Advance Steel for Building Information Modeling (BIM): Seamless Workflow from Design to Fabrication

Deepak Maini

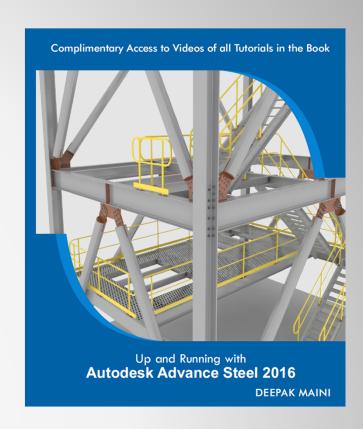
Product Manager – BIM/MFG Solutions

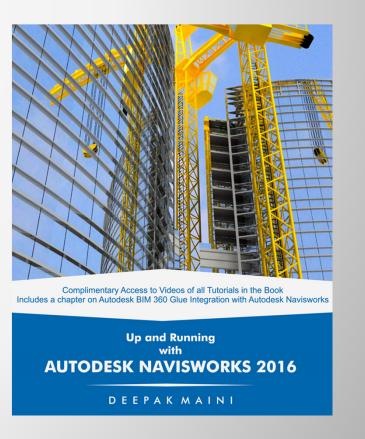
Cadgroup Australia



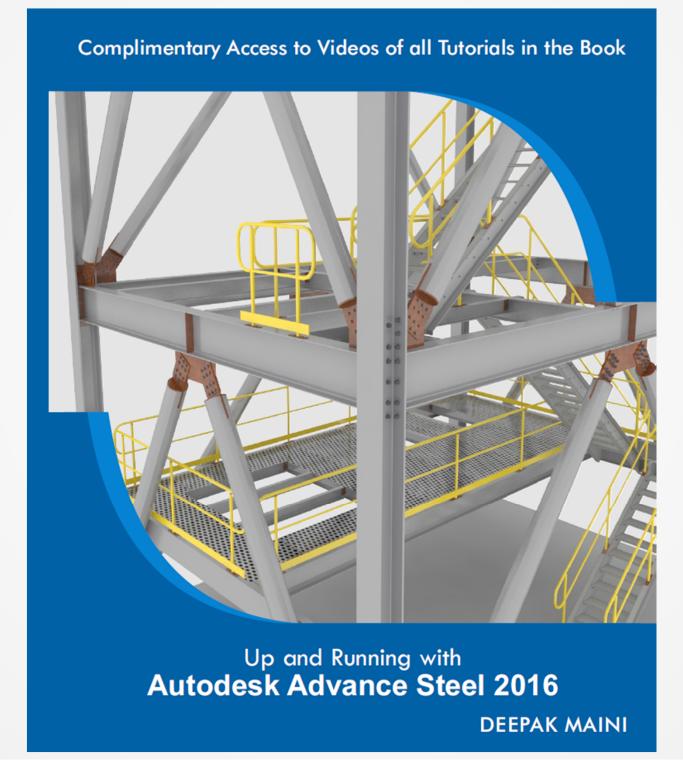
My Introduction

- Qualified Mechanical Engineer
- More than 17 Years of Experience on various CAD Platforms
- Guest Lecturer at the University of New South Wales (UNSW) and University of Technology Sydney (UTS)
- Regular Speaker at Autodesk University in Las Vegas
- Author of Up and Running with Autodesk Navisworks series of books
- Author of Up and Running with Autodesk Advance Steel
 2016 book (to be released in February 2016)





Give Away 2 Copies of the Advance Steel Book



My Aim: Lets Keep it Simple and Have Fun as we Learn

- Units in Millimetres
- Class is Being Recorded. You and your colleagues will be able to view it around January as "Class on Demand" from AU Website
- Happy to Receive Emails from Attendees Anytime about Any Technical Question

Join the conversation: #AU2015 #FabForum 🔼 AUTODESK.

Mobile Phones on Silent Mode Please. Thanks

Class summary

To maintain a competitive advantage, more and more structural engineers are trying to find a way to capitalize on their Building Information Modeling (BIM) data for steel detailing and fabrication. This class will focus on showing how Advance Steel software is proving to be the missing link that enables structural engineers to capitalize on their Revit Structure models for steel detailing and fabrication.

