software.

We'll explore why BIM (Building Information Modeling) is important to building product manufacturers, custom fabricators, and industrial facility owners, and level set on Inventor software's existing BIM interoperability tools.

We'll then work our way through a five-part workflow example that includes,

- Importing Revit data with AnyCAD for Inventor for Revit projects (RVT file)
- Simplifying the manufacturing design model in Inventor, "bottom up" (with simplify) and "top down" using Model States (also new in Inventor 2022)
- Exporting the Inventor model as a Revit project (RVT file)
- Linking the Inventor model into Revit for review and collaboration
- Updating the Inventor model and updating the export to see the design update in Revit.

We'll provide a data set, and written, and video recorded instructions, and there'll be a live Q&A session on Tuesday 5 October 2021 10:00 AM Pacific time.

Supporting documents

Don't forget to download the dataset and watch the video of the presentation from AU Online.

https://www.autodesk.com/autodesk-university/au-online?query=paul+munford

1 | Page

AUTODESK UNIVERSITY

Paul Munford

Paul Munford is a laugher, dreamer, raconteur, CAD geek, and Technical Marketing Manager for Autodesk in the UK.

Paul 's background in manufacturing items for the construction industry gives him a foot in digital prototyping and a foot in Building Information Modeling (BIM).

Paul was a speaker at Autodesk University for the first time in 2012, and he says it's the most fun anyone can have with 250 other people in the room.

@PaulCADmunford

What is BIM?

'BIM' or Building Information Modelling', is the process of collaborating on a digital, 3D database of information about a building design.

A 'BIM' is the Building Information Model itself.

A BIM is created using a BIM authoring tool such as Autodesk Revit and is compiled from several separate 3D model/databases each created by a different specialist - for example, an Architectural BIM, a Structural BIM, and a Mechanical BIM.

At each design stage, the BIMs can be coordinated, so that the overall design has no contradictions before being released to the wider project team.

The coordinated BIM is a 3D model that represents a database of information about the design. Schedules, drawings, and even simulations or renderings are all 'views' of the same database.

The design BIM can be passed on to the General Contractor, who can continue to update the BIM by incorporating 3D models from trade subcontractors and specialists.

Eventually, the 'As Built' BIM can be passed on to the building owner, who can use the BIM database for asset management throughout the buildings lifecycle.

BIM for Manufacturing Facility Owners

In this class, we will take the part of a manufacturing facility team. We need to coordinate our production line equipment installation with the factory building and its services (Mechanical, Electrical, and Plumbing).

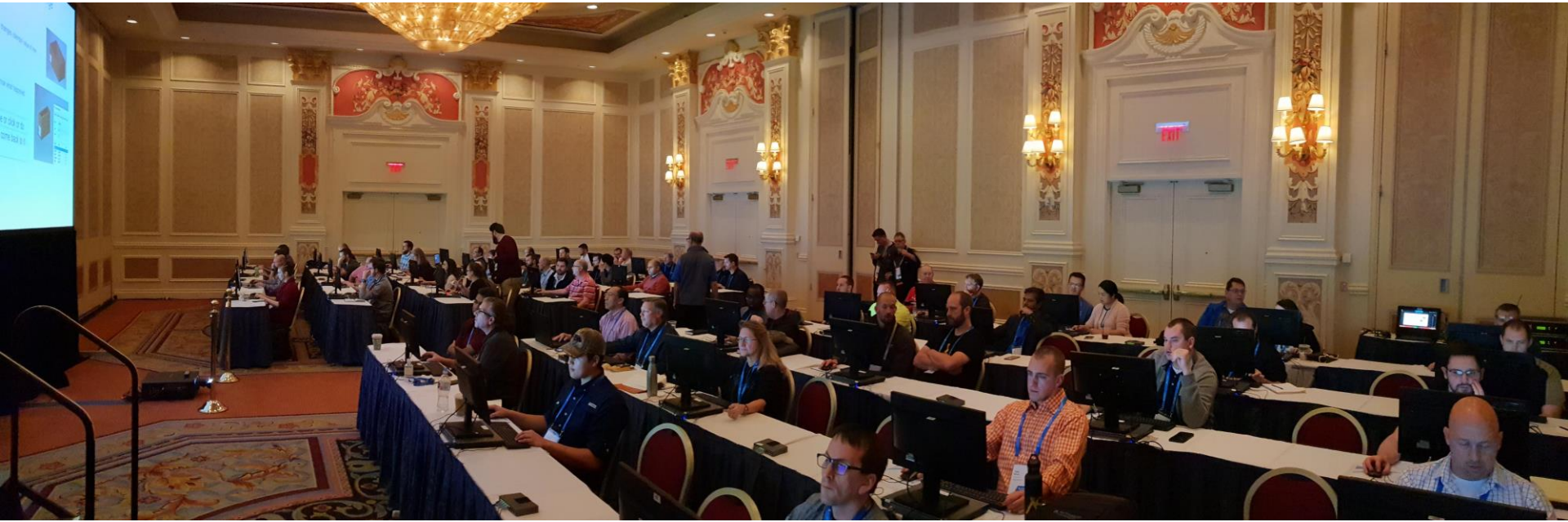
We have been supplied with a Revit BIM to help us work in context with the Architects design.

