Descon Version 8 Basic

Built on more than 30 years of user input, Descon Version 8 features a new user-friendly interface and new features that make the software easier and quicker to use. Add highlighting and comments to the calculation reports, switch a design between ASD and LRFD on the fly, quickly view limit states with capacity gauges and more. The five different drawing views allow you to zoom, rotate, toggle and select connection drawings. “No-goods” are flagged dynamically in the report as the connection is designed.

For more information, visit www.desconplus.com or call 1.888.8DESCON (833.7266).

EuroBoor ECO-Tube 30

This one-of-a-kind magnetic drill is specifically designed to drill holes up to 1¼ in. in diameter in round material. Traditionally, magnetic drills work only on a flat surface, but the ECO-Tube.30 has a feature that allows the magnet to conform to round material no matter the diameter. It can also drill internal materials like tube or pipe—as well as flat surfaces—and is already being used on a national project to convert existing light poles into public charging spots for hybrid cars.

For more information, visit www.euroboor.com.

Inovatech Engineering Group SP900

The SteelPRO 900 3D plasma cutter combines numerous processes such as: drilling, coping, beveling, marking, plate cutting and punching. The robotic cells, which include SteelPRO Series Software, provide everything required for 2D/3D robotic plasma cutting. For users who need to create or convert parts, the standalone Builder tool can be used to create DSTV (3D) files for SteelPRO Nester. Nester can organize parts into stock material and provides a multitude of options to control how parts will be processed and can process DSTV (3D) and G-Code (2D) data into SteelPRO Director-ready cutting operations. Director is used for real-time control over 2D/3D robotic plasma cutting and seamlessly integrates all machine components into an easy to use interface.

For more information, visit www.inovatechengineering.com or call 613.809.3614.
**Ajax Fasteners ONESIDE**
The ONESIDE structural blind fastening system is the first true structural blind fastener on the market. By using a collapsible washer rather than sleeve deformation, it is capable of being installed in friction grip design and can be used as a one to one replacement of standard structural bolts in many engineering applications. The same design methodologies applicable to standard A325M structural bolts are suitable for the design with ONESIDE in blind applications.


**St. Louis Screw and Bolt HEXPORT**
HEXPORT is a new cloud-based portal for all structural bolt documents and order tracking, making document retrieval and important information available to our customers anytime they need it, 24/7. This includes material test reports, rotational capacity test results, DOT approval documents, packing slips, order tracking and signed proof of deliveries. And it’s a free service!

For more information, visit [www.stlouisscrewbolt.com](http://www.stlouisscrewbolt.com) or call 800.237.7059.

**CloudCalc Structural Analysis in the Cloud**
CloudCalc structural engineering analysis software runs in the cloud, freeing the engineer from the confines of PC-installed software. Members of a distributed project team can easily share models. Working over the cloud, all team members always have access to the same data and the same version of the engineering software. The software is accessible via computer, tablet and smartphone, allowing engineers to make better informed decisions at the job site, since potential modifications can be analyzed right on the spot. By offering the Software as a Service (SaaS), licenses can be added nearly instantaneously to easily match the cyclic workload of a typical engineering firm, and users are not restricted by perpetual licenses and enforced maintenance payments.

For more information, visit [www.cloudcalc.com](http://www.cloudcalc.com) or call 713.623.1263.
What Wires?
A number of applications at NASCC this year featured mobile or cloud-based capabilities. Here’s a sampling:

Steel Projects PLM and Steel Central

Steel Projects PLM: This tablet-based production module contains all the information any worker on the shop floor needs to perform their duties and record their work. It provides details on each piece, assembly, bundle or nest that is to be worked on—including material lists, 3D views, detail drawings and any other attached documents like as RFIs or change orders. In addition, information about the “route” of the piece through the workshop is provided—which workstation it came from and where it needs to go next. Lastly, a forecasted time for completion of the work at any particular workstation is provided. Employees log into the module and select the job and piece they are working on. They are then presented the information and documents they need, and the system records the time they spend working on it. Input is via a simple barcode reader, touchscreen or keyboard. All the information is immediately available in the office for production managers to review and track progress.

For more information, visit www.steelprojects.com or call 813.343.4458.

Steel Central: Private inventory clouds (PICs) allow any supplier the opportunity to share their inventory with customers and project teams. The information they share is private and secure, with only those granted access able to view the data. The amount of information shared is also completely controlled by the supplier, enabling an effective method of channel management. Those granted access to this private space can view, search, save, and print the results. They can also access the results live via a web stream directly into their MIS, inventory management or BIM application, which provides them instant feedback for any problems ahead regarding availability. Any supplier can buy a private inventory cloud for a one-time setup fee and a monthly subscription.

