PRODUCT DATA SHEET

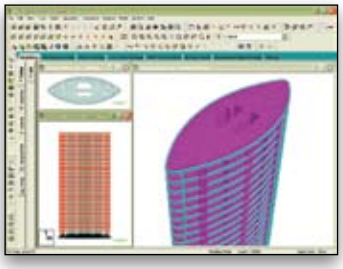
STAAD.PRO®

THE WORLD'S #1 STRUCTURAL ANALYSIS AND DESIGN SOFTWARE

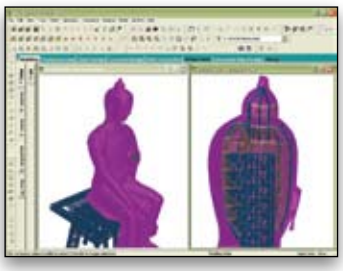
STAAD.Pro is a comprehensive and integrated finite element analysis and design solution, including a state-of-the-art user interface, visualization tools, and international design codes. Capable of analyzing any structure exposed to static loading, a dynamic response, soil-structure interaction, wind, earthquake, and moving loads.

STAAD.Pro is the premier FEM analysis and design tool for any type of project including towers, culverts, plants, bridges, stadiums, and marine structures.

Clear Start Page and new structure wizard allows user configuration and easy access into the program.



Powerful state of the art graphics routines to fully visualize the model.



STAAD.Pro has the power to analyze and design the most complex of structural models.

With an array of advanced analysis capabilities including linear static, response spectra, time history, cable, and pushover and non-linear analyses, STAAD.Pro provides your engineering team with a scalable solution that will meet the demands of your project every time.

STAAD.Pro will eliminate the countless man-hours required to properly load your structure by automating the forces caused by wind, earthquakes, snow, or vehicles.

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In addition, no matter what material you are using or what country you are designing your structure in, STAAD.Pro can easily accommodate your design and loading requirements, including US, European (including the Eurocodes), Nordic, Indian, and Asian codes; even special codes like AASHTO, ASCE 52, IBC and the US aluminum code can be catered to.

With an unparalleled quality assurance program, open architecture for customization, and a 25-year track record including such projects as the MCI Stadium in Washington DC, Wimbledon Court No1 in Europe, and the tallest transmission tower in Asia, STAAD.Pro is the perfect workhorse for your design firm.

Extremely Flexible Modeling Environment

All the power in an interface that is based on the latest programming technology which means that 80% of new clients learn to use STAAD.Pro efficiently in under 2 hours. Along with our tutorial movies, we also include on line help and dozens of examples to illustrate solutions to commonly raised modeling, analysis and design issues.

Broad Spectra of Design Codes

Steel, concrete, timber and aluminum design codes from all around the world including a number of historical codes means that you can take STAAD.Pro to wherever your company works.

Interoperability and Open Architecture

STAAD.Pro is more than an analysis and design tool, but from simple importing of CAD models to custom links to third party applications using OpenSTAAD; it can be the heart of your structural solution. When integrated with Bentley® ProjectWise®, your STAAD.Pro models can be efficiently managed with the leading project collaboration tool.

Quality Assurance

STAAD.Pro is the only software that has gone through ISO 9001 certification and has passed the stringent software validation requirements of the nuclear industry (10CFR Part 50, 10CFR 21 and ASME NQA-1-2000).

SYSTEM REQUIREMENTS

Processor:
Intel Pentium or AMD Athlon

Operating System:
Windows Vista, XP, and 2000

RAM:
128MB minimum

Hard Disk:
200MB free disk space

Display:
Graphics Card supported by DirectX 9.0

ABOUT BENTLEY

Bentley Systems, Incorporated is the global leader dedicated to providing comprehensive software solutions for sustaining infrastructure. Architects, engineers, constructors, and owner-operators are indispensable in improving our world and our quality of life; the company's mission is to improve the performance of their projects and of the assets they design, build, and operate. Bentley sustains the infrastructure professions by helping to leverage information technology, learning, best practices, and global collaboration – and by promoting careers devoted to this crucial work.

For more information, visit www.bentley.com or call 1-800-BENTLEY

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Bentley® *Sustaining* Infrastructure

STAAD.PRO AT-A-GLANCE

User Interface

- Graphical tools. Models can be created quickly and accurately using structural grids, tooltips to highlight data, frame generators and a structure wizard for standard structural frames.
- Visualization. From simple wire frames for speed, accuracy and ease of use to fully rendered 3D models for clear mass distribution and presentation.
- Editor. A color coded tool to check and organize the data, label with comments and organize to model stage construction.
- Section Wizard. Calculate properties of built up sections, drawn freehand, parametrically defined, or imported from a CAD drawing.
- Meshing tools. Triangular or quadrilateral meshes created from zones within defined models or imported from DXF files.
- Load generators. Seismic UBC, IBC, ASME wind and snow, bridge loading BEAVA.
- Customizable interface with VBA tools. Create windows and tables to your own specification. SQL query builder.

