2010 HOT PRODUCTS

INTRIGUING NEW PRODUCTS emerge each year at NASCC: The Steel Conference, and 2010 was no exception. Here are several new items from this year's gathering in Orlando that were recommended to—or caught the eyes of—*Modern Steel Construction* editors.

These Hot Products were selected by MSC staff 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.

Joist Lifting Rig

Invented by an experienced crane operator, the E-Z Joist Release from Freedom Tools, LLC simplifies moving and setting open-web steel joists while also increasing job site safety. Operation is a snap: The ground man slips the tool into position between the top chords, engages the lock lever and walks the release cord to the end of the joist. Once it is locked in place and the slack is brought tight, the joist cannot separate from the tool. When the joist is set and the tension slackened, a simple pull on the release cord releases the tool from the joist. No center lift or worker is needed, saving both time and money and keeping workers out of harm's way. The tool stays fixed to the crane, ready for a quick fit into the next joist. The E-Z Joist Release is available in three sizes, to accommodate LS/LH, K and Girder joists. The tools can be used in multiple configurations, and are rated from 1,000 lb up to 8,000 lb lifting capacity.

Contact: Freedom Tools at 480.250.5266 or visit www.freedomtoolsllc.com.

Component Management System

StrucSoft Solutions' Component Management Software (CMS) is a stand-alone 2D/3D graphical DSTV file creator, viewer, editor, and manager. It enables the production and manipulation of DSTV files, which frequently are used to communicate machining instructions to CNC equipment. This program allows users to edit existing DSTV files in order to either fix errors induced by detailing software or to make their DSTV output more compatible with a specific CNC machine, making CMS attractive to fabricators who have 3D detailing software such as Tekla, StruCad, ProSteel etc and who are having machine compatibility issues. It also facilitates creation of DSTV-NC on the fly, for small jobs and isolated steel components; generates DSTV files from Inventor or Solidworks; and allows users to batch process and adjust DSTV files created by any steel detailing software to suit the requirements of a specific CNC machine.

Contact: StrucSoft Solutions at 514.731.0008 www.strucsoftsolutions.com
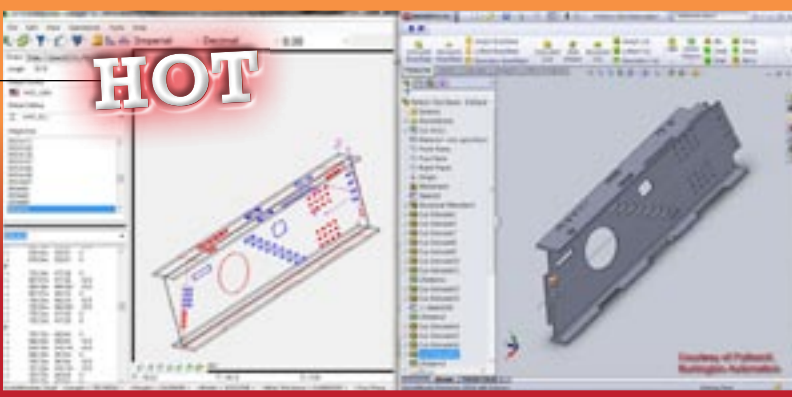
Robust Tag for Galvanizing

InfoSight Corporation has developed an identification tag for fabricated steel that meets the rigors of the hot-dip galvanizing. The KettleTag Plus permits real-time printing of custom information—including text, logos, and high quality bar codes—on metal tags that remain readable after galvanizing through to the end-customer's site. The tags resist typical caustic solutions and acid baths for four hours or longer. The tags also resist flux solutions, zinc baths up to 1,000 °F and chromate dipping. Standard tags are 3 in. square with a hole punched near the top for easy attachment with wire fasteners to fabricated steel parts. Information is printed on the tags using the company's standard line of industrially hardened CO_2 laser printers, which render black print across the light gray surface that is readable by any standard bar code reader.