For more information, visit www.steelcentral.com 813.343.4458.

StruM.I.S Mobile Scan App

This mobile management solution provides easy access to information and data from anywhere, on any type of device to suit your specific needs. Available on iPhone, Android and Windows devices, the app is usable on- and offline, providing you with the ability to update all users in real time. It also offers integrated bar-coding to address full traceability and tracking needs of steel fabricators.

For more information, visit www.strumis.com or call 610.280.9840.

Trimble Tekla Structural Designer, Model Sharing and Trimble Connect

Starting with a true physical model, Tekla Structural Designer automatically establishes the correct analysis wire model from which traditional analysis can be completed—and it also allows the engineer to complete multiple building analyses at the same time an auto-design selecting the most efficient sections is carried out. In addition, it can be integrated with BIM platforms such as Tekla Structures and Autodesk’s Revit Structures.

As well as sharing initial geometry, all amendments made in either system can be easily synchronized and managed with sophisticated class leading integration management tools.

Through Tekla Model Sharing, Tekla users and their partners can collaborate on the same model at the same time in different locations and time zones, and can work online and/or offline and sync only the changes made to a model instead of the entire file. For large companies, that means global partners can work on a project during their working time—and for contractors and subcontractors, it means an increased presence in local and global markets. It requires no additional software.

Trimble Connect is a new way for designers, builders, owners and operators to collaborate, share and view project information regardless of software platform. Exchanging files and project information is simplified by combining file management, viewing, messaging and activities in one simple-to-use tool that is available anytime, anywhere. This cloud-based platform combines models created in any modeling tool into one common coordination view, which incorporates all of the measuring, clash and markup tools needed by the project team.

For more information, visit www.tekla.com or call 877.TEKLA.OK.
Honorable Mentions

D-MAC Industries, Inc.,
Same Day Steel Deck

D-MAC Same Day Steel Deck has added 15 new regional locations since last year’s Steel Conference, for a total of 23 same-day facilities specializing in solving steel deck emergencies by shipping steel deck and accessories and cutting steel to required lengths the very same day. We stock over 1.2 million sq. ft of steel deck at our 23 regional warehouses. D-MAC stocks over 1.2 million sq. ft of steel—all profiles and finishes of composite, form and roof deck in gauges from 16 to 22. Visit our website for a list of our locations.

For more information, visit www.samedaysteeldeck.com or call 888. 731.7368.

Intelligent Engineering Sandwich Plate System

The Sandwich Plate System (SPS) is a structural load bearing panel comprising two metal plates bonded with a polyurethane elastomer core. It replaces reinforced concrete and eliminates the stiffening elements required in conventional steel construction, simplifying the structure and reducing vulnerability to fatigue and corrosion. It is much lighter and thinner than conventional reinforced concrete with equal or better performance in dynamics and acoustics, and can be used in stadiums, buildings, bridge decks, maritime and offshore industries as well as special applications.

For more information, visit www.ie-sps.com or call 613.569.3111.

HGG Profiling Equipment Edge Rounding Line

HGG’s new Edge Rounding Line delivers a smooth and perfectly rounded surface edge to I/H-beams, tees and flat bars to prevent corrosion, while eliminating the labor-intensive costs of grinding. It is available as a standalone machine solution and can also be fully integrated with the HGG Robotic Profile Cutting Line (RPC) for even higher levels of productivity through totally automated cutting and material handling. The line includes a conveyor for in-and-out material feed, aligning rollers to position and guide material and an edge rounding unit to stabilize and round the bottom and then top flanges. It also includes a handling conveyor for out-feed to a revolver, which revolves material so that the top flanges can be been rounded, in turn, once bottom flanges have been rounded.

For more information, visit www.hgg-group.com or call 330.461.6855.
Autodesk Steel Connections for Revit
Autodesk Steel Connections for Revit extends the capabilities of Autodesk Revit software for structural designs and detailing. It provides access to a variety of parametric steel connections in Revit, enabling connections to be modeled with a higher level of detail. The application also includes a built-in steel connection design engine based on U.S. and European codes. This functionality helps to bridge the gap between design and fabrication as both members and connections can be synchronized between Revit and Autodesk Advance Steel for detailing.
For more information, visit www.autodesk.com or call 855.301.9562.

Exciting Equipment
On the heavy equipment side, one innovation came in the form of a compact, multipurpose CNC machine while the other isn’t so much about the cutting and drilling work itself, but rather how that work can be performed more efficiently.