Objects

- Beams. Standard linear, curved and physical beams, compression/tension only, with databases of sections from around the world.
- Plates. 3 or 4 noded 2D plates and surface objects with holes.
- Solid. Solid 3D bricks from 4 to 8 noded.
- Supports. Foundation and Multi linear springs.
- Loads. Full range of loads for static and dynamic analysis which can be defined explicitly or calculated using the wide range of load generators.

Analysis

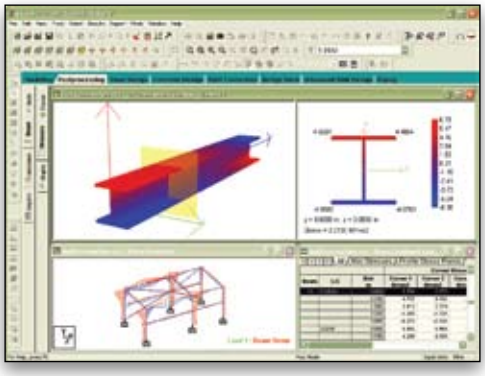
- Elastic. Traditional first order including iterative one way analysis.
- P-Delta. Both large and small P-Delta including stress stiffening effects
- Cable. Account for the changing stiffness of cables due to loading.
- Imperfection. Account for imperfections in structural geometry.
- Dynamic. Modal analysis including stress stiffening eigensolution and steady state options, Time History and Response Spectrums.
- Buckling. Identify the eigen buckling factor.
- Basic and Advanced Solvers. The standard solver, the staple of STAAD® for over 20 years is now complemented by an advanced solver that can be up to 1000 times faster!
- Pushover. A solution to the requirements outlined in FEMA 356:2000
- Code Checking and Design
- Steel, 37 codes from around the world.
- Concrete, 25 codes batch processed or within the interactive RC design modes.
- Timber, 4 design codes supported.
- Aluminum design.
- Shearwall designs for US, Indian and British codes.

Post Processing

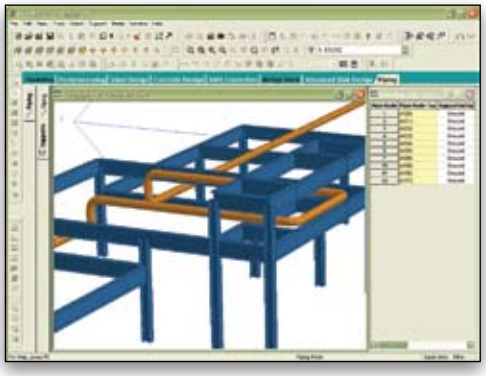
- Pages. The STAAD.Pro interface is configured to suit the model to ease access to the required data.
- Interactive graphics. Linked tables and windows to get direct feedback from one item in related windows.
- Output file. Simple clear information to verify the analysis.
- User Report. Create high quality documents.
- Contoured stress plots. Using automatic or user configured scales, colors and limits.
- Animations. View displacements, stress contours or mode shapes dynamically.

Interoperability

- Bentley® Structural. Two way link to support creating models with design and construction documents.
- Bentley® REBAR. Reinforced concrete designs passed into Bentley Rebar for complete scheduling and detailing.
- RAM™ Concept. Floor slabs can be identified and linked to RAM Concept for full RC and PT design and detailing in a state of the art application.
- RAM™ Connection. Joints defined in the model with the forces calculated from the analysis passed into the leading connection design application.
- AutoPipe®. Pass the STAAD.Pro structural steel frame into AutoPipe to correctly account for the pipe support stiffnesses and import the pipe engineers support reactions back into the model for an accurate design in a fraction of the time of traditional methods.
- STAAD.foundation. Import the STAAD.Pro support reactions and positions directly in to design the structure foundations.
- OpenSTAAD. A complete set of functions that make Open STAAD an API from which data an be extracted directly into applications such as MS Word or MS Excel or your very own application. You can even drive STAAD.Pro creating models, run the analysis and view the result with your own interface.
- CAD, DXF. Use CAD models as the base wire frame, structural grid or outline of a complex deck that needs to be meshed.
- CIS/2. Exchange data with other steel design packages.



Graphical post processing and linked windows to cross reference results data.



Pipe work designed in AutoPipe can be imported and graphically linked to the structure to import the loading.