Our deliverable will be a 3D model that can be returned to the General contractor and Architect for design coordination and approval.

2 | Page

- Download the handout and dataset from the class page:
- Or use this link: https://cadso.co/IM500008_DOWNLOAD

About this ~~lab~~ class



Feedback: Paul.Munford@Autodesk.com


You have a formative role in how buildings are experienced

62%

Of general contractors cited coordination and communication between project teams to negatively impact labor productivity.

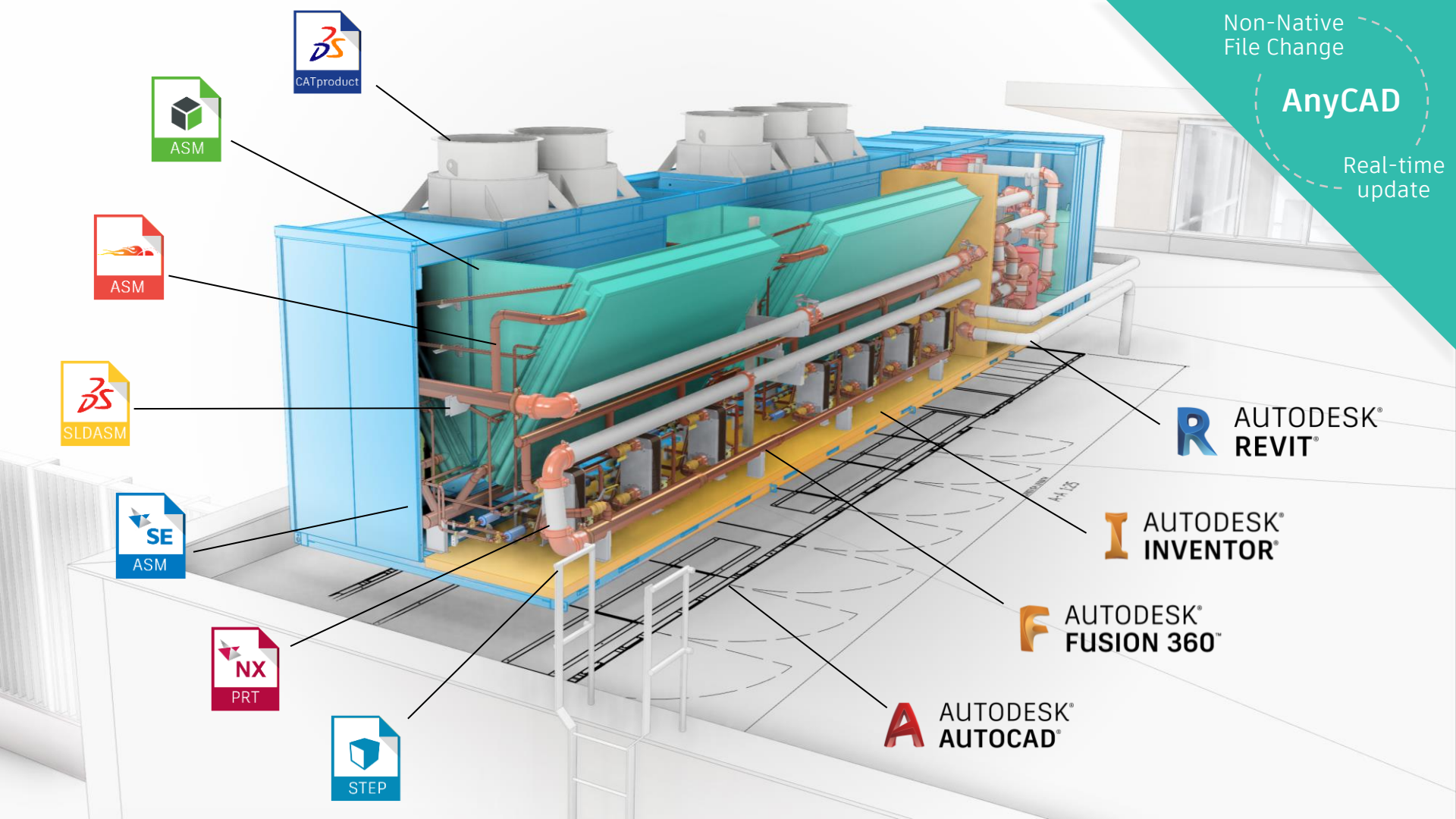
68%

Of trades cited poor schedule management to negatively impact labor productivity.

