



The **first** SolidWorks®-based
solution for **steel fabrication**

AMV STEELWORKS® is the FIRST SolidWorks® - based solution entirely dedicated to steel fabrication.

AMV STEELWORKS® is conceived to streamline the design and management of structural steel components inside SolidWorks and the generation of the relating drawings: simple and composite marks and assembly drawings. Moreover, thanks to a specific **client/server module**, SteelWorks allows sharing comprehensive information for each fabrication step and enables simultaneous management by different users when working on large and/or complex jobs.

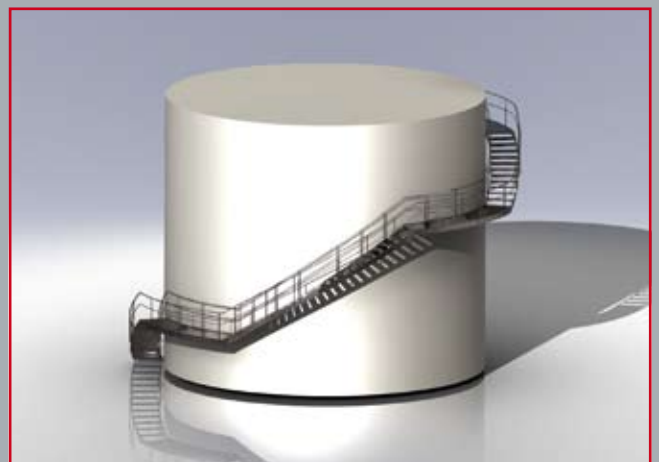
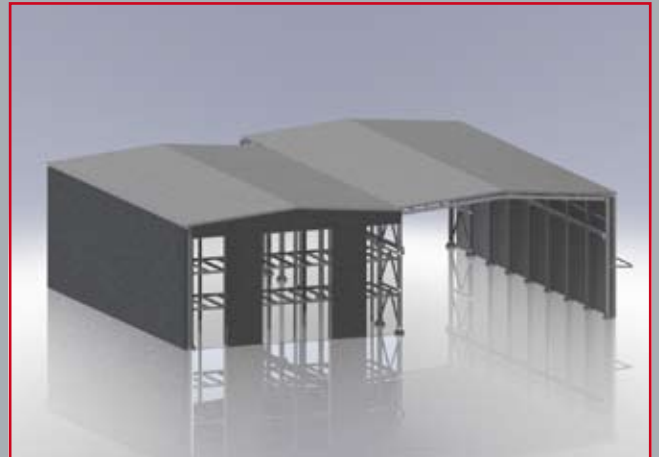
Models created with SteelWorks can be naturally edited on any SolidWorks workstation, and the full integration between the two solutions results into joint and synergic employment.

The unbeatable flexibility of SteelWorks shows from the very first steps,: the user can chose whether to quickly model the single components such as profiles, joints, welds, etc, by using a parametric wireframe, or select them from the libraries of associative smart components responding to different construction standards.

This enables to rapidly re-edit an entire structural sub-system and then reuse it in a different context. This way a truss, a staircase or a brace can be designed once and then instantly reused in another project with (if necessary) different parameters.

SteelWorks includes libraries of pre-sized components pursuant to ISO, AISC, and AS/NZS Standards which can be freely integrated with user-defined components. Library items can be arranged according to, for example calculation code, customer, place, etc and the respective access rights can be defined for each user. Alongside the libraries, specific tools have been conceived to speed up the modeling of components such as plates and ribs.

A specific function within the TOP version enables the automatic insertion of the joints; that means that in few seconds a full, detailed connection can be added to the model by selecting it from a library.



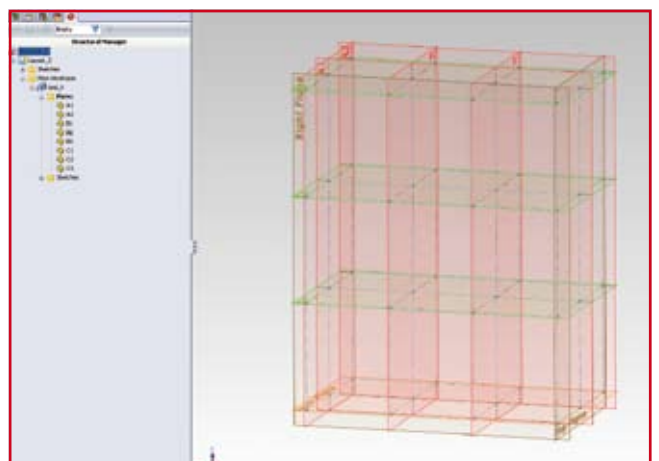
AMV STEELWORKS® automatically suggests joints compatible with the profiles and the alignment selected which resize automatically whenever the profiles involved are modified.

