

2011 MSC HOT PRODUCTS

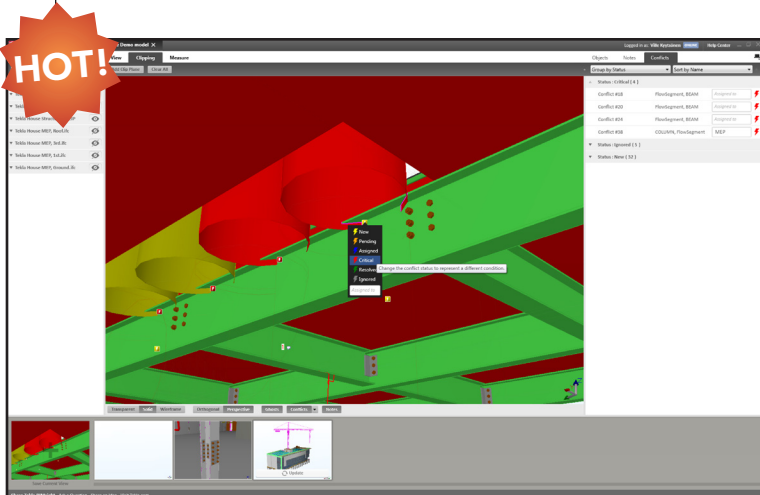
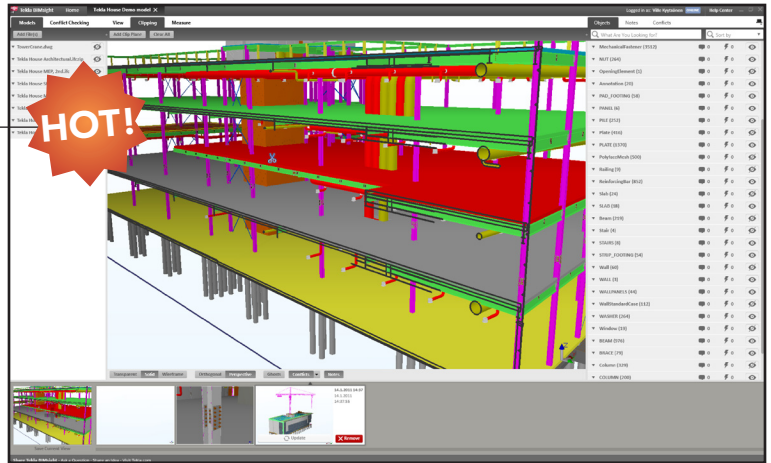
THIS YEAR EXHIBITORS AT NASCC: THE STEEL CONFERENCE were invited to submit formal entries in a new Hot Technology Products category. Six products were selected as standouts by MSC staff and representatives of the AISC Technology Integration Committee, and many more hold great promise for the future.

Selection was based on manufacturers' descriptions and claims; no product testing or evaluation was performed. This list does not constitute a product endorsement by *Modern Steel Construction* or AISC. For more information on the contest organization, go to www.aisc.org/integration.

OVERALL WINNER Tekla BIMsight

Tekla BIMsight is Building Information Modeling (BIM) software for model-based project cooperation. Available as a free download, this easy-to-access application presents the complete construction project including all necessary building information from different construction disciplines. Much more than just a new Tekla viewer, BIMsight enables users to communicate with anyone—not just Tekla Structures or other BIM software users—using the building information model.

BIM's use continues to grow in the construction industry, and more and more people are taking advantage of the benefits of visualizing, measuring, communicating, and planning through 3D models. BIMsight enables all project participants to actively use the composite model without making a major investment in BIM software. Specifically, BIMsight enables any project participant to:



- Combine multiple models and file formats from a variety of BIM software into one central model for coordination between different trades and deliverables.
- Easily navigate through the model using simple-to-use zoom, rotate, and clipping commands.
- Communicate problem areas, clashes, changes, approval comments, and work assignments in 3D by storing a history of different view locations and descriptions in the model.
- Measure distances directly in the model to verify design requirements and construction tolerances.
- Control the visualization and transparency of different types of parts in the model making it easier to understand complex congested areas of the project.
- Query properties such as profile, material grade, length, and weight from parts and report their quantities for estimation, planning, and verification.
- Package all of the models and comments into a single file, which can be easily exchanged with other project team members—with just the press of a button.

For more information or to download BIMsight, go to www.teklabimsight.com.

