

Allplan BIM 2008

Steel Construction Package



The CAD solution for designing and planning Steel Construction

The Allplan Steel Construction package is the ideal solution for designing and planning steel structures. With Allplan Steel Construction you can display the shape of your structure down to the smallest detail in order to convincingly present the sections, including connections, to your customers.

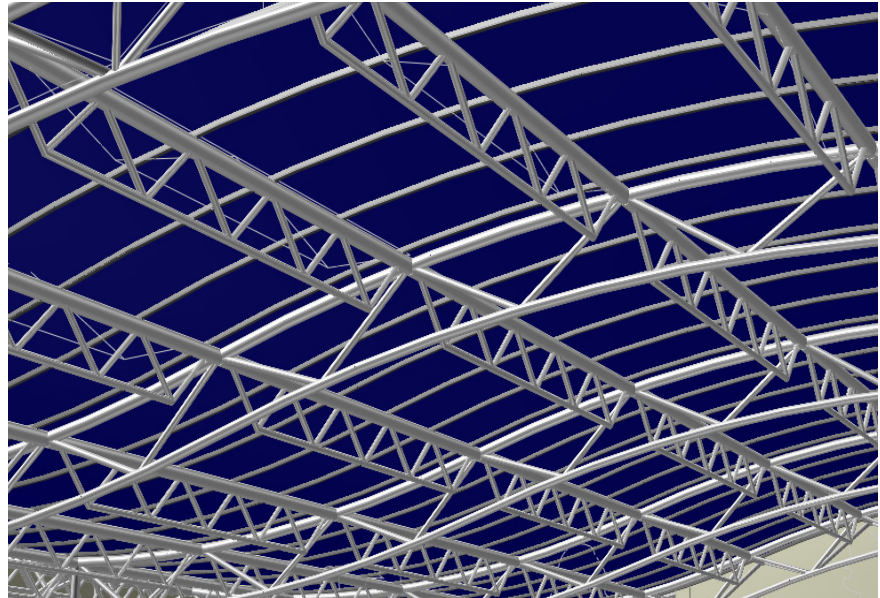
Includes Allplan Design package

This package includes the entire Design package and builds on its functions for 2D design, 3D modeling, layout, design, visualization etc. Please refer to the relevant data sheet for more information.

Save time Steel Construction templates

Parameter-based templates allow you to create steel structures in 2D and 3D in no time at all. All entries can be modified in the dialog boxes used for the initial design. Views and sections are generated associatively.

- ▶ Cubic, cylindrical and spherical axis grids for domes as well as custom axis grids as the basis for designs
- ▶ Easy positioning of components like columns, beams and corbels
- ▶ Use straight, curved, arched or variable bars
- ▶ Templates that provide a convenient way of designing steel construction details in no time at all.
- ▶ Use the component properties for initial input and to make changes to, for example, the bar priority, eccentricity, filler elements etc.



- ▶ Library of cross-sections for all European, North American and Asian standard rolled sections and a wide range of additional sections, composite cross-sections as well as universal cross-section editor
- ▶ Joints for rigid and weak axis: bolted, welded and flexible joints for corners, ridge points, panel-panel joint, T-connectors and cross-connectors
- ▶ Arches in different designs and additional degrees of rigidity
- ▶ All associated views and sections are updated automatically when changes are made

Highlights Allplan Steel

- ▶ Cubic, cylindrical and spherical axis grids for domes
- ▶ Extensive templates such as masts, 2D and 3D arched framework, steel grids and many more
- ▶ Use straight, curved, arched or variable bars
- ▶ Standard sections and additional, universal cross-section editor
- ▶ Point snap typical to steel construction for precise designs even with large reference scales
- ▶ Automatic generation of elevation views and component drawings for construction details
- ▶ Interactive connection to the 3D FEA structural analysis software ESA PT from SCIA
- ▶ Import and export the geometry in the CAD format DXF, DWG, DSTV
- ▶ Realistic visualization
- ▶ Create your own templates quickly and easily (optional)

Modeling and detailing of Steel Construction Projects

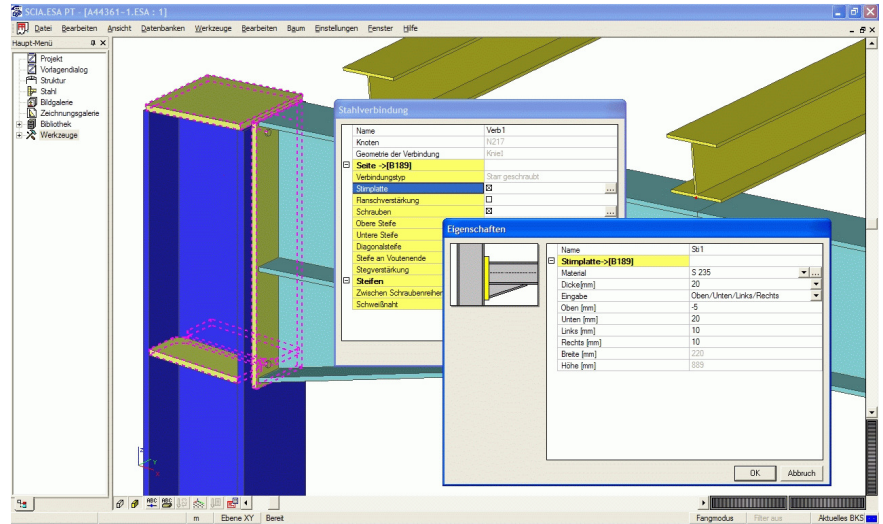
After using the templates to design a structure, you can adapt and edit it in detail.

- ▶ Follow-up editing of existing axis grids, bars, beams, columns, joints and cross-sections
- ▶ Structured property dialog boxes for quick checking and modifications
- ▶ Point snap typical to steel construction for precise designs even with large reference scales
- ▶ Automatic generation of elevation views and component drawings for construction details
- ▶ Import and export the geometry in the CAD format DXF, DWG, DSTV

Optional: create your own Steel Construction templates (parameter-based modeler)

The parameter-based modeler for Allplan Steel Construction offers an easy way to create your own, custom steel construction templates. It requires no programming knowledge at all!

- ▶ Set parameters for any steel construction project or detail subsequently as a template for retrieval at any time
- ▶ Define specific structural properties as parameters e.g. geometry or loads
- ▶ Parameters can be modified at any time and have an immediate impact on the steel construction model
- ▶ Effectively create simple "programs" to calculate a continuous beam, a frame etc.
- ▶ Quickly create additional templates with a similar structure by entering just a few parameters



Picture: Straightforward dialog boxes in Allplan Steel Construction

Save time with Round-Trip Engineering

The interactive connection to SCIA's 3D FEM structural analysis software ESA PT allows for time-saving Round-Trip Engineering.

- ▶ Wherever changes are made, the geometric information and data are reconciled interactively in Allplan and ESA PT
- ▶ No redundant input
- ▶ High degree of efficiency in structural design

Advantages in conjunction with the Allplan Solid Construction package

The Allplan Solid Construction package includes all the solid components you need to complete your design and based on which you can then derive views and sections. The cross-section type label with information about area, volume, length and weight is available when it comes to labeling your steel construction. Of course, this information

can also be made available in an Allplan material schedule.

Further Information

If you need additional information or would like to find out more about one of our products, please contact your local Nemetschek dealer or visit our website at: www.nemetschek.com.