Peddinghaus Peddi XDM-630 High-Speed Drill/Saw
The two-in-one Peddi XDM-630 combines a true multi-spindle CNC drill line and a structural band saw into one productive yet space-saving CNC solution. Achieve complete carbide drilling, double-miter sawing, four-axis scribing, tapping, countersinking and milling (slot and cope) with no stop in production.

Three drill spindles can operate independently or simultaneously catering to individual processing needs while three five-station tool changers eliminate the need to manually change tooling. The machine is capable of milling out copes, tapping and countersinking on both the web and the flanges for maximum efficiency. The band saw carriage transfers the saw to the profile following drilling processes, with no need for manual positioning and no loss in measurement occur as material passes through the drill line to the saw. The entire profile can be processed with final remnants as small as 13 in.
For more information, visit www.peddinghaus.com or call 815.937.3800.

Ficep Corporation
Intelligent Steel Fabrication
Intelligent Steel Fabrication, developed by Ficep, incorporates a level of automation and software integration that was not available previously to the steel fabrication industry. It can achieve the actual extraction of a single XML file from the 3D model for one job rather than a separate DSTV file for each part in the contract. Once the XML file is transferred into the software, the fabricator can simulate the actual fabrication of the job to determine the fabrication time required for the job and the most productive sequence of the production flow to maximize the fabrication system’s productivity. After the most productive sequence is determined, the job is released to production, where the Ficep system’s automation starts to run the complete material handling system and work centers to their maximum efficiency. This is without direct operator involvement of material handling operations, CNC program selection and the automated CNC work centers, as an attendant just supervises the fabrication processes.
For more information, visit www.ficepcorp.com or call 410.588.5800.

Simpson Strong-Tie
Strong-Drive Screws
The new Simpson Strong-Tie Strong-Drive XM Medium-Head Metal screw (in conjunction with the new Simpson Strong-Tie Quik Drive PROSDX150 Steel-Decking auto-feed screw driving system) is specially engineered for interlocking steel deck applications. It features a ½-in. washer head and is designed for narrow flutes commonly found on interlocking decks. The screw can be hand driven or driven with the Quik Drive auto-feed PROSDX150 system, which is designed for specially collated screw strips. The new Strong-Drive XL Large-Head Metal screw (in conjunction with the new Quik Drive BSD200 Structural Decking auto-feed screw driving system) is engineered as a 1-for-1 screw replacement option for pins in steel decking, and is an ideal choice when high shear or uplift resistance is required. The BSD200 provides hands-free screw advancement, eliminating the need to handle individual screws. Unlike welding and powder actuated tools, no special inspections or certifications are necessary.
For more information, visit www.strongtie.com or call 630.613.5100.
Seismic Solutions
Advanced seismic-related offers were also on tap at the show. Here are a few select seismic solutions:

Lindapter USA Hollo-Bolt
ICC-ES report ESR-3330 now verifies that Hollo-Bolt, Lindapter’s expansion bolt for structural steel, can be used in seismic design categories A through F for resisting wind loads and seismic loads. In addition, the Hollo-Bolt provides the highest resistance to tensile loading in accordance with AC437 while ensuring compliance with the 2012 international building code (IBC). The ICC-ES report further defines the connection: “Hollo-Bolt Fasteners are designed for connecting structural steel to hollow structural section (HSS) steel members and other structural steel elements where access is difficult or restricted to one side only.” Unlike alternative connection methods such as welding, a Hollo-Bolt is conveniently installed by simply inserting the fastener into a pre-drilled hole and tightening with a torque wrench, which ultimately saves the contractor time and money.

For more information, visit www.lindapter.com/american.

SidePlate Systems Bolted SMF
SidePlate’s new bolted SMF (special moment frame) requires no field welding at all, making it significantly faster and easier to erect steel buildings in seismic areas. (A low-seismic version of the SidePlate bolted connection has been successful over the past several years, with contractors and erectors commenting that they’re saving days to weeks of field time on projects.) Multiple full-scale tests were recently performed on the connection at the University of California San Diego, proving that it far exceeds the AISC 341 requirements for special moment frames, and, in fact, has ultimate capacities of 7% to 9% rotation versus the required 4%.

For more information, visit www.sideplate.com or call 949.238.8900.

RISA Technologies RISACoInnected
In addition to the recent addition of seismic moment connections and flush end plate connections, RISACoInnected now also offers the design of seismic braced frame connections. Take the confusion and complexity out of designing a gusset plate for a special concentric braced frame with transparent calculations based on the uniform force method that are perfectly formatted for calc packages. Expanded options for work point location and new shape types such as tube columns and wide-flange braces are also included, and the software offers tight integration with frame analysis (RISA-3D and RISAFloor) and with detailing/BIM packages such as Tekla Structures.

For more information, visit www.risa.com or call 949.951.5815.