61%

Of general contractors cites quality of construction documents to negatively impact labor productivity.

https://constructionblog.autodesk.com/construction-productivity/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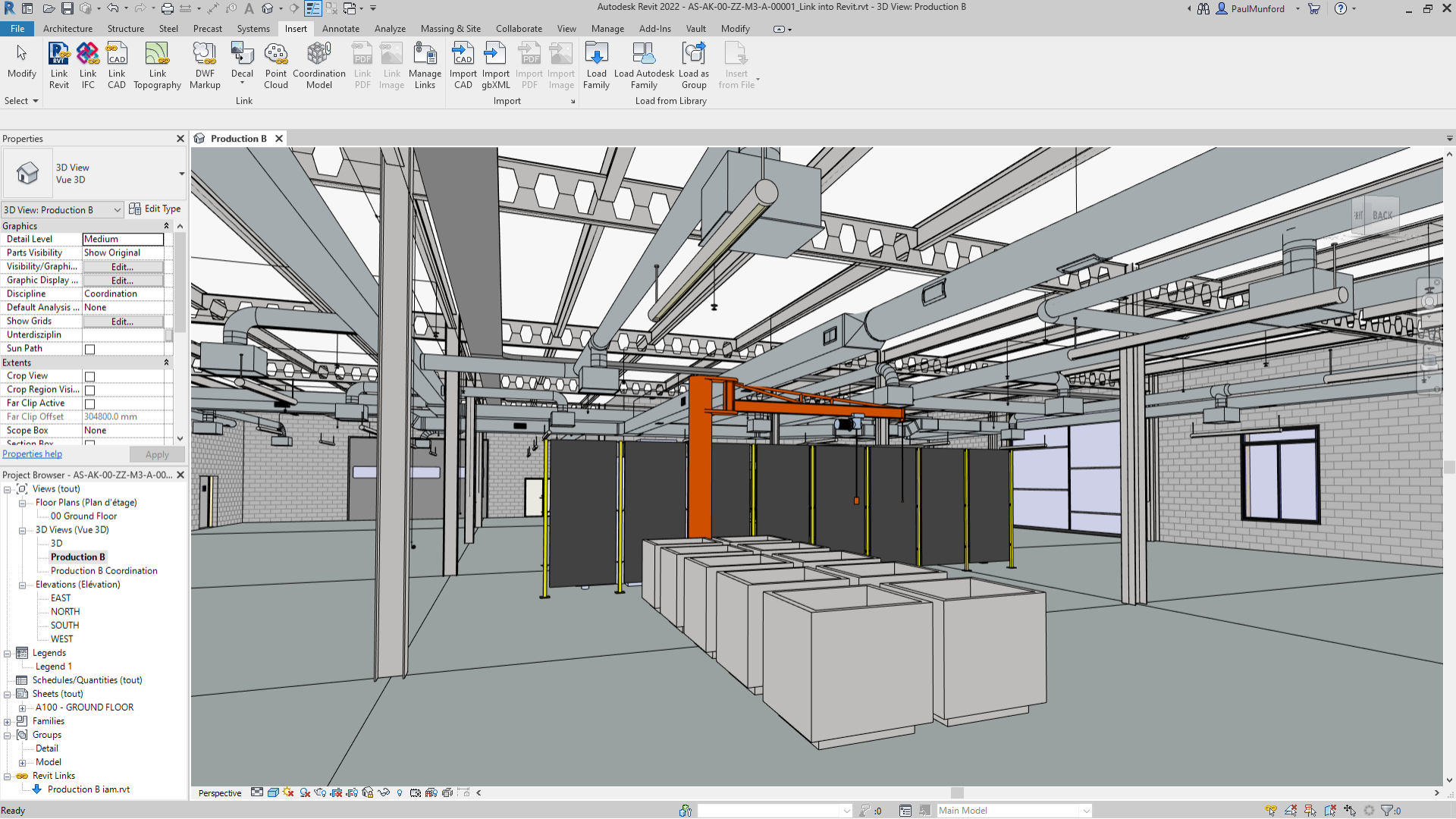
Autodesk Revit 2022 - AS-AK-00-ZZ-M3-A-00001_Link into Revit.rvt - 3D View: Production B
