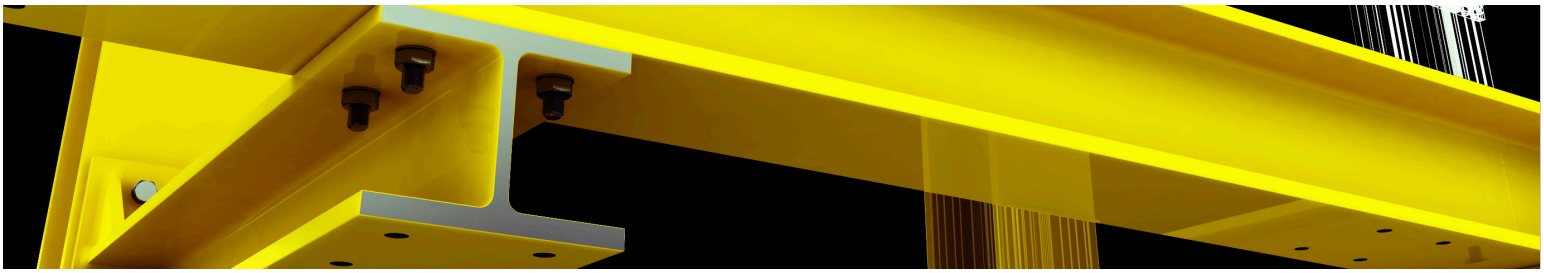
AUTODESK®
ADVANCE STEEL

Be part of the BIM revolution.

Improve your process with Building Information Modeling and intelligent structural steel detailing and fabrication software.

Minimize time from design to fabrication

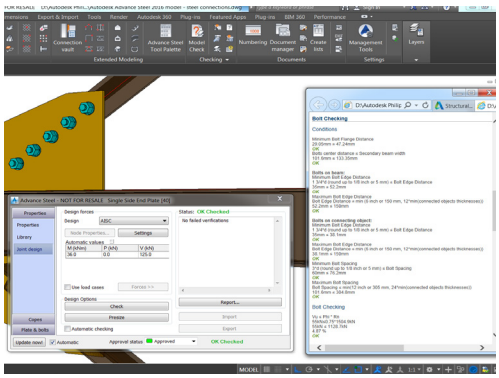
Intelligent 3D modeling software for structural steel detailing and fabrication that helps to improve accuracy and reduce time from design to installation.



3D steel modeling with the intelligence of BIM

Autodesk® Advance Steel structural steel detailing software is built to help structural engineers, detailers, and fabricators more quickly and easily create information-rich building models that can help drive the fabrication of steel components.

Building Information Modeling (BIM) is a process-based workflow that helps businesses work more efficiently and helps teams complete projects on time and on budget. Advance Steel helps detailers and fabricators model with intelligence and helps designers and engineers extend their BIM workflows through to detailed modeling.



Built-in steel connection design engine.

Structural steel modeling

Advance Steel helps simplify the structural modeling process through several intelligent features. It contains an extensive library of objects and powerful tools to help designers create structural elements. The dedicated wizard tools make it easier to create elements like trusses, bracings, purlins, and portal frames.

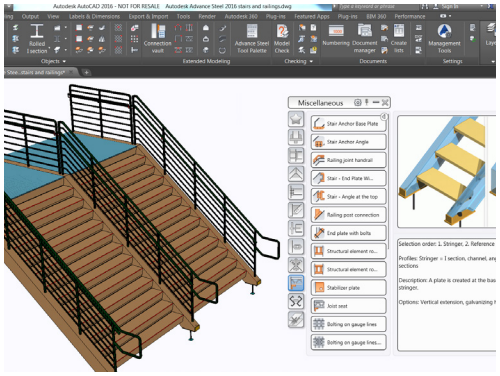
Advance Steel gives you access to different types of ready-to-use parametric steel connections. The comprehensive, user-friendly library enables you to access simple and complex structural connections, and when member size changes are made, connections are automatically updated.

A built-in steel connection design engine that checks connection compliance against AISC and EC3 standards helps validate your models. Check your steel connections at any time against industry standards and then run a report with formulas included for printing and reference.