Joints can be displayed in full detail or in a more essential, lighter way which proves to be particularly effective especially when working with large assemblies.

The modular solution AMV STEELWORKS® TOP also supports multi-user employment and greatly simplifies the management of outsourcing projects through networked job check-in/job check-out.

Layout-based Modeling

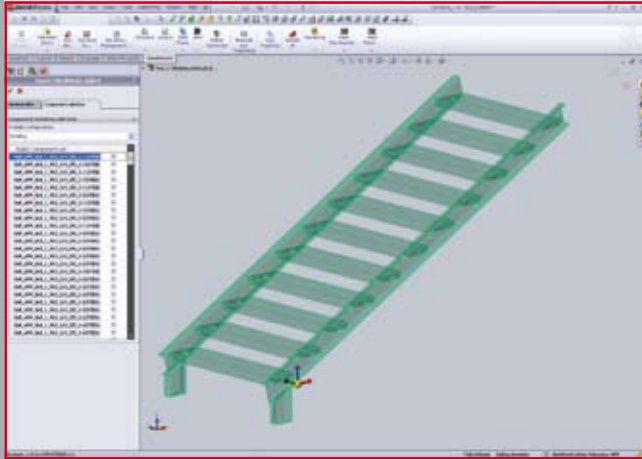
The SteelWorks grid, which can be used either in conjunction with the one present in SolidWorks 2011 or in place of it, presents advanced functionalities for the creation of a tridimensional, parametric and associative layout. By layout-based modeling, any change performed on the layout results in an automatic adjustment of all involved components.



Components Reuse

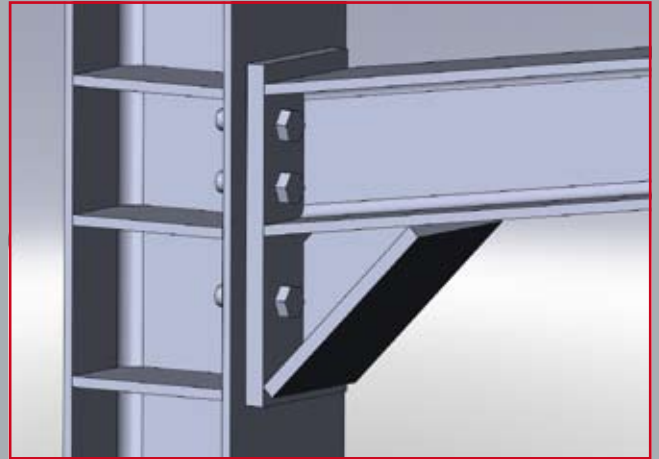
AMV STEELWORKS® accelerates and empowers **components-based design** by adding specific functionalities thought for metal carpentry design.

For example, the **stair** in the picture can be modeled inside a SteelWorks job, added to the library and easily reused in a different context with (if necessary) different parameters such as the number of risers, the width of the tread, the total width and length, etc.



Management of standard and custom Joints

AMV STEELWORKS® TOP and Machinery feature a library of standard joints including various common joint types, all pursuant to the most widespread standards such as Eurocodes, DSTV, AISC, etc. All standard joints are smart and flexible, that is to say that whenever a change is performed on the model, the joints automatically adapt to the new parameters.



Available Versions

AMV STEELWORKS® is available in **four versions** designed to respond to the different requirements of the steel industry.

STEELWORKS LITE & LITE PLUS

STEELWORKS LITE

New for 2011, SteelWorks **LITE** has been conceived for the professionals wishing to **speed up steel modeling inside SolidWorks**.

SteelWorks **LITE** features modeling functionalities and enables joint insertion through SteelWorks tools. Moreover, it features all the necessary instruments to obtain the BOM for a **quick and accurate sales quote**.



STEELWORKS LITE PLUS

SteelWorks **LITE PLUS** has been conceived for the professionals needing not only modeling, but also **detailing and interoperability with FEA solutions**.

Similarly to the LITE version, SteelWorks LITE PLUS too enables joint insertion through specific tools such as the management of plates, stiffeners and bolts, combined to create the desired connection.

