

HOT 2017 Products

HOT PRODUCTS ARE HERE! These products were all on display at the 2017 NASCC: The Steel Conference in San Antonio this past March and represent the wide range of machinery, technology, tools and other products that service the structural steel industry. All exhibitors were invited to submit entries, and products were selected by AISC staff based on manufacturers' descriptions and claims; no product testing or evaluations were performed. This list does not constitute a product endorsement by *Modern Steel Construction* or AISC.



▲ Senior editor Geoff Weisenberger takes a virtual journey along a beam fabrication line at Ficep's booth.

HOT!



Ficep Endeavour

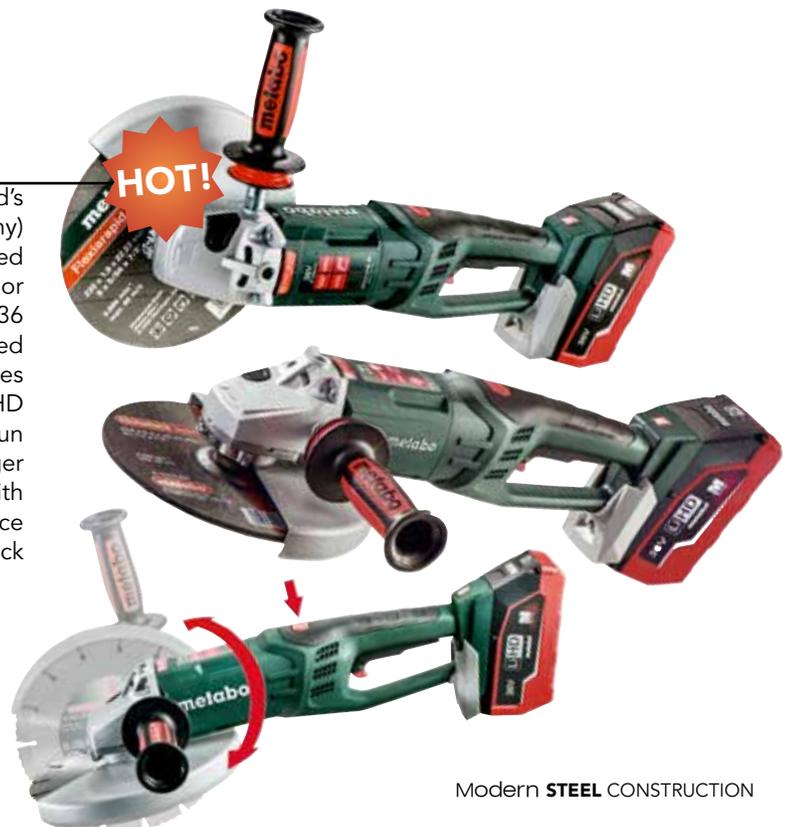
The Endeavour 1203DDB features three independent X-axis drill spindles plus a band saw. Each spindle has a separate 10-in. sub-axis in the X-direction and can operate independently within this window, meaning that the beam doesn't have to move, and each spindle can be positioned and operate in a different X-axis position—e.g., simultaneously drilling hole sets on different axes. In addition, one spindle can drilling while another is carrying out a different operation such as layout marking.

For more information, visit www.ficepcorp.com or call 410.588-5800.

Metabo Corporation 36V Cordless 9-in. Angle Grinder

Based on Metabo's LiHD Battery technology, the world's first 9-in. cordless angle grinder (according to the company) produces the equivalent power of a 2,400W, 15A corded angle grinder, making it suitable for heavy-duty grinding or cutting in locations where power is unavailable. The WPB 36 LTx BL 230 is comparable in size and weight to its corded cousins and incorporates a swivel handle that facilitates ergonomically correct grinding and cutting positions. LiHD batteries generate up to 67% more power and 87% more run time than standard lithium-ion batteries, thanks to a larger cell that offers extremely low internal resistance along with battery pack construction that eliminates most resistance between the cells and the tool. Simply put, the battery pack stays cooler and lasts longer.

For more information, visit www.metabo.com or call 800.638.2264.



HOT Products

ESAB WeldCloud

WeldCloud is an online management system that connects welding power supplies to a software platform that manages data to be analyzed for maximum productivity. Incorporating real-time monitoring of the welding power source via mobile and desktop devices, shop personnel can now save an extra trip to the power source when troubleshooting because they know the issue in advance. The platform can track back to welds that have already been created and provide details about how and when they were created. The platform can also “push” new welding procedure specifications (WPS) to equipment and send equipment performance data back to the cloud.

For more information, visit www.esabna.com or call 800.ESAB.123.