Key learning objectives

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

- Export Revit Structure model and import into Advance Steel
- Create automated steel connections between the members imported from Revit
- Generate automated fabrication drawings and NC files
- Use Sync to review and import any Revit changes into Advance Steel or validate an Advance Steel model in Revit

Current Workflow for Steel Design, Detailing, and Installation

Design

Detailing and Fabrication

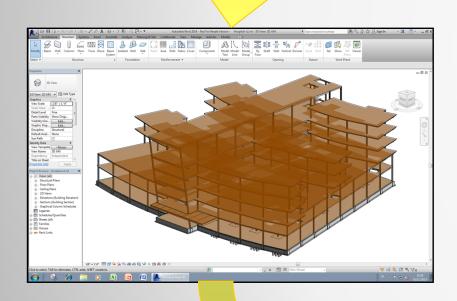
Construction

Revit Structure

Tekla / Pro Steel

Navisworks / Glue / Point Layout for Total Station Export

Data Loss/Hard to Compare





IFC Export
No Intelligent Sync

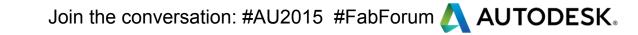
CIS/2 / IFC Export No Intelligent Sync

So what's the Solution???



The Solution is...

- A single unified model from design to documentation
- Project complexity will reduce
- Interoperability will avoid errors and redundancies
- Result in improved productivity
- Better project coordination



Preferred Workflow for Steel Design, Detailing and Installation

Design

Detailing and Fabrication

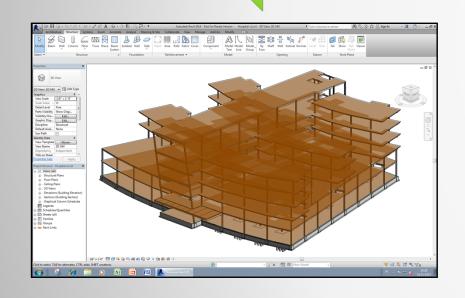
Construction

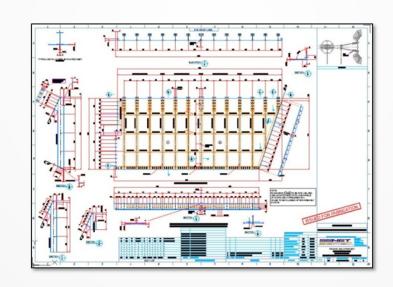
Revit Structure

Tekla / Pro Steel

Navisworks / Glue / Point Layout for Total Station Export









Preferred Workflow for Steel Design, Detailing and Installation

Design

Detailing and Fabrication

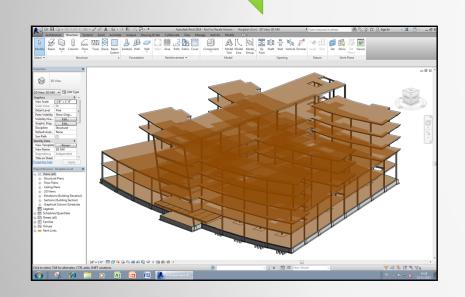
Construction

Revit Structure

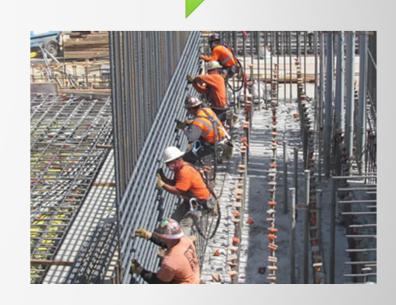
Autodesk Advance Steel

Navisworks / Glue / Point Layout for Total Station Export









Preferred Workflow for Steel Design, Detailing and Installation

Design **Detailing and Fabrication** Construction **Autodesk Advance Steel Revit Structure** Navisworks / Glue / Point Layout for Total Station Export AUTODESK*
ADVANCE STEEL 2015 Sync Sync AUTODESK.

Autodesk Advance Steel

Advance Steel is a software specifically designed for structural engineers and steel detailers who need an easy-to use steel detailing application.