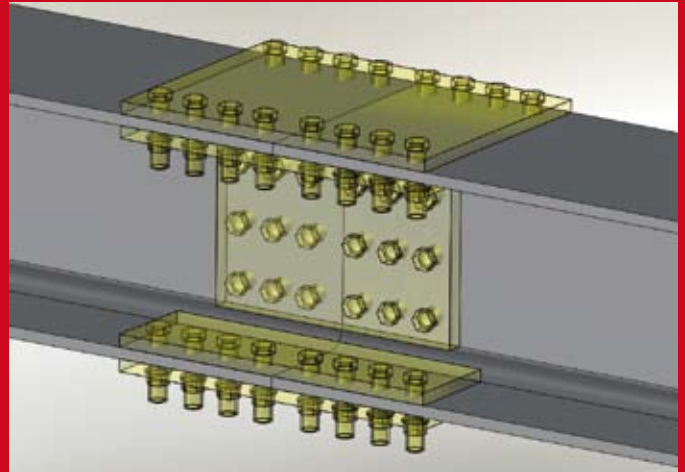


STEELWORKS MACHINERY

The youngest of the SteelWorks family, SteelWorks **Machinery** is designed for the professionals of the mechanical sector who often face the need to add metal carpentry elements to their models.

These users typically require the automatic joint insertion, whereas the network functionalities are managed through **PDM**.

Specifically, the **Machinery** version includes **full modeling functionalities** and the **automatic insertion of joints** (although limited to the most common industrial joints, such as **flanges, end plates, base plates, splices and angles**).



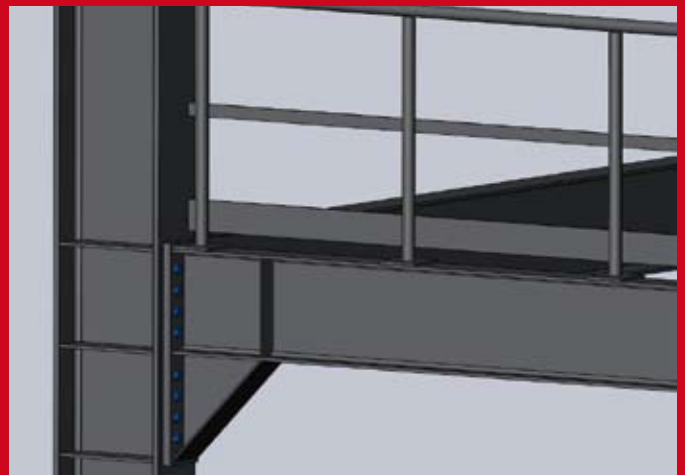
STEELWORKS TOP

The full, modular, upgradable solution, conceived to offer maximum flexibility and complete functionalities.

STEELWORKS TOP BASIC

The basic model includes all the tools meant for the **3D modeling of steel structures inside SolidWorks**: automatic joint insertion, piece numbering, customized BOM printouts for materials and bolts, etc, as well as the instruments thought for an immediate and effective estimation of the costs such as customizable cost codes (single and grouped), totals, and subtotals.

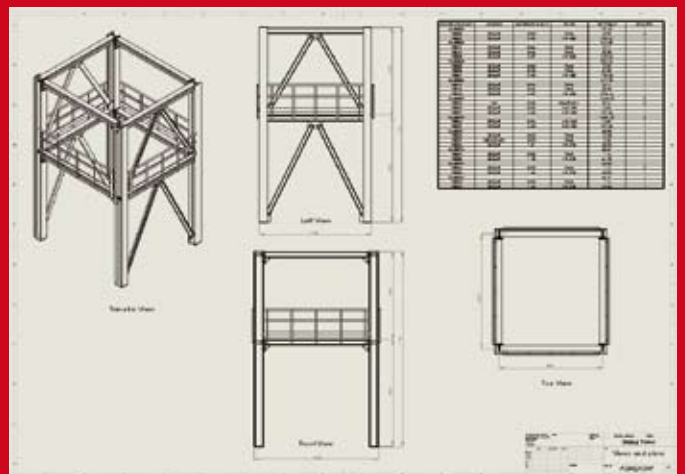
The library of the TOP version includes all the joints available according to the various standards.