JacketPlate jFrame

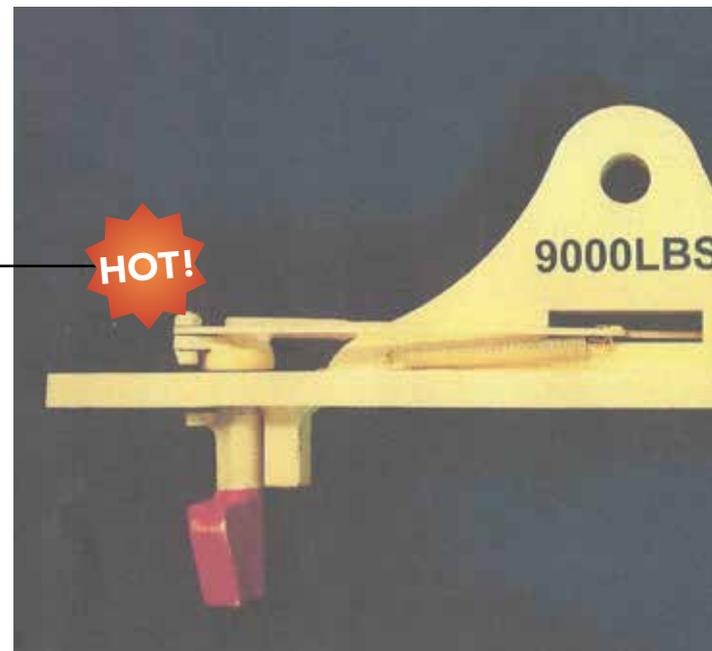
Using 3D connection plates in a simple and consistent manner, the new JacketPlate system for steel moment frames is suitable for all possible connection configurations that are made with steel wide-flange shapes. With a unique load transfer path around the envelope of a joint, the technology removes interior constraints and relieves stress concentrations, dramatically improving overall connection ductility. Since all components and parts can be prefabricated, it can be bolted together at the project site without field welding. Technically, the connection is formed by combining structural channels in a very creative way and then sandwiching the steel shapes between the channels using structural bolts, and it can work for wide-flange shapes of any depth.

For more information, visit www.jacketplate.com or call 858.208.3087.

Freedom Tools

The E-Z BEAM RELEASE was developed to lift and release beams from cranes quickly and safely. The tool is set into two offset 1-in. by 2-in. pre-located slots at the beam's center of gravity, incorporated into the beam during fabrication. Once the tool is set in place, the locking handle is closed and tension is applied. At that point, the tool cannot come open. From there, a ground laborer can walk the rope connected to the locking arm to the end of the beam and lay it over the top; the crane operator can lift the beam and set it in place; the riggers receiving the beam will secure the beam; and the crane operator will release tension, popping up the locking mechanism and releasing the lock. No more twisted wire ropes or cut nylon straps! In addition, the beam will hang level and straight, making it easier for laborers to handle when receiving it.

For more information, visit www.freedomtoolsllc.net or call 480.250.5266.



Honorable Mentions

EHS Momentum MyMomentum

MyMomentum is a cloud-based mobile application that gives management a new level of visibility into the effectiveness of their safety programs and drives employee accountability throughout the shop. The tool tracks maintenance items, injuries, inspections, training, compliance deadlines, behavior-based observations and OSHA log information. It has an integrated assignment and alert system that keeps everyone up to speed on what needs to get done. The tool will save your team significant time and allow you to see trends, incidents and progress like never before, allowing you schedule routine inspections, track open issues, assign responsibility and make sure every issue gets addressed. Any issue can be flagged right on the shop floor and can be tracked to completion. The tool is also a great way to track positive behavior and recognize the efforts of your team.

For more information, visit www.ehsmomentum.com or call 469.999.2500.



QuickFrames

QuickFrames are the only patented, bolt-on, adjustable structural roof-opening frames for commercial buildings. Traditionally, roof frames have been welded in place and dependent upon knowing exact mechanical rooftop equipment specifications and locations far in advance. When equipment specifications and locations inevitably change, there are often delays, excessive costs and frustration. QuickFrames don't require welding and are pre-engineered for a wide range of projects (with site-specific engineering included in the cost of the frames when it's needed). The frames are available in several strength levels to maximize load-carrying ability while minimizing cost. Designed for new construction and tenant improvement projects, QuickFrames can easily be relocated in the field when needed and can be installed from under the deck. Each frame is shipped as a complete kit. The company recently debuted a new preassembly delivery option in which the main rails are assembled and the hangers attached prior to shipment. If the frames use joist hangers, the tap bolts are also added during the preassembly process. The preassembly option reduces installation times even more dramatically, with some customers saying it's even helped them install QuickFrames in less than 15 minutes per frame.