MERIT AWARD

FabSuite Remote Link (RL)

FabSuite RL is a web interface that gives fabricators and their customers alike instant access to view and update live information in the FabSuite database. It works with every modern browser (Firefox, IE8, Google Chrome, Mac Safari) as well as just about any Internet-ready device, including tablet devices (iPad, Motorola Xoom, Blackberry Playbook, Nook, etc.) and smartphones (iPhone, iPod Touch, Android devices, Meego, Blackberry, etc.) FabSuite RL runs on Apache/PHP, the same technology that runs Facebook. It is also wholly independent from FabSuite and can be installed on the fabricator's network or remotely from a web-hosting provider. The data shown in FabSuite RL is streamed directly from the database that FabSuite uses, therefore updates are instantaneous.



FabSuite RL has three main uses:

1. It enables project managers to view the status information for any job, both as an overview of the project as well as drilling down to find a specific part.
2. It can be used as an efficient method of recording the production and shipping status from the shop or the field.
3. It allows engineers, architects, detailers, and others to view any information to which they have been given access without having to install any software. Because the permissions are granular, fabricators can grant access to their customers and sub-contractors on a project-by-project basis.

As an enhancement to the company's existing suite of products, FabSuite RL gives fabricators a relatively simple yet highly effective way to retrieve, share, and update project information. This means that information can now be shared in real-time, throughout the supply chain, from document control through erection so that decisions can be made quicker and more intelligently than ever before.

For more information, go to www.fabsuite.com or call 757.645.0842.

MERIT AWARD

Peddinghaus PeddiWriter 1250

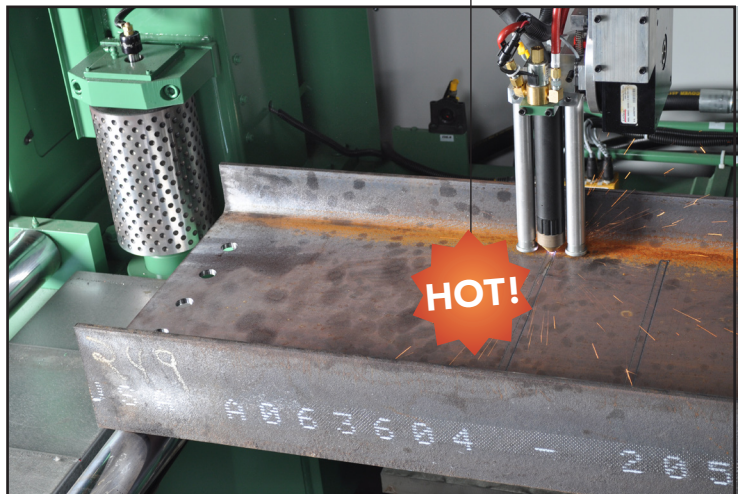
The PeddiWriter from Peddinghaus employs two independent plasma torches to mark detailed layout information onto all four surfaces of any structural profile. Its use allows the top web, bottom web, and both flange surfaces to be quickly marked using data that can be gleaned from the DSTV- or BIM-type file. Developed by working with structural fabricators, the unit automatically marks all detail and fit-up data replacing the tedious, laborious, and potentially inaccurate manual layout markings with CNC precision.

Fabrication shops no longer have to rely on a senior fitter or layout person to manually identify the next fit-up operation for a fabricated section. All locations for plate/angle connections, welding, part identification, crane lifting points, and so on can be processed in a fully CNC method. Plus, by marking on all four sides at once, it eliminates expensive crane lifts.

The unit features patent-pending advanced surface detection to monitor any inconsistencies due to mill tolerance in the section. This also allows the machine to maintain proper "stand off" distance for the torch, which speeds the operation by eliminating excessive probing.

Peddinghaus software, including Adnexus, provides the optimum platform to provide a seamless integration of the data onto the beam surface. And the PeddiWriter works seamlessly with today's industry software such as Tekla, AceCad, SDS/2, and others.

For more information, go to www.peddinghaus.com or call 815.937.3800.



MERIT AWARD

RAM Structural System V8i

RAM Structural System V8i, the new update of Bentley's popular structural design software, allows engineers to design increasingly more complex structures to the latest design codes and specifications and incorporates the ability to investigate new technologies. It includes implementation of the latest AISC 360-10 *Specification for Structural Steel Buildings*, including the requirements of the Direct Analysis Method. This version also incorporates the requirements of IBC 2009.