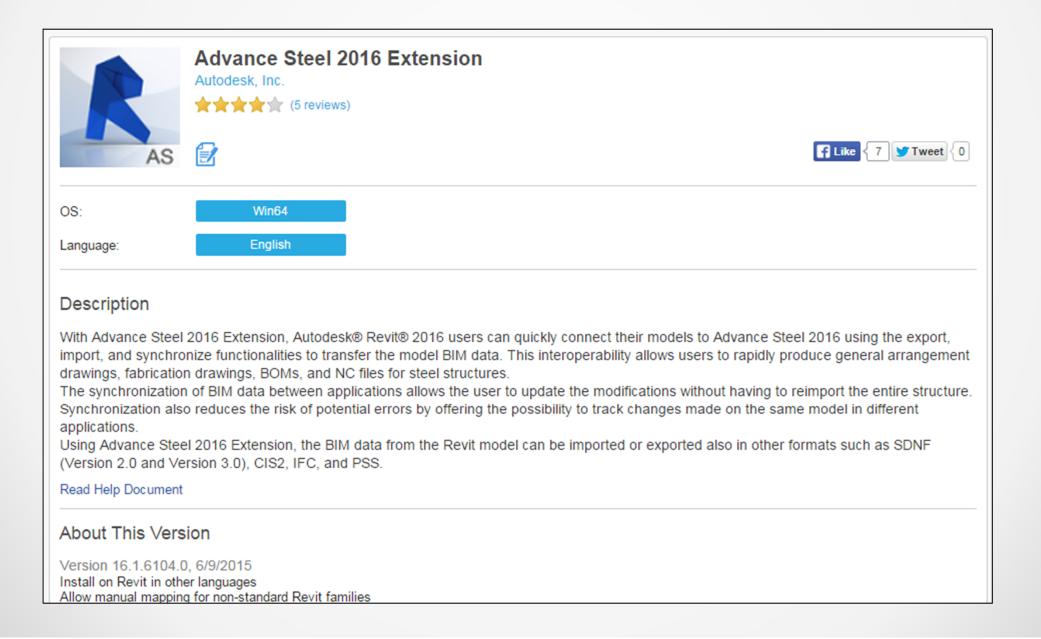
- Allows Bi-directional data interoperability with Autodesk Revit Structure
- Automates the creation of complex structural models and connections that would be too tedious to manually model
- Increases productivity during the creation of construction detailing and documentation drawings, bills of material (BOMs) and reports

Autodesk Advance Steel Key Features

- Bidirectional Link with Autodesk Revit
- Intelligent Structural Objects
- Parametric Steel Connections
- Extremely Smart Detailing and Documentation Tools
- Bill of Materials and Reports Generation
- NC/DSTV File Generation
- Document Management and Revision Control

Advance Steel Plugin for Revit

Free for Subs Customers



Demo

Now the goodies...

Forget to take notes? No problem!

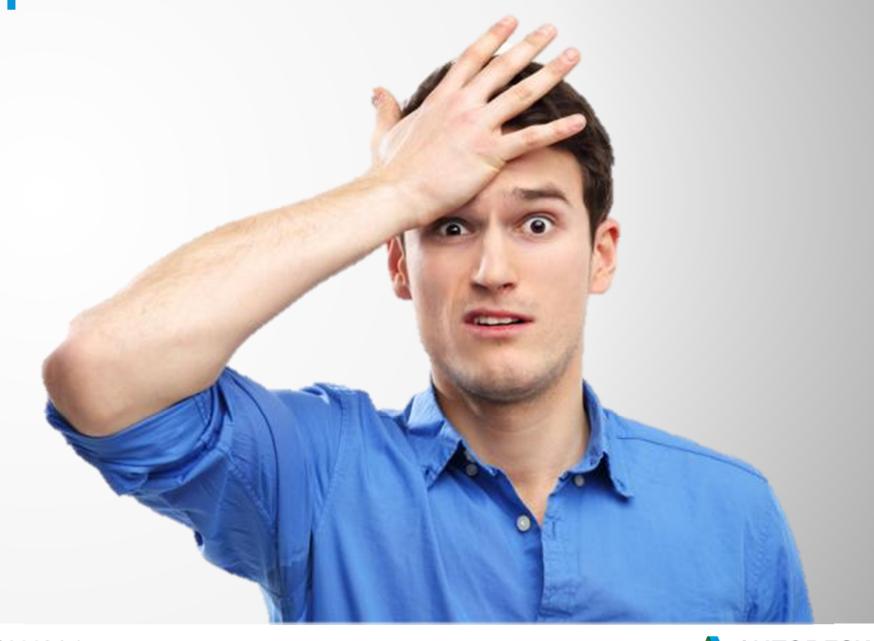
After AU visit:

AutodeskUniversity.com

Click on My AU to find:

- Class Recordings
- Presentations
- Handouts

All of your sessions will be there to enjoy again and again.



Be heard! Provide AU session feedback.

- Via the Survey Stations, email or mobile device.
- AU 2016 passes awarded daily!
- Give your feedback after each session.
- Give instructors feedback in real-time.