For more information, visit www.quickframes.us or call 480.464.1500.



Honorable Mentions



Hougen Manufacturing HMD130

The new HMD130 Ultra Low Profile Portable Magnetic Drill is a small compact unit for making holes in confined spaces and for use in general steel fabrication. With a height just under 7 in., the HMD130 is small enough to fit in places even handheld electric drills

cannot go. Lightweight and easy to carry at only 23.8 lb yet powerful enough to drill up to 1³/₈-in.-diameter holes through 1-in.-thick material, it includes a pilot light and uses Hougen's RotaLoc Plus Annular cutters, which require no tools to change sizes. Made in the U.S.A., the drill is available in 120V or 230V units.

For more information, visit www.hougen.com or call 800.426.7818.

Hot Software

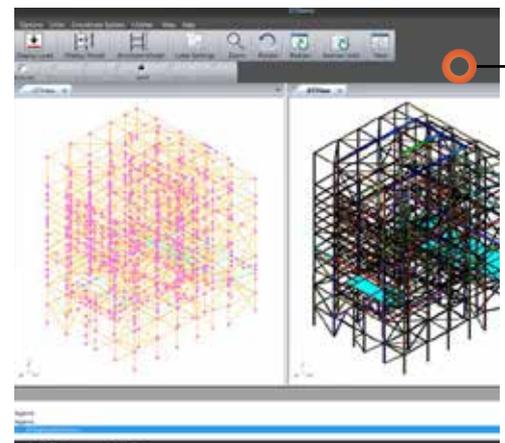
Several software vendors at NASCC showcased new versions of established software packages in the perpetual quest to make design, analysis and workflow more efficient, intuitive and accurate.

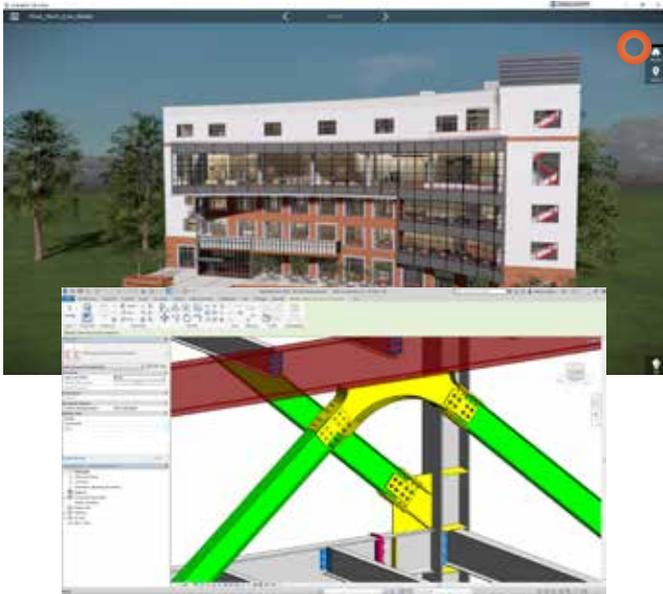


RISA Technologies RISA-Revit Link

New to the RISA-Revit Link is the ability to export steel connections from Revit to RISACONNECTION for engineering calculations. Simply create connection elements in your Revit model, then use the RISA-Revit Link to export them to RISACONNECTION, where all limit states for the AISC or CSA codes are checked. Revise the connections as necessary in RISACONNECTION and then import the changes back into your Revit model. Convenient pass/fail color-coding in Revit makes it easy to see how the connections performed.

For more information, visit www.risa.com or call 800.332.RISA.





Autodesk Revit Live

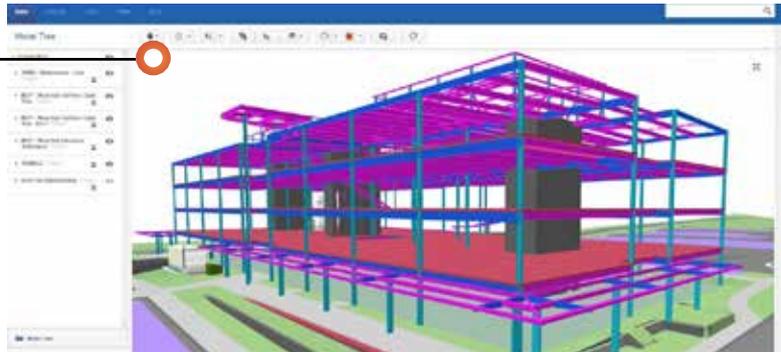
With Autodesk Revit Live, structural engineers can leverage their Revit models to generate interactive design visualizations, placing their structural members (and element properties) in realistic architectural context. With one click, they can turn their 3D models into immersive visualizations, an experience where they can walk around their design and understand how the design with look, feel and function before construction. With enhanced libraries within Steel Connections for Revit 2018, engineers can use Revit Live to better visualize, engineer and coordinate their complex steel designs. This improves accuracy and quality when sharing Revit models downstream with detailers and fabricators. A Revit Live visualization maintains all of the BIM data from Revit/Revit LT, so a user will see all of their material and be able to see what their design will look like throughout the day when the sun rises and sets, based on geolocation.