PaulMunford
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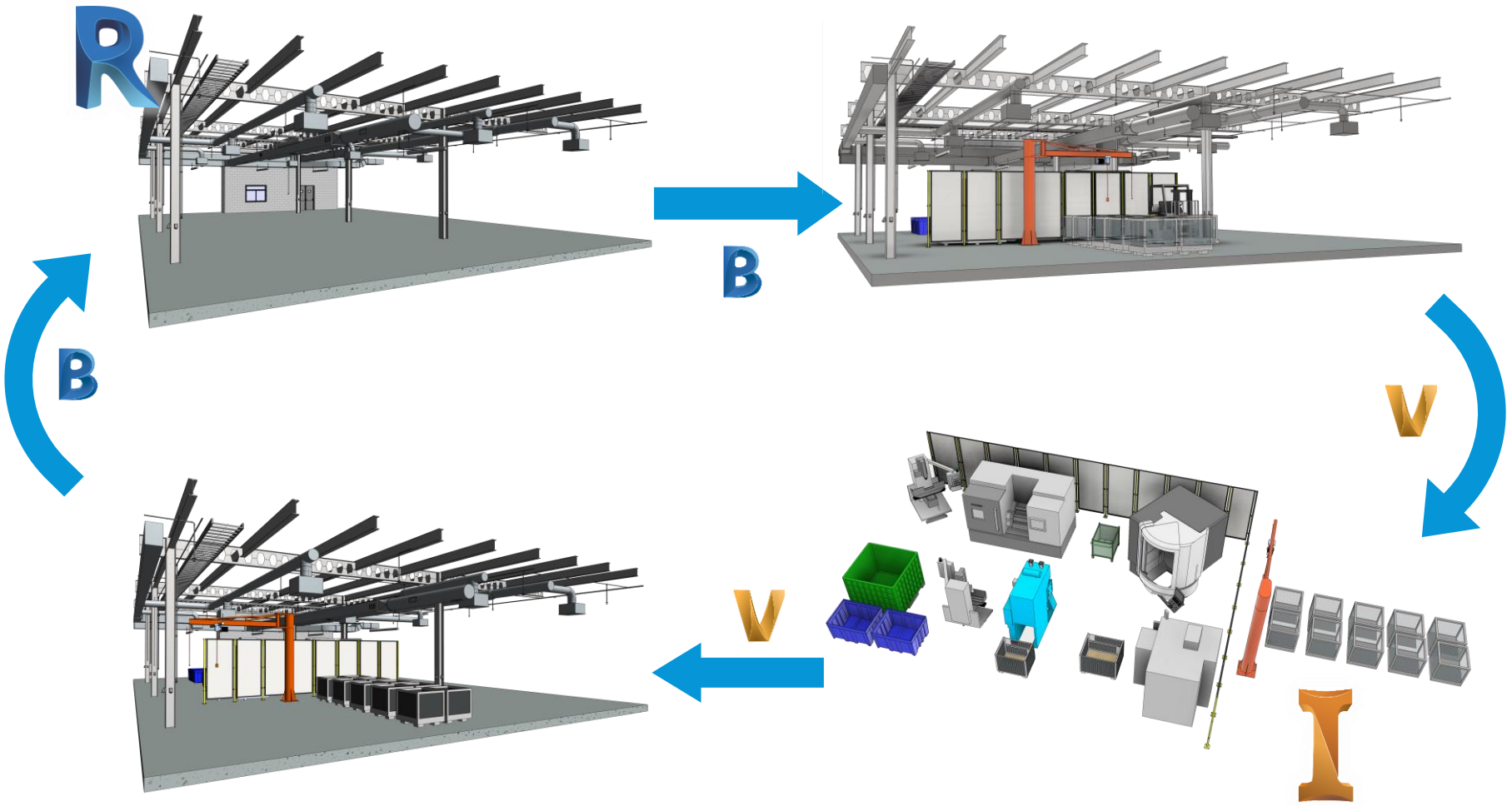
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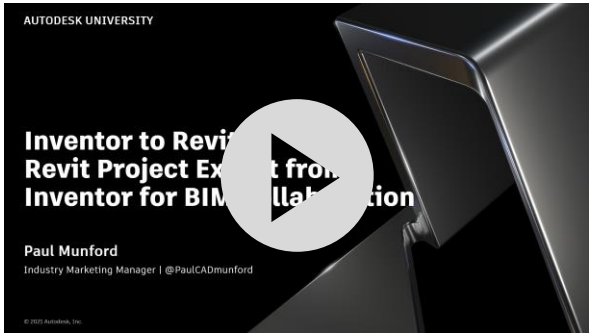
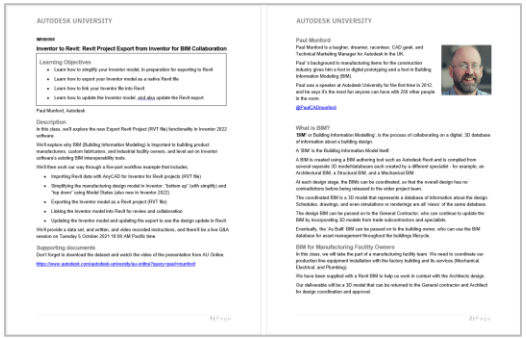
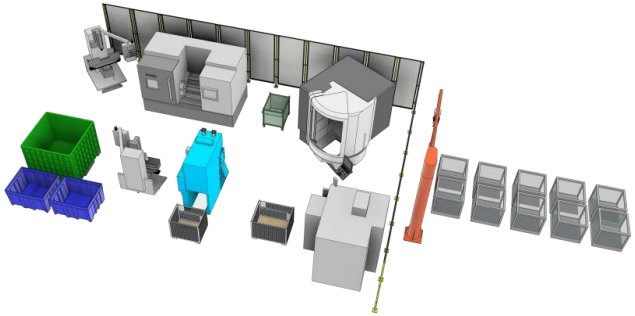
About this class







