

# 2008 HOT Products

**MACHINERY, SOFTWARE, TOOLS, AND SUPPLIES ARE** the steel industry's most important accessories—and innovation among these products can mean faster, more cost-effective steel design and construction. This year's **Hot Products** are just a sample of some of the creative solutions recently introduced for designers, detailers, fabricators, and erectors. Some offer advanced technology, while others provide simple and practical applications in response to common problems. But all stand out as novel approaches to on-the-job difficulties.

Hot Products were selected by *MSC* staff from products offered by exhibitors at **NASCC: The Steel Conference** in Nashville in April. Their selection was based on descriptions and claims by the manufacturers; no product testing or evaluation was performed. This list does not constitute a product endorsement by *Modern Steel Construction* or by AISC.

## Seismic ShearLoc System

This new steel deck side-seam attachment system combines Wheeling Corrugating's High-Strength B Deck with the Gator, a one-step, crimp connection tool.

The Gator tool's goal is to achieve high shear values at less cost than other systems—and also be the easiest to use. Just roll along on the wheels and touch the button, and the Gator does all the work. It doesn't require human punching power; its pneumatic operation produces consistent clinch connections all day long. According to Wheeling, the Gator can do its job 10 times faster than an experienced welder making top seam welds.

The Gator's hardened steel teeth can power through even our toughest 16-gauge High-Strength B Deck, resulting in diaphragm shear values that meet the most stringent seismic design specifications. The Seismic ShearLoc System was tested in accordance with the International Code Council to meet seismic design specifications, although it can be used to assemble Wheeling roof and floor deck anywhere in the United States—not just seismic zones.

**Contact: Wheeling Corrugating, 877.333.0900**  
[www.wheelingcorrugating.com](http://www.wheelingcorrugating.com)



## TN Series Wrench

The "Turn of Nut" installation tool is said to be the only structural bolting tool that controls the angle of rotation during installation. The rotation can be set for any angle between 90° and 240°, in 1° increments. By pressing the trigger switch, the wrench turns the nut the pre-set rotation amount, then stops, thus eliminating torque-related problems. Installation is not affected by changes in torque; the tool turns the nut to the same, pre-set angle of rotation, no matter what the torque requirement may be. In addition, this lightweight, electric tool eliminates the need for a compressor.

**Contact: G.W.Y., Inc.,**  
**888.838.6500**  
[www.gwyinc.com](http://www.gwyinc.com)



## Rigging Points

The rigging clamp has evolved from a 5-Kip tension-mounted product to an up-to-67-Kip friction- and tension-mounted workhorse that both swivels and rotates for connections in any orientation. The rigging plate can be installed without drilling or welding, leaving primary steel unharmed and protective coating intact. It provides a needed rigging point connected to any structural steel, and when the need for the rigging is done, it can be taken down and reused for another application.

The blind-hole rigging point can be installed in hollow structural sections or any application where the back side of the connection isn't reachable. It is available in stock as a 5-Kip load product and can be specially designed for up to 30 Kip. Designed for tension and shear load applications, the blind-hole rigging point connects mechanically, requiring no welding or tapping.

**Contact: Lindapter North America, Inc., 888.724.2323**  
[www.lindapterna.com](http://www.lindapterna.com)



### ProCutter 600

The ProCutter 600 incorporates four CNC-controlled axis-to-position pipe sections up to 24 in. in diameter in conjunction with either an oxy-fuel or plasma head, to accomplish the most challenging of beveled cuts on pipe for all required connections. The new technology was driven by the increasing popularity of exposed structural steel incorporating hollow structural sections.

The tool eliminates the extensive manual layout that is required when generating pipe connections in complex structural steel projects, and claims reductions in manual labor required for the layout and production of such pipe connections of up to 90%.

Programming the tool is simple, as the comprehensive software permits the operator to quickly enter the basic parameters of a predefined macro into the control. Programs can also be automatically generated, as the ProCutter 600 can import CAD files directly to generate the CNC program without any manual programming.

**Contact: Ficep Corporation,  
410.588.5800**

[www.ficepcorp.com](http://www.ficepcorp.com)

### W44 Beams

Nucor-Yamato Steel Company this year introduced its 44-in.-deep wide-flange structural shapes, becoming the first mill in North America to produce sections at such a depth. The beams are ideal for the growing number of short-span bridges that require repair or replacement, and can be used as primary bridge beams to carry the bridge deck and roadway surface.

Until now, the deepest domestically produced beams came in 40-in. sections. According to one provider of pre-engineered modular steel bridges, the new W44 beams will eliminate at least 25% of the beam weight on a 120-ft bridge. A typical application will require only two W44 beams per module, rather than three W40 beams. In addition, the W44 beams increase the range for HS-20-rated bridges to 150 ft in length, a 25% improvement from the previous limit of 120 ft. This reduces installation costs and requires only simple support abutments.

**Contact: Nucor-Yamato Steel  
Company, 800.289.6977**

[www.nucoryamato.com](http://www.nucoryamato.com)



## **TurnAnut Fastener**

This new tensioning device links a TurnaSure DTI (Direct Tension Indicator) to an ASTM A563 DH nut. With a TurnAnut fastener, the nut, hardened washer, and DTI—previously being three pieces—become one piece. The new design is expected to produce significant benefits in terms of transport, handling, and ease and speed of field assembly. With only one piece to handle instead of three, assembly errors can be decreased and the potential of using fewer operators to tighten bolts can be increased.

**Contact: TurnaSure LLC,  
800.525.7193  
[www.turnasure.com](http://www.turnasure.com)**



## **Universal Pin Connectors**

The fabrication of “true-pin” connections to round hollow structural sections (HSS) is difficult, particularly when aesthetics are a concern. The use of standardized Cast ConneX Universal Pin Connectors (UPC) vastly simplifies architecturally exposed connection fabrication and significantly improves the aesthetic value of the connection.

UPCs have been carefully sculpted to provide smooth transitional geometry that is otherwise unachievable using standard fabrication practices, and are thus perfectly suited for architecturally exposed structural steel applications. Using standard welding techniques and minimal grinding, you can employ UPCs to provide seamless connection to round HSS members produced to any structural steel grade, thereby further improving the visual appeal of the overall structural element.

*For more on Cast ConneX UPCs, see “Convenient Connections,” July 2008, p. 61.*

**Contact: Cast ConneX Corporation,  
416.978.3521  
[www.castconnex.com](http://www.castconnex.com)**