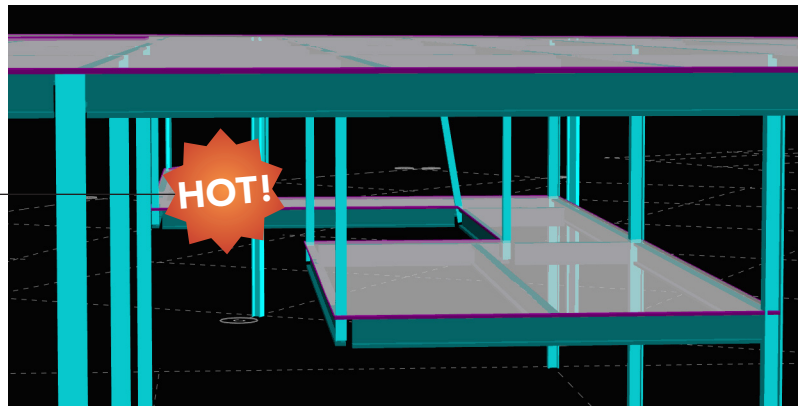
The analysis and design of Star Seismic Buckling Restrained Braces has been incorporated, including the automatic calculation of the axial stiffness modifier and the requirements of AISC 341 *Seismic Provisions for Steel Buildings*. The automatic calculation of the axial stiffness modifier provides considerable savings over the time and effort previously required when specifying buckling restrained braces.

Also implemented in this version are the analysis and design of moment frames using the SidePlate connection, considering the stiffening effects and critical design locations due to the side plates. Other connection types, such as the reduced beam section (RBS) and user-specified springs, also can be assigned and analyzed.

Hanging columns can now be explicitly modeled. This, along with the previous implementations of sloping columns and framing, stub cantilevers and semi-rigid diaphragms, allows the modeling and design of structures with complex geometries without sacrificing the simplicity of modeling for which the RAM Structural System is known.

This version is now compatible with ISM, providing interoperability with the other Bentley structural design, drawing production and detailing products as well as with third-party programs such as Autodesk Revit.

For more information, go to www.bentley.com or call 800.236.8539.



HONORABLE MENTION

Tracer on the Go

The web-based Tracer on the Go is the latest release of Tracer Software's drawing log management software that makes global operations as close as your mobile phone. Written from the steel construction industry perspective, it provides instant access for users to see drawings, drawing status, drawing history, transmittals, RFIs and other documents (PO, MTRs, etc.) from iPhones, iPads, or other smart phones via Wi-Fi or another 3G/4G network.

Whether you are an executive traveling frequently, a project manager at a job site, an engineer at a different state, a plant manager working on a grave shift, or an erector operating from the scissor lift, you can access drawings and other documents with Tracer on the Go.

The software uses an enterprise level database and offers advanced features that benefit the entire steel construction team. It helps engineers, fabricators, detailers, erectors, general contractors and inspection agencies save time and make good decisions quickly because they no longer need to have the CAD software to see the models from a laptop or desktop. The detailer does not have to send CIS/2 files or VRML files of the models through email. Rather, the model can be stored on the web portal and viewed through any VRML plug-in through a web browser. Different model statuses, such as approval status model by sequence, can also be stored as desired.

A secure network can be set up with a username and password for customer access. To further facilitate its use, the program can generate a QR code for inclusion on the back of a business card, for example, to give users easy access to the web portal.

For more information, go to www.steeltracer.com or call 248.875.9800 or 913.709.2540.