Miscellaneous steel modeling

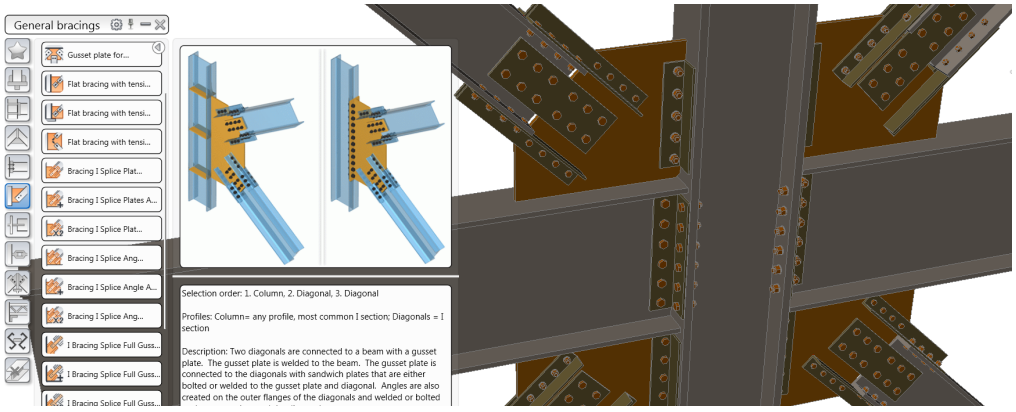
Advance Steel also has powerful tools for miscellaneous steel creation. Create more accurate stairs and railings with the use of special wizards. These dedicated wizards save more time by helping you quickly generate straight and spiral stairs, straight and curved railings, and cage ladders. Once created, you can more easily modify the properties using a large selection of customizable parameters to suit the needs of your project.

Additionally, you can design sheet metal or model complex folded plate by using specific commands. These miscellaneous elements can be automatically unfolded during the creation of your shop drawings, and the pattern can be fully represented within the CNC data to help drive fabrication.

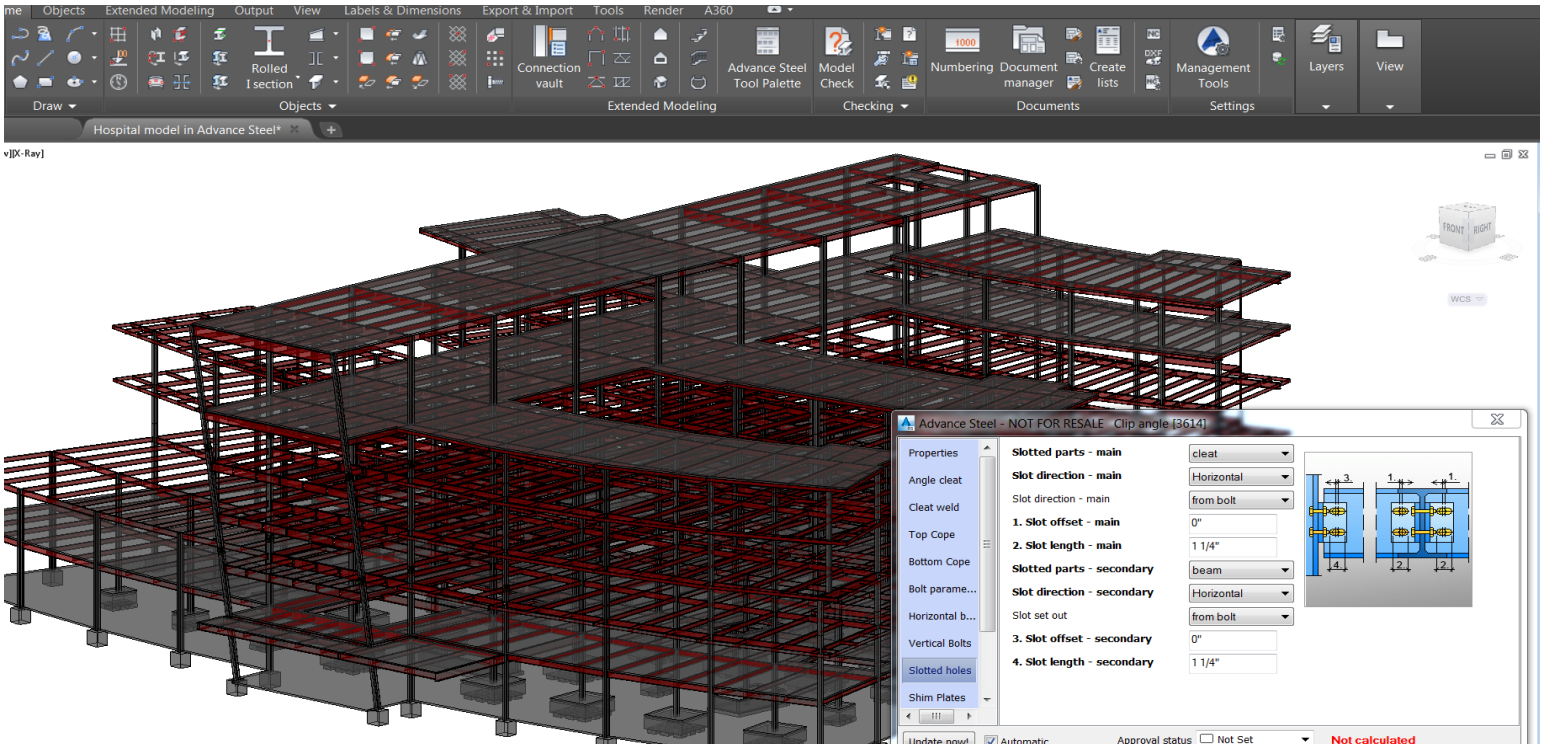


Dedicated tools for stairs, railings and cage ladders.