Watch the video

Read the instructions

Have a go!

Repeat

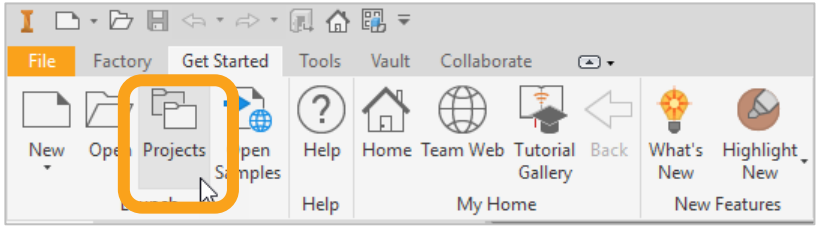
Prerequisites

Before we begin, please check that you have the following:

- ☑ Inventor 2022 installed

  (Including the Revit Interoperability 2022.0.1 Hotfix for Inventor 2022)
- ☑ Revit 2022 Installed
- ☑ Dataset downloaded and extracted to **C:\Datasets\IM500008**
- ☑ Handout
- ☑ This Video of the presentation

Before we begin



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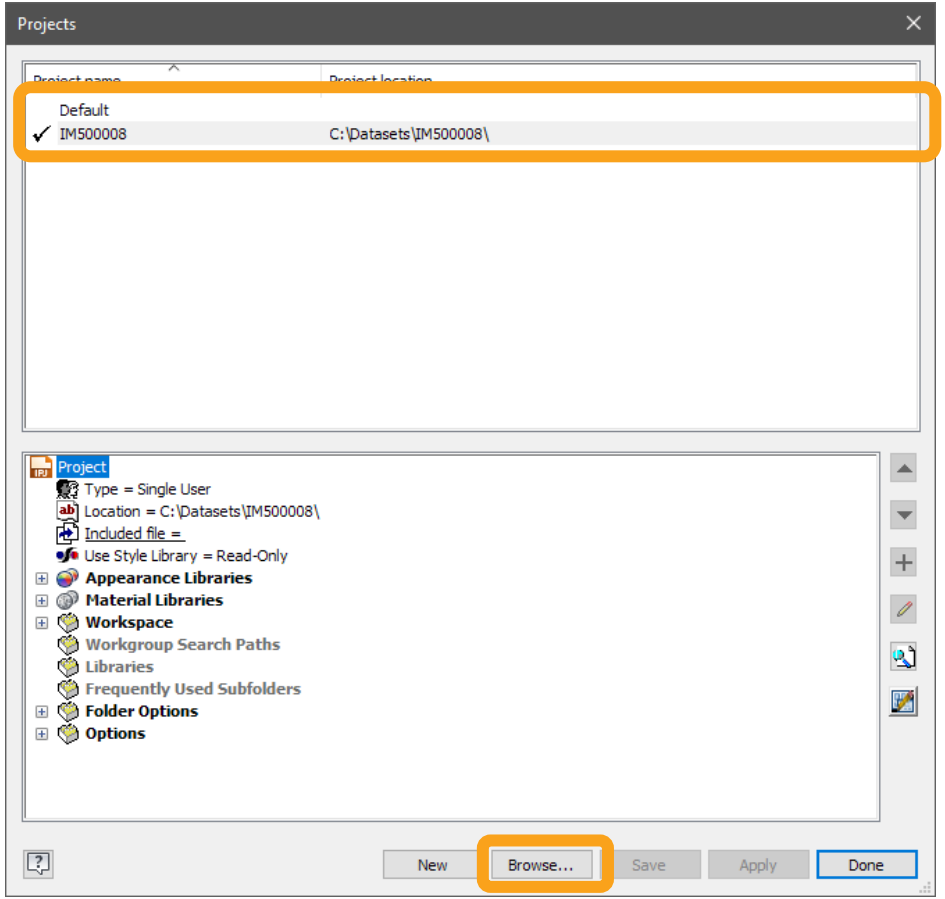
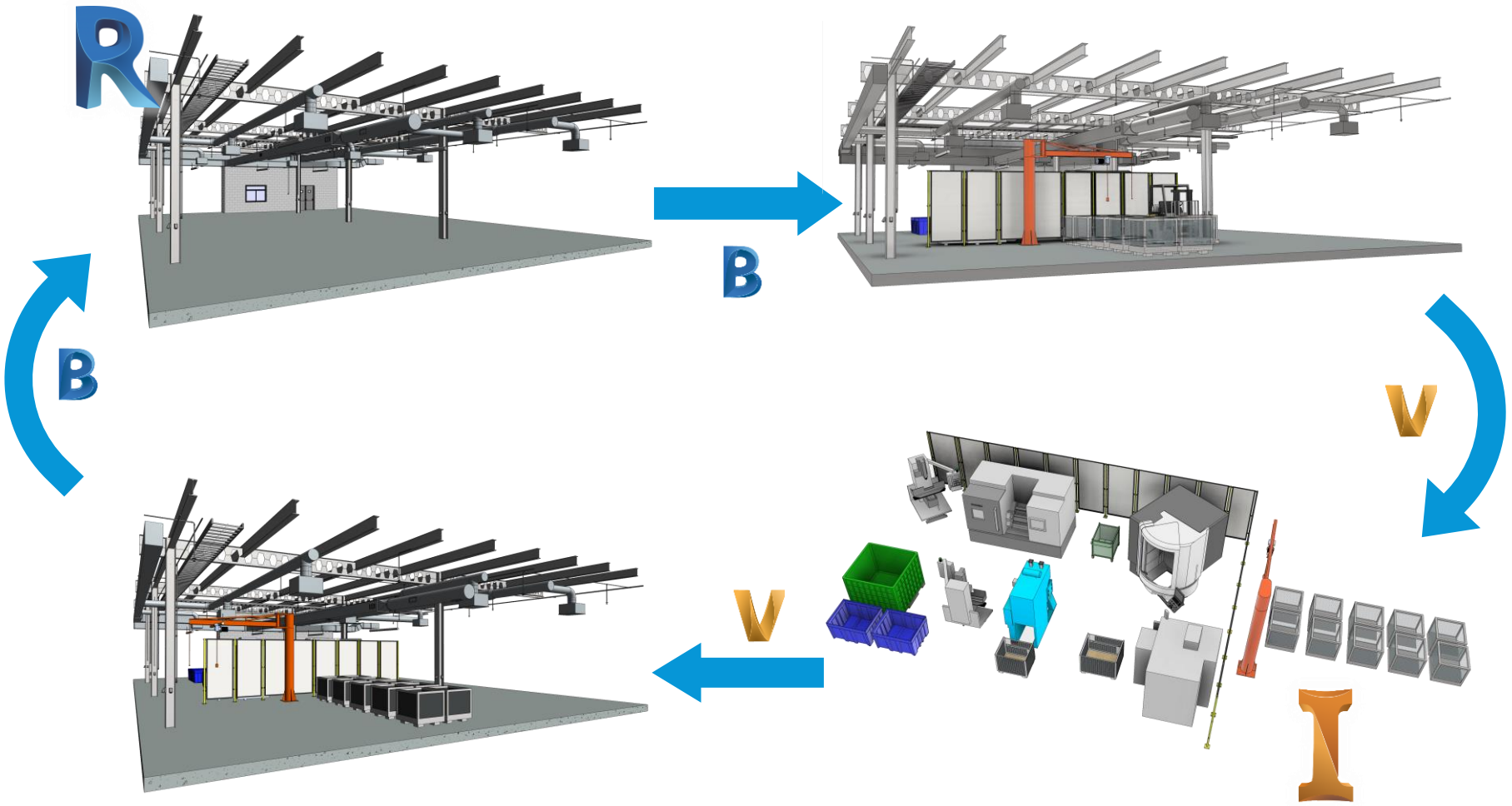