Contact: InfoSight at 740.642.3600 or visit www.infosight.com.
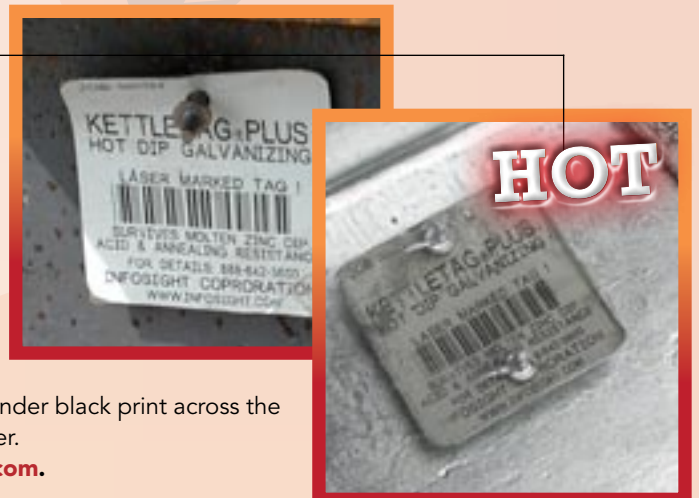
Steel Joists in BIM

Steel joist digital design software version 1.0 from New Millennium enables structural engineers and detailers to design digital steel joist plans incorporating the company's standard line of joists when using Tekla structural steel modeling software. Future editions of the free, downloadable software add-on will include an expanding range of special profile joists and metal decking. It supports three phases of project flow for joist design: placing a "generic" joist object in a BIM, which is then used in the detailing and design process (with export and import capabilities) including as-built joist configurations, end conditions and member sizes, and finally documenting the final fabricated joist component in the construction model.

Contact: **New Millennium at 260.969.3500 or visit www.newmill.com/bim.**

Robotic Welding Solution

The SmartTCP robotic welding solution automates the gantry system's robot programming and weld production, making it possible to optimize the fabrication of low-volume parts. SmartTCP can weld any assembly that fits within its predefined three dimensional working envelope, first time seen, in a short time. Its software analyzes target geometry and teaches the system to look at the task through the eyes of an expert welder, creating accurate and reliable robot programming up to 100 times faster than either on-line or off-line programming techniques. Import 3D CAD approximation data of the welding assembly model into the system and it automatically creates a program file containing all the potential welding geometries and implements a predefined master technology of welding paths, via paths, robot configurations, and welding technologies.

Contact: **SmartTCP at 248.994.1041 or visit www.smarttcp.com.**

Self-Learning Production Cell

AGT offers a self-learning production cell for structural steel fabrication that assembles and welds accessories on a beam with no human intervention. The system uses the information stored in a CIS/2 file exported from CAD package, scans the entire beam and all accessories, places the accessories on the beam assembly and welds them. The machine also provides direct conversion from CIS/2 to robot program and autonomous assembly recognition, with no jig or offline programming required. It supports simple pass welding of tacked angles, end plates, base plates, simple brackets and simple stiffeners, varying weld length according to CAD file. Beam assemblies can be up to 60 ft long, and the cell supports welding up to five beams at a time in working area.

Contact: **AGT at 819.693.9682**
www.agtech.qc.ca
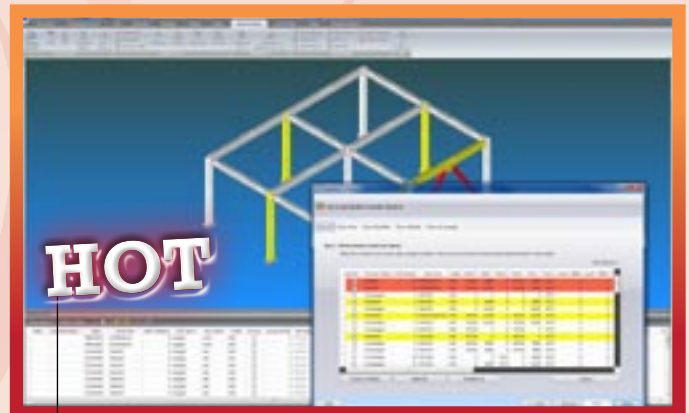
Integrated Software Extends BIM

AceCad Software's evolution series is a knowledge-based implementation of Fabrication Information Modeling (FIM) consisting of new and redeveloped integrated software systems for the steel engineering and fabrication industries. This new package is based on a Microsoft.NET framework, uses a SQL database, and is compatible with both 32-bit and 64-bit operating systems. The product includes the new StruWalker, a collaborative 3D project review tool, and StruConnect, a load calculation program based on the latest AISC code, as well as redeveloped versions of StruCad, for 3D modeling, and StruM.I.S.

Contact: **AceCad Software at 610.280.9840**
www.acecadsoftware.com