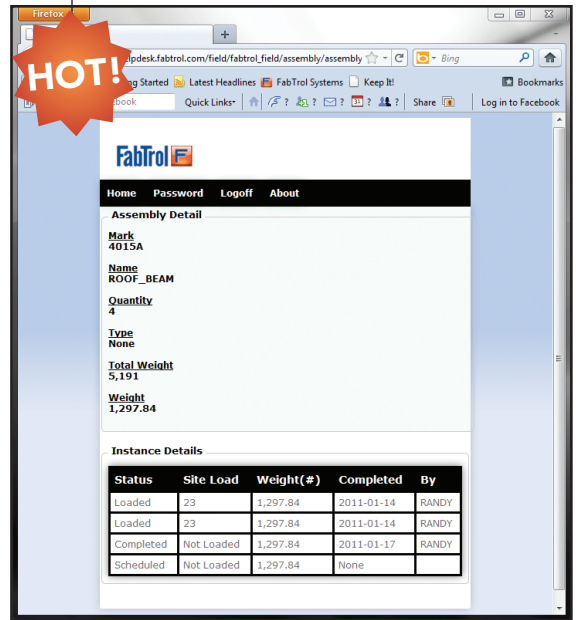
HONORABLE MENTION

FabTrol Field

FabTrol Field takes the guesswork out of all job-site activities related to steel building construction, which typically involves a complex supply chain with members working from disparate locations. This module recently was added to FabTrol MRP Version 3.6 to improve communication and collaboration between these supply chain partners by providing everyone with access to the same real-time data needed to keep job-site deliveries and building erection on schedule. Offering remote web-enabled access to real-time project data, FabTrol Field allows project participants from the on-site project manager to the general contractor and erector to check on load status and the status of individual assemblies (e.g., in production, loaded, in transit). Authorized users can use any smartphone or desktop computer to quickly look up the real-time information they need to meet their project schedules. In addition, with proper authorization, remote users can update FabTrol MRP so that all users will know immediately when a load and specific assemblies on the load have been received at the job site.

As more and more companies begin to recognize the value of Building Information Modeling, they will expect to stand in a half-erected building and instantly know the real-time production status of any assembly, whether or not it has been delivered on-site. Imagine an erector on the fourth floor of a building wondering about a missing beam. Seconds later FabTrol Field displays on an iPhone whether it is in production, shipped, or already on-site—without calls back and forth to the project manager.

For more information, go to www.fabtrol.com/field or call 888.322.8765



MORE HOT PRODUCTS

Portable Beveler

The Steelmax BM15 is a lightweight portable beveling machine for flat, curved or rolled plate. It can also perform O.D. and I.D. bevels on pipe, including deburring, and will produce countersinks in holes with a minimum diameter of 2 in. Interchangeable chamfer and radius milling heads use indexable inserts enabling beveling at 22.5°, 30°, 37.5°, 45°, 60° and cutting radius edges of 3 mm, 4 mm and 5 mm.

Equipped with a bevel width adjustment, overload protection and electronic speed control the machine can be used on a variety of materials like steel, aluminum, and stainless steel. The BM15 is highly efficient for edge weld preparation and rounding off steel construction before painting or coating. Its compact design and small overall dimensions make it an excellent tool in any place with limited access.

For more information, go to www.steelmax.com or call 877.833.5629.

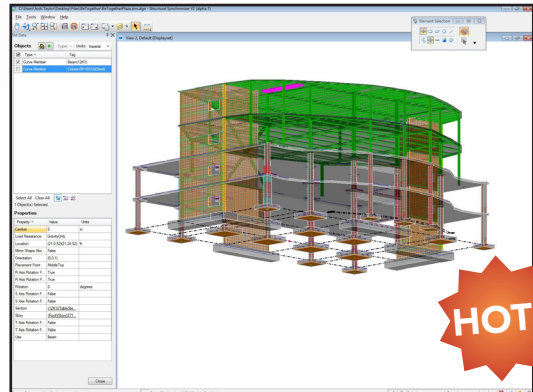


Integrated Structural Modeling (ISM)

Bentley's comprehensive interoperability framework for structural information, Integrated Structural Modeling (ISM), maximizes the interoperability of structural information among different specialized applications, CAD and BIM platforms, and design reviews for authors and consumers of a project's structural information. By ensuring interoperability across all structural applications required for intelligent structural design, ISM enables the highly collaborative workflows that are so critical to integrated project delivery.

Developed to address the major pain points surrounding structural interoperability, ISM facilitates moving data between physical and analytical structural models; provides small sharable models and a free viewer; provides a change management mechanism independent of each ISM-enabled product; and provides revision history capabilities.

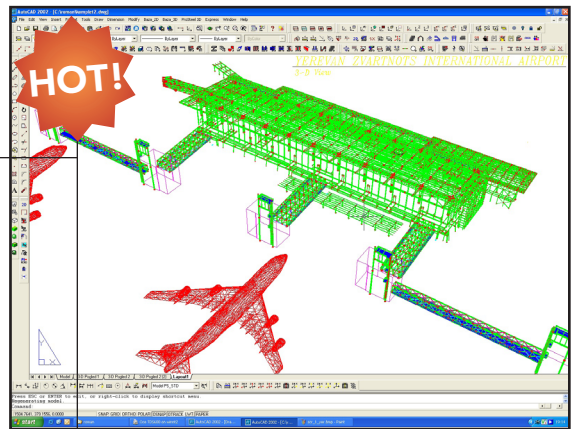
For more information, go to www.bentley.com or call 800.236.8539.