Demo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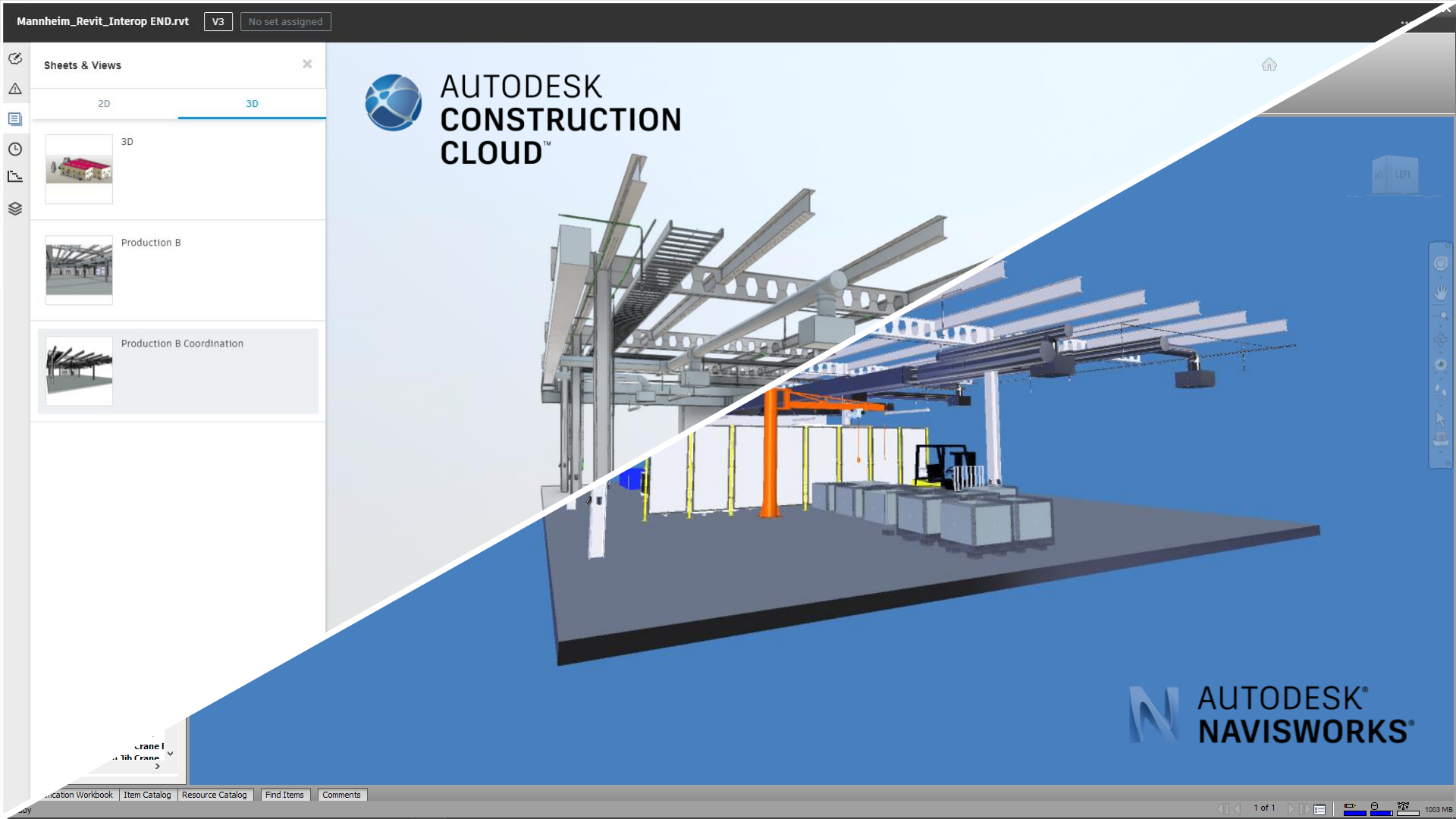
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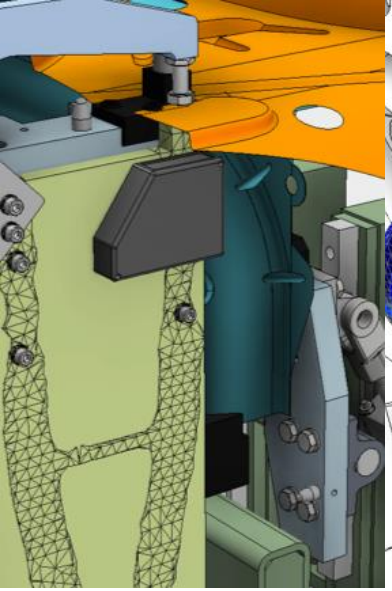