Advance Steel also enables you to import other non-standard components for detailing and shop drawing creation, helping you create a full as-built model. For example, you can import components such as engines and tanks and add welds and bolts to them for better coordination, clash detection, and more accurate bills of material.



Large library of parametric steel connections.



Customizable documentation for more efficient fabrication

Autodesk Advance Steel software helps to improve the steel detailing process by providing ready-to-use templates that aid the creation of high-quality shop drawings. The software also has features that automatically generate CNC data for fabrication.

Shop drawing templates can be used to create more accurate single part and assembly drawings at any time. These can be labeled and dimensioned to your requirements and expectations, so the process can fit in your with shop needs. The shop templates are easily customizable so that they can be refined to fit in with your current business needs.

You can also produce general arrangement drawings for use during erection at the jobsite. These clear drawings can be quickly created in isometric, top, elevation, and anchor views, and automatically dimensioned and labeled by using the customizable drawing styles.

Bills of material (BOMs) can be easily created using ready-to-use templates. Quantities are defined by the parts used in the information-rich model, helping to eliminate waste with more accurate BOMs. Information can also be exported to different file formats so that it can be used in third-party systems, such as procurement solutions.

Advance Steel also automatically generates computer numerical code (CNC) for use with most machine manufacturers—including welding robots—enabling you to drive fabrication straight from the 3D model.

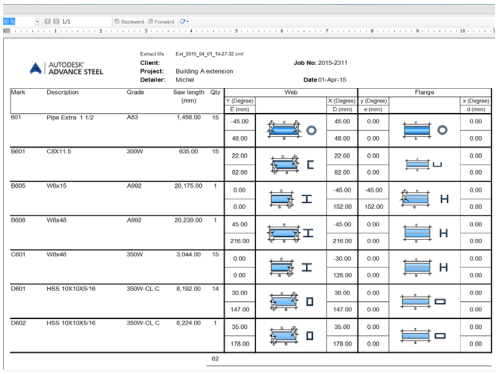
Interoperable for maximum efficiency between processes

Advance Steel offers bidirectional links to design, analysis, and coordination tools to help you work better with different disciplines and help provide a validated end-result to your client.

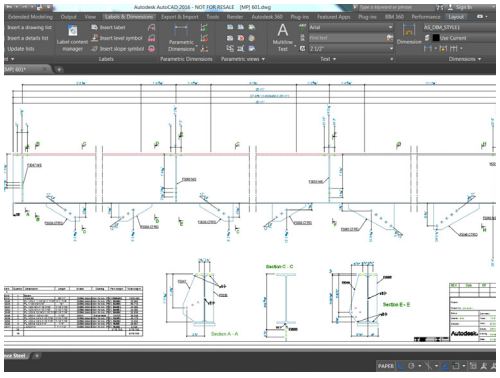
The Advance Steel Revit® plug-in enables you to import a Revit design model into Advance Steel so that you can continue to work where the designer left off. Once detailing is complete, you can take the model back into Revit and resave it as a native Revit software file, if required for handoff... This helps provide a smoother BIM workflow between design and fabrication.

The same level of interoperability is available with Autodesk® Robot™ Structural Analysis Professional structural analysis software. You can import your model between Advance Steel and Robot to optimize your structure steel and evaluate the design before fabrication against major standards and codes.

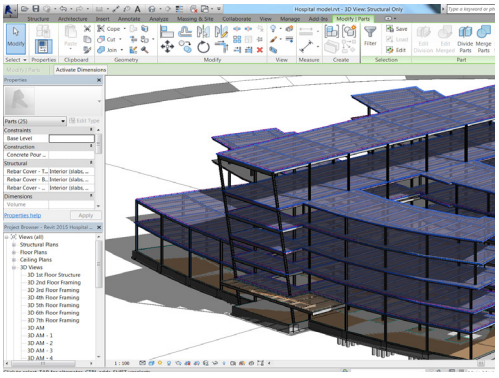
Finally, Advance Steel models can be taken into Autodesk® Navisworks® software for multidiscipline collaboration, construction simulation, and whole-project analysis, enabling you to work more closely and efficiently with other project stakeholders to help reduce the risk of unexpected issues at the job site.



Saw cut bill of material with explicit pictures.



Example of an automatically generated shop drawing.



Share models between Advance Steel and Revit.

Advance Steel helps me work out the constructability of a design, and gives me that other set of eyes when I'm rechecking complex spatial geometry.

–Bart Rohal
Founder and President
Steel Detailing Online, Inc.

Autodesk has been very good to us for training and support and we've been using Advance Steel ever since...The advantages that Advance Steel brings include the automation tools: automated marking of pieces, automated connections, automated creation of drawings, parts and plans; and it does a really good job of it.

–Erich Bretz, P.E.
Principal
MB BIM Solutions

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