STEELWORKS TOP DETAILING

The detailing module enables the automatic creation of the tables for the detailing and assembling of marks and the management of the drawings typical of metal carpentry (steel structures):

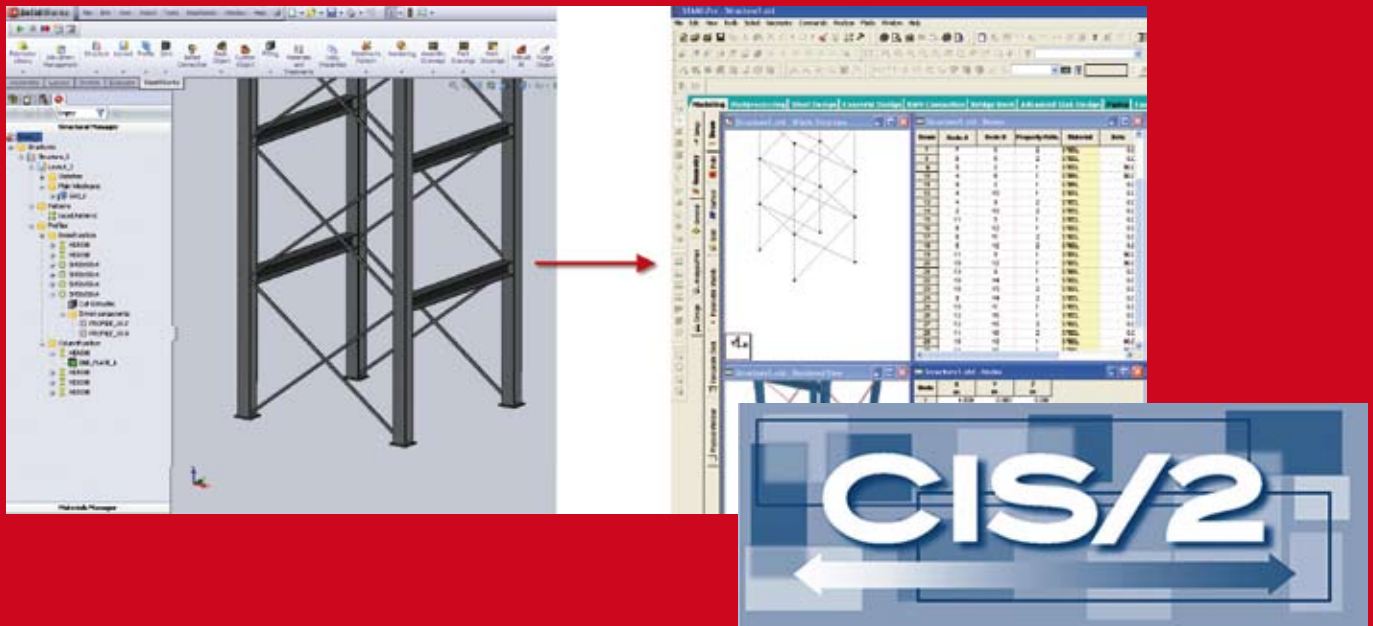
- Positioning/numbering of marks;
- Assembling of composite marks;
- Numbering and management of composite marks;
- Workshop sketches;
- Simple mark drawings;
- Composite mark drawings;
- Assembly drawings.



As the drawings are directly associated with the model, whenever a change is performed on the latter, this is immediately reflected in the tables, thus drastically reducing the risk of human error.

STEELWORKS TOP INTEROPERABILITY

The interoperability module allows exporting from SolidWorks to FEA solutions through the CIS\2 format. Moreover, it offers direct interoperability with STAAD Pro (Bentley).



STEELWORKS TOP SEVER & SUBTASKING

Server

The Server module allows the connection of single seats in client-server mode (one single module connects multiple licenses) thus enabling “floating licenses”.

It furthermore allows the simultaneous access to projects and libraries by multiple users, as well as the sharing of the required data and of the libraries.

Through this module jobs can be checked in and out from the server to a local workstation or a laptop and vice versa.

Sub-Tasking

Through the Sub-Tasking module a job can be subdivided into sub-systems, accessible from a local network as if they were self-standing jobs.

WHY CHOOSING STEELWORKS

- Quick and straight-forward approach;
- Specifically developed for steel design;
- 100% parametric and customizable;
- Fully integrated inside SolidWorks;
- Full management of layout, modeling and level of detail;
- Customized management of the library;
- Custom Joints;
- Generation of specific drawings;
- Automatic drawing layout;
- Export to FEA;
- Compatible with EPDM and other SW add-ins.

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