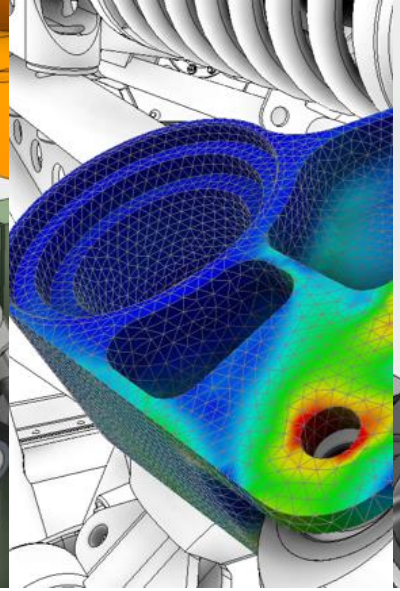

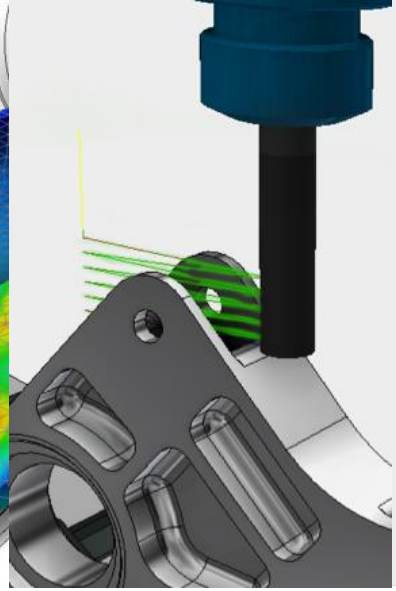

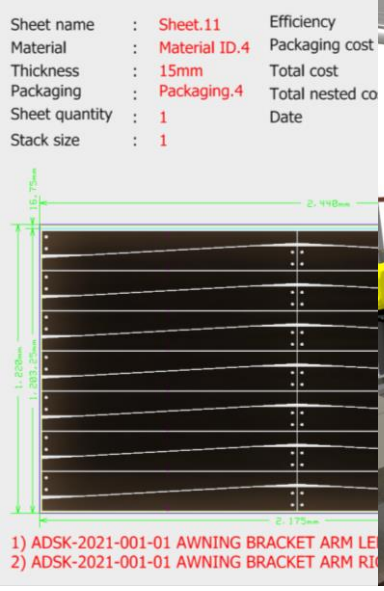

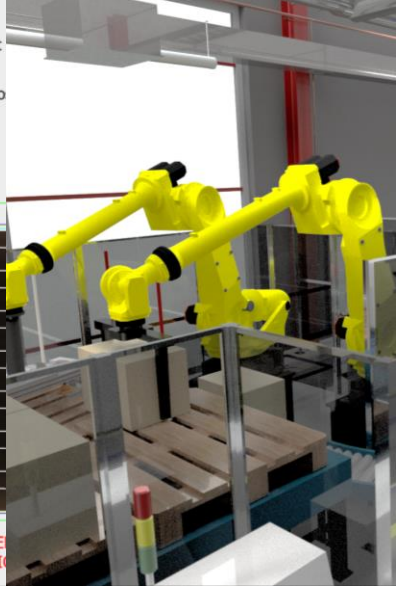

PROFESSIONAL-GRADE DESIGN & AUTOMATION

ADVANCED & NONLINEAR SIMULATION

2.5- TO 5-AXIS CAM

SHEET METAL NESTING

FACTORY DESIGN

PRODUCT DESIGN ⟷ *MANUFACTURING*

END-TO-END WORKFLOW RIGHT INSIDE INVENTOR

Conclusion

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