

STEEL



Steel Constructions Design Package



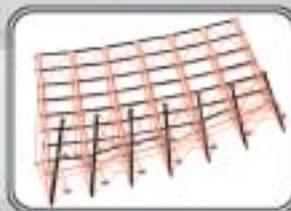
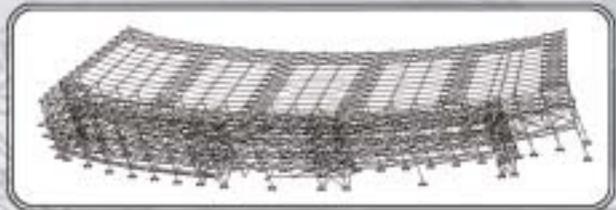
The Advanced Structural Analysis Tool for STEEL Constructions

STEEL offers the most dependable and flexible solution in the Analysis and Design of Steel Structures. It consists of four independent modules:

- i) Space Frame Analysis & Member Design according to EC3,
- ii) Simple Connections – Truss Connections, Moment Connections - Frame Connections,
- iii) Drafting of Frame & Connections,
- iv) Dynamic Spectrum Analysis.

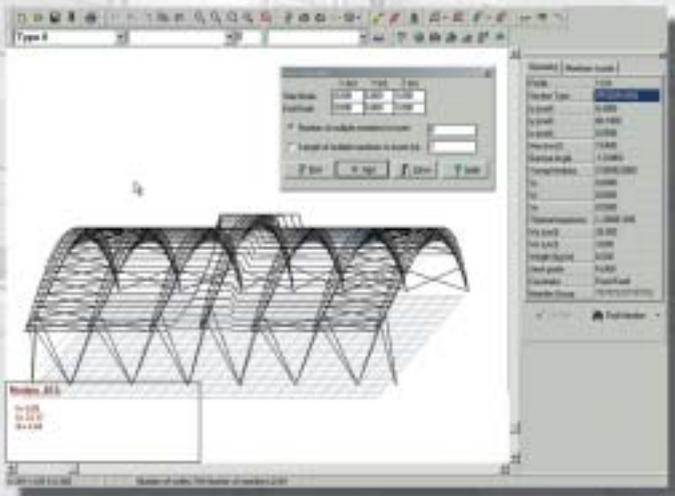
Moreover, there are three powerful add-ons for STEEL:

- i) module for exporting the model and loading cases into GT.STRUDL(*) (for non-linear or cable analysis),
- ii) SteelCAD, for quick and advanced drafting of node connections and
- iii) PRE-Steel a wizard for fast model and load input.



(*) GT.STRUDL is a registered service mark of the Georgia Tech Research Corporation, Atlanta, Georgia, USA

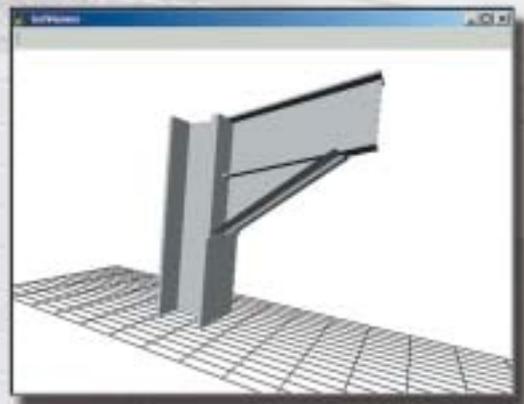
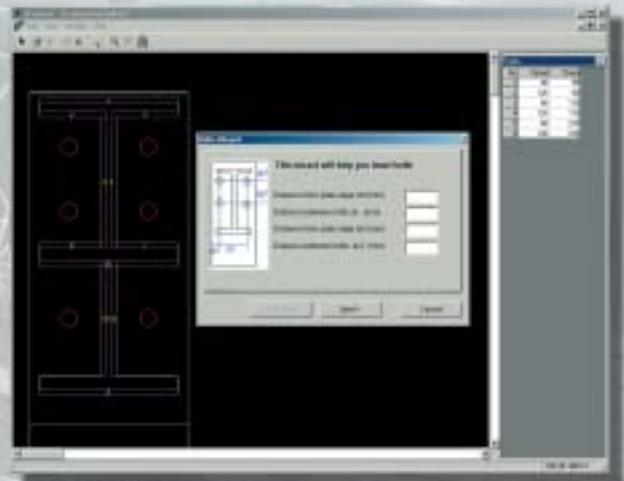
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- is upgraded with modules for designing frame connections wizard for the automatic design of welded or bolted connections of trusses and wizard for the design of foundations and tie-beams.
- produces high quality drawings in standard file format (dwg, dxf) and an incredibly detailed report in modern rich text format. The user has the overall overview of the results at every step of the program. STEEL can print on screen the deformed shape of the model, eigenmodes animation, member results and stresses. Drawing modification can be done using the known CAD software IntelliCAD, which is included in the package.

STEEL is an autonomous, productive tool for any Engineer. It can be easily used to analyse and design any steel structure having reliable methodology based on the most modern techniques and standards. Its scientific background is verified with many announcements at European and International Conferences and Magazines. More specifically, STEEL:

- is based on a high quality interactive graphics visual interface that allows fast data input and structural modeling with capabilities for making modifications easily. Moreover, it has the capability for 3D Frame input in *.dxf format. Models can be generated from existing libraries included in the program.
- can automatically produce any 2D or 3D building views and it offers a special module for rendering. Members can be easily selected using special filters and their properties can be modified through dialogue windows. There is no upper limit at the number of nodes or members.
- performs analysis of 2D and 3D Frames with dynamic response spectrum analysis. It offers up to 12 user defined loading cases including dead load, live load, static, seismic, wind, snow loading and temperature stresses. The process is highly customised to accept parameters according to any seismic code (such as EC3 and EC8).





STEEL belongs to the Integrated 4M Suite, which supports the close cooperation among the Architect, the Civil Engineer and the Mechanical/Electrical Engineer, during all the stages of the Building Design Process.

- **Powerful CAD Environment**
 - High quality interactive graphics visual interface
 - Fast data input and structural modeling with capabilities for making modifications easily
 - Capability for 3D Frame input in *.dxf format
 - Generation of models from existing libraries included in the program
 - Use of special filters for individual member selection or group selection
 - Direct access to member properties of an individual member, or a group of members, which are displayed in a dialogue box
 - Unlimited number of members and nodes
- **Reliable Methodology**
 - Analysis and member design using the newly developed algorithms of STEEL
 - Analysis of 2D and 3D Frames with dynamic response spectrum analysis (STEEL Plus)
 - Up to 12 user defined load cases (static – seismic – wind – snow loading, temperature stresses)
 - Design of frame connections
 - Wizard for the automatic design of welded or bolted connections of trusses
 - Wizard for the design of foundations and tie-beams
- **Final Drawings**
 - High quality printing of all the required drawings as well as the design calculations
 - Drawing mortification using the known CAD software IntelliCAD, which is included in the package
 - Fully compatible with the most popular drawing formats (*.dxf, *.dwg, *.rtf, *.doc)
 - On line help with analytical examples

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9 Mikion str.
 152 33 Chalandri
 Tel.: (+30) 210 6857200
 Fax: (+30) 210 6848237
 gen@4m.gr