ProStructures v8i

Bentley's ProStructures is a 3D modeling environment for structural steel, metal work, concrete and rebar supporting construction and planning tasks. Working on the MicroStation and AutoCAD platform, users can obtain an intuitive and integrated multi-material modeler well suited to laying out complex structures, producing shop drawings, assembling connections, managing bills of materials, creating bending bar schedules and creating NC data. From initial planning and design to assembly, ProStructures is comprehensive software built by engineers experienced with steel and concrete design. Developed to address the major issues surrounding structural modeling and detailing, ProStructures creates a single 3D model including steel, metal work, concrete and rebar and also creates fabrication documents and interface data. Because it uses a "standard" CAD platform and open input and output interfaces, it can be integrated into almost any other solution. Through its support of "native" data, it is possible to use any kind of 3D solid models created by other solutions.

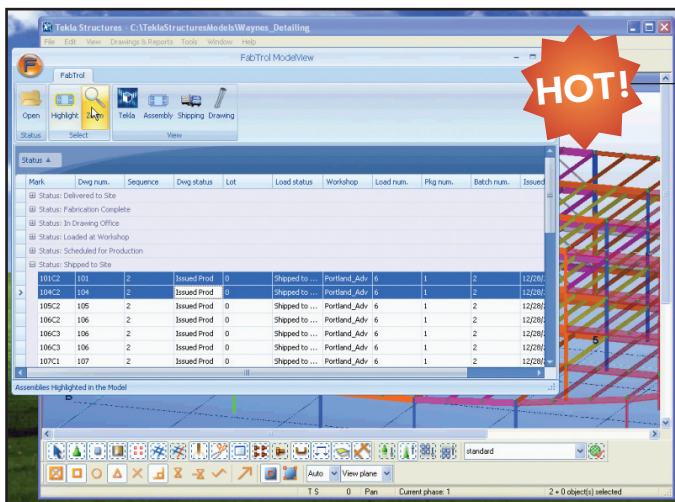
For more information, go to www.bentley.com or call 800.236.8539.



BeamMaster

BeamMaster from Orus Integration Inc. is a fully-automated steel beam assembler that provides the next level of robotized welding, laser accuracy and automated efficiency. Whereas structural steel fabricators typically spend almost 50% of their fabrication time assembling and welding, the BeamMaster can automate most of those tasks, while also reducing manipulation. Simply feed a model file into a computer, and then feed structural steel beams into one end of the robotized assembler and robotically-welded construction steel assemblies come out the other. The BeamMaster automated beam assembly machine incorporates an unprecedented level of integration between software, scanners, and industrial robots.

For more information, go to www.beam-master.com or call 819.693.9682.