For more information, visit www.autodesk.com or call 844.262.9170.

Trimble Tekla Structures

Tekla Structures helps manage the detailing, fabrication and erection of steel structures. The newest release now includes bent plate functionality, allowing users to create shapes in Tekla Structures that otherwise were extremely difficult or not possible to include. You can create anything from simple bent gussets to folded profiles, spiral stringer plates, transitional duct sections, complex folded panels and more. The ability to create multiple and nonparallel bends and "box" unfolding is also now supported. All shapes can be properly unfolded for accurate fabrication drawings, and all fabrication export files (DSTV/DXF) can be generated for these shapes.

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



FabSuite Remote Link

Gain real-time access to your FabSuite database from the shop floor with Remote Link. This browser-based interface connects workers to vital information via any internet ready device, including tablets and smartphones. Remote Link allows users to view shop drawings, receive material, consume inventory, update production status and load trucks. New to the product is the ability to update time cards and update records in batch updates rather than line by line.

For more information, visit www.fabsuite.com or call 757.645.0842.

Intergraph GT STRUDL

The 2017 version of GT STRUDL structural analysis and design software features numerous enhancements including the Canadian steel design code, earthquake and wind load generators, improved editing and selection, a brand-new user interface, results spreadsheets and an independent report generator.

For more information, visit www.hexagonppm.com or call 281.890.4566.



Hot Robots

Robotic technology has been making steady inroads into structural steel fabrication shops. Here are a handful of robotic solutions that were present at this year's show.

AGT BeamMaster Weld

BeamMaster Weld is a robotic welding line specially engineered to answer all the welding needs of structural steel fabricators. The system features a small footprint, complete robotic automation and integration with dedicated software. The entire welding process is automated from CAD to production and handles different weld types, which are defined by the 3D model or generated by CORTEX | Structural. It accepts wide-flange shapes, HSS and even tapered beams. Compatible accessories include angles, stiffeners, base plates, end plates and other standard parts.

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



Kranendonk Robotic Beam Constructor

The Kranendonk Robotic Beam Constructor eliminates the need for marking stiffener positions and manual tack welding. Using smart sensors and production software, robots can deal with continuously changing designs without the programming overload. The software directly generates robot welding programs based on a 3D CAD model. Beam manipulators position and turn the beams without any human effort, saving you valuable time. Operation is easy, importing information from your 3D detailing software. On the shop floor, your operator can do other tasks while the system is fabricating your beam.

For more information, visit www.kranendonk.com or call 31.344.623944.



Burnco – Prodevco Robotic Solutions

PCR42 Advanced Robotic Plasma Steel Cutting Prodevco offers the PCR42 advanced robotic plasma steel cutting system with plasma cutting of standard structural steel profiles and round shapes from 4 in. to 26 in. It cuts copes, notches, holes and weld preps; splits beams; and scribes and marks on all four faces of H-beams, channels, angles, HSS and plates using automated robotic technology. The all-in-one system reduces fabrication time, manpower and materials to meet everyone's goal: lower manufacturing costs.

For more information, visit www.prodevcoind.com or call 905.761.6155.

Inovatech Engineering SteelPRO 600

The SteelPRO 600 is a smaller robotic beam line that can process structural profiles of all sizes and shapes. No matter the part size or coping, mitering or beveling requirement, it offers continuous production with a fast, precise cut. Despite its modest size, this 75% smaller robotic beam line boasts the same 3D capabilities as the SteelPRO 900 and can process wide-flange beams, H-beams, HSS, angle, channel, flat bar or bulb flats. In addition, it is the first beam line to incorporate Hypertherm's XPR300 plasma-cutting system.

For more information, visit www.inovatechengineering.com or call 877.453.0517.





PythonX, a Lincoln Electric Company

The PythonX Structural Fabrication System is an all-in-one robotic plasma system for structural steel fabrication. The system takes detailed drawing files and automatically processes beams, channels, angles, square and rectangular tube and plate, all on one machine. The PythonX can produce AISC-permitted bolt holes, copes, slots, cut-outs, cut-to-length, miter cut, T-beams and scribe part/layout marks all in one place, eliminating countless hours of material handling in between operations.

For more information, visit www.pythonx.com or call 905.689.7771.