FabTrol ModelView

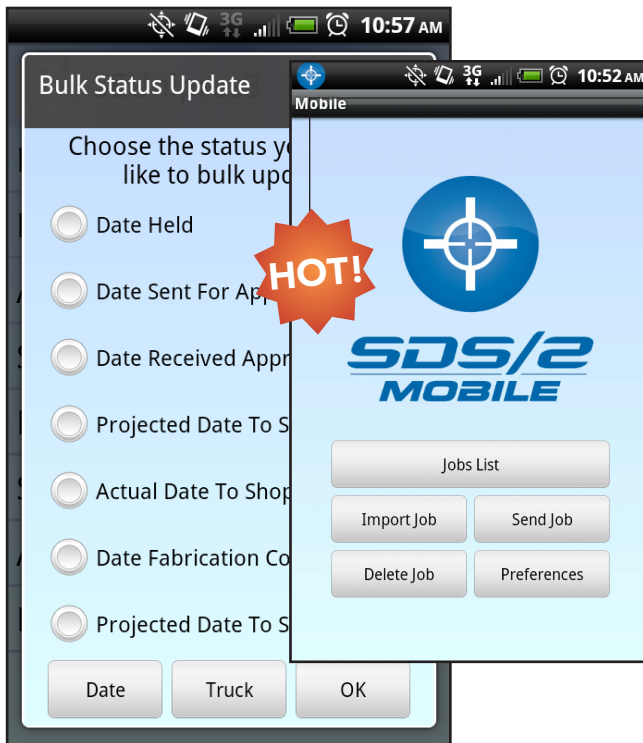
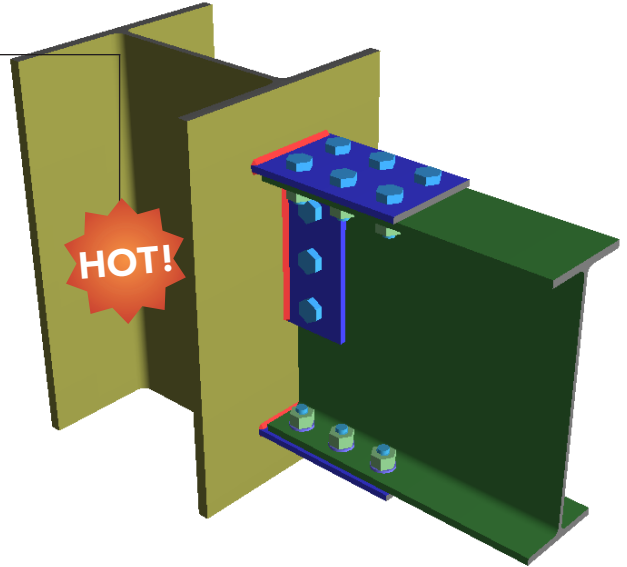
FabTrol ModelView is a free plug-in that makes it easy and inexpensive for all project participants to review assembly status information in the model, colorized by drawing, production and shipping statuses. One click in ModelView allows users to view a specific assembly's location and status. The fabricator simply exports project data from FabTrol MRP and sends the export file to interested project partners. Developed to improve communication and collaboration between the fabricator, detailer, and job-site personnel, ModelView provides project status information in an easy-to-access and easy-to-understand graphical format. While FabTrol has always made project status information available in the model, ownership of a full Tekla Structures install and/or receipt of an updated model from the detailer was required for project participants to view projects statuses in the model. Now, any team member can access this time-sensitive information quickly and inexpensively.

For more information, go to www.fabtrol.com or call 888.322.8765

RISAConnection

RISAConnection connection design software features full 3D visualization, shop-drawing-style views, and expandable engineering calculations for all limit states, making it a valuable tool for engineers who use steel. Completely integrated into RISA-3D and RISAFloor, it allows one-click connection design for entire structures enabling structural engineers to assign connections within the 3D model and have all of loads automatically update throughout the design process. The risk of losing information has been minimized by automating the connection design process and updating loads automatically and its library of connection types is continuously growing.

For more information, go to www.risatech.com or call 949.951.5815.



SDS/2 Mobile On Track

Design Data's SDS/2 Mobile On Track allows users of Android smartphones or tablet computers to keep up to date on the status of members (such as beams and columns) for a project. It also allows the user to scan bar codes and instantly update the status of members individually, or in bulk. These updates can be sent to any other user of SDS/2 Mobile On Track, or sent back to an SDS/2 workstation to keep the model's status information current.

Fabricators can use SDS/2 Mobile On Track to mark members that have been fabricated and are ready to ship, indicate they have been shipped, or update any other relevant information. Erectors can use SDS/2 Mobile On Track to scan and update individual members or shipments of members as they arrive at the construction site—and, using GPS, even tag individual members with the exact location where they have been offloaded.

For more information, go to www.sds2.com/erector or call 800.443.0782.

Trimble Field Link for Structures

Trimble Field Link for Structures is the next generation construction layout solution for progressive contractors working in BIM and virtual design and construction. Offered by Trimble Navigation, it is composed of three elements: a Trimble RTS655 Robotic Total Station; a Trimble Tablet Rugged PC with 7-in. touch-screen and integrated Wi-Fi capabilities; and the Trimble Field Link for Structures field layout software that includes a modern, touch-screen user interface; job-level productivity reporting for layout tasks; the ability to review construction data in a 3D model; and a customizable viewport with collapsible panes.

With integrated Wi-Fi and new reporting and monitoring functions, Trimble Field Link for Structures allows the contractor to share important and timely information that can be used to manage the project resources (personnel, materials, timing, cost) more accurately and integrate with the BIM process more seamlessly.

For more information, go to www.trimble.com or call 800.874.6253.

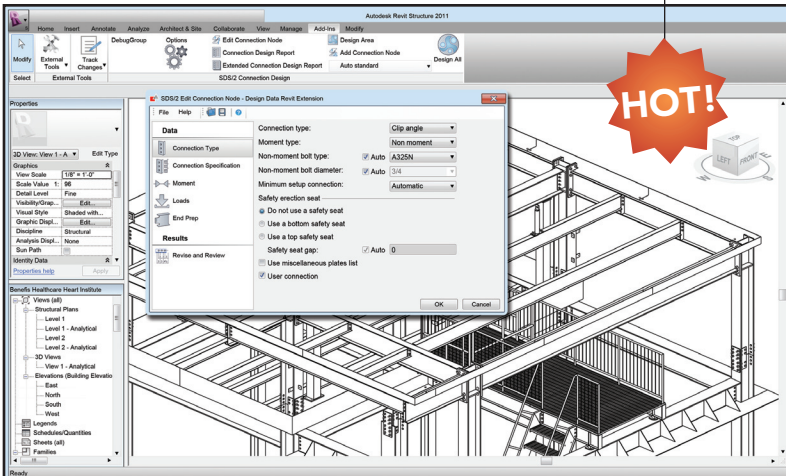


SDS/2 Connect

SDS/2 Connect, from Design Data, is a plug-in for Autodesk Revit Structure that enables the use of SDS/2's automatic connection design within the Revit platform. The integration also streamlines the BIM workflow with new technology and interoperability, resulting in truly seamless transfers of BIM data.

Through this integration, automated connection design is widely available to the AEC industry inside the tools they are accustomed to using for BIM projects. SDS/2 Connect gives engineers the flexibility to design their own connections in a familiar environment—but one with expanded capabilities. SDS/2 Connect also enables engineers, detailers, fabricators and others involved in the work process to complete connection design within the same environment, all with a level of interoperability that preserves the architect's and engineer's information in a way that maintains the accuracy necessary for steel detailing and manufacturing.

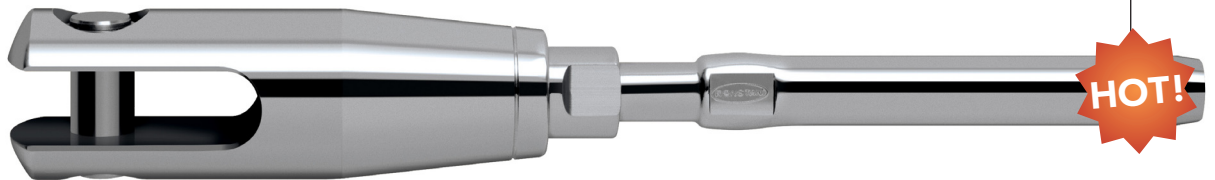
For more information, go to www.sds2.com or call 800.443.0782.



Compact Adjuster

Ronstan compact adjusters are designed for tensile systems in cable and threaded rod. Minimalist in proportions, these sleek and elegant end connections visually enhance structures while providing uncompromised durability and fully adjustable functionality. Compact adjusters are available to suit cables as end fittings (RF1629-xx) and as completed cable assemblies (ASC1) or finished rod assemblies (ARS1). They are easy to install and can be tensioned under load.

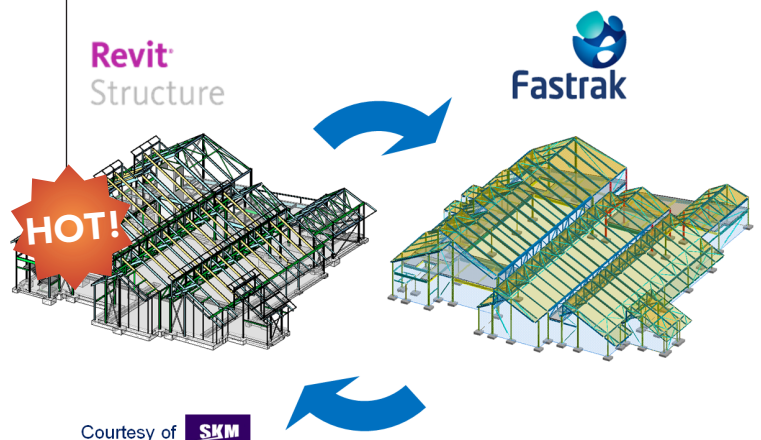
For more information, go to www.ronstan.com or call 401.293.0539.



Fastrak

Fastrak is software for the design, documentation and BIM interoperability of both simple and complex structural steel buildings. Offering ease of use with its 2D and 3D modeling environments, Fastrak is capable of dealing with diverse structures that may encompass trusses, cantilevers, composite beams and complex loadings. Offering true collaboration, Fastrak has the capability of synchronizing its physical model data with Revit or Tekla throughout the life of the project, unlike other design programs that allow only a one-time import. The program easily deals with design changes that occur throughout the life of the project and can also be communicated with the BIM model ensuring a code compliant building. Fastrak automates the design and drafting of simple and complex structural steel buildings and allows the engineer to quickly assess design alternatives to establish the most economical solution.

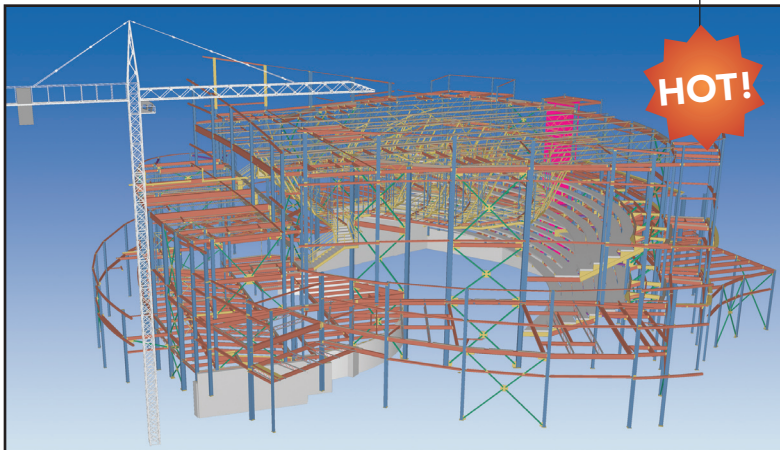
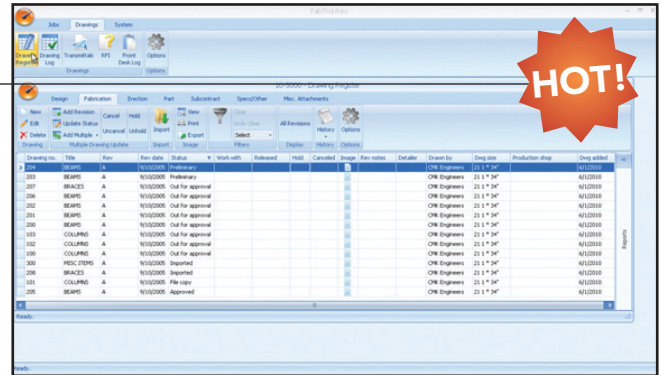
For more information, go to www.cscworld.com/fastrak, or call 877.710.2053.



FabTrol Rev

FabTrol Rev is a drawing/document management solution specifically designed to meet the needs of managing project documents through the life cycle of a steel building construction project. Because most projects are one-off designs from customer specifications and all projects involve multiple drawing types (e.g., design, fabrication, erection, etc.), staying on top of which drawings are the most current and which are in contract, approved, or released is vital to a project's successful completion. With full-featured transmittal and RFI systems, a powerful importing engine, and automated revision and status control, FabTrol Rev provides a one-stop integrated solution that can be used by all project team members, from the project manager and detailer, to the customer and engineer.

For more information, go to www.fabtrol.com or call 888.322.8765



SDS/2 Erector

SDS/2 Erector from Design Data gives erectors powerful tools to aid in their work process. The 3D model and 2D drawings are accessible and viewable, providing the steel information in its native form. Erectors can generate center of mass and weight calculations for simple members or assemblies. Measurement tools provide the ability to verify necessary information and check erectibility clearances.

Crane placement and reach also are addressed with SDS/2 Erector. Erectors can locate their cranes around the steel model and choose exactly where the best location for placement will be. Easy to import and move around, the crane placement tool is a valuable component to any erector.

SDS/2 Erector also affords erectors even more power to track and record progress to keep their job site on schedule. Through reporting and status tracking tools, daily progress can easily be recorded and future erection can be planned, allowing the model to be color-coded as the structure goes up. The actual status of the job site can be electronically sent to general contractors to allow them to adjust project schedules.

For more information, go to www.sds2.com/erector or call 800.443.0782.

Laser Layout Printer

The Laser Layout Printer LLP50/20 produced by Controlled Automation transfers layout information from the design model, including fitting and welding information, quickly and accurately marking all of a member's surfaces. Capable of marking structural members up to 50 in. wide and 20 in. high, the device uses two laser heads that mark at a speed of more than 200 in. per minute and eliminates errors due to misread drawings and measuring tape issues. Designed by Nicklebutt Automation LLC and manufactured by Controlled Automation.

For more information, go to www.nicklebutt.com or call 501.557.5109.

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