

ENGINEERING

Steel Shapes—New, Old and In Between

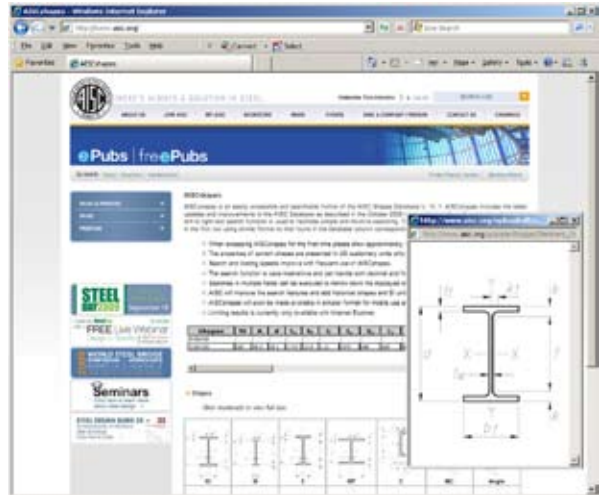
AISC now offers AISCshapes—an easily searchable online interface that reflects the data in the updated Shapes Database (V13.1.1) and is accessible to members only. The page allows easy searching using the shape name or any other dimensional property. The intuitive online interface provides an easy tool to narrow down to a small number of shapes based on a search that satisfies a series of dimensional choices. To access the page first login at www.aisc.org, then visit www.aisc.org/AISCshapes.

The AISC Shapes Database has been updated to V13.1.1 and several improvements have been made, including the addition of detailing dimensions for all shapes and S_x values for single angles. The database provides electronic access to dimensions and properties of W-, M-, S-, and HP-shapes, channels (C- and MC-shapes), angles (L- and 2L-shapes), tees (WT-, ST-, and MT-shapes), hollow structural

sections (HSS) and pipe (P, PX and PXX), as given in the AISC *Steel Construction Manual*, 13th Edition. U.S. customary and metric units are included.

The AISC Shapes Database V13.1H (Historic) provides electronic access to dimensions and properties of shapes published in the AISC *Manual* since the 5th Edition, and shapes from before that era as originally published in the book *Iron and Steel Beams 1873-1952* (the predecessor to AISC Design Guide 15, *AISC Rehabilitation and Retrofit Guide*). Thus, this database is the compilation of all of the structural steel shape dimensions and properties recorded by AISC from 1873 to 2001.

For members, these two files are available for free downloading on the AISC website at www.aisc.org. Non-members can download the files through the online bookstore for a \$20 fee.



Record Number Attends Pennsylvania Powers Union Construction

In the single largest meeting of TAUC's history, more than 250 union contractors, labor representatives and industrial business owners from around the country convened at Pennsylvania Powers Union Construction on September 9.

Despite limited travel budgets, industry leaders came from around the country to address critical safety and labor relations issues in industrial maintenance and construction.

The meeting included representatives from Pennsylvania, New Jersey, Maryland, Virginia, West Virginia, Ohio, Massachusetts, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Georgia, Alabama, Missouri, Oklahoma and California, according to TAUC CEO Stephen R. Lindauer.

"I believe this packed room is a testament to the fact that TAUC has very quickly established itself as an industry-leading association that is here to create lasting, positive change," TAUC president Robert W. Santillo said. "When other groups and associations are seeing a decline in attendance, interest, and support...The Association of Union Constructors is seeing a dramatic increase."

In his opening remarks, Santillo told the crowd that union construction's classic business models are no longer adequate.

"Our industry is now demanding bold, innovative approaches; approaches that may not feel completely comfortable at first," Santillo said. "However, if we can rise to this challenge and demonstrate the flexibility that these times require, union construction will see bright days again."

Pennsylvania Powers Union Construction was generously sponsored by: Aramark Uniform Services; Boilermakers Local 154; Blue Mountain Equipment Rental Corporation; the Ironworker Employers Association of Western Pennsylvania; Manning & Napier; the Mechanical Contractors Association of Western Pennsylvania; Mobile Medical Corporation; and, the National Maintenance Agreements Policy Committee, Inc.

TAUC will hold another industry-wide event on December 9, 2009, in Washington. Advance registration is required through www.tauc.org.

RESOURCES

Detailing Guide Now Available

The 3rd edition of *Detailing for Steel Construction* is now available in print. This is an update of the 2nd Edition to be consistent with the 2005 AISC *Specification for Structural Steel Buildings*. Topics included are:

- general fabrication requirements
- contract documents
- common connection details
- basic detailing conventions
- project set-up and control
- erection drawings
- shop drawings
- bills of materials
- detailing quality control and assurance

The new *Detailing for Steel Construction* and a corresponding online Steel Detailing Course are available for purchase at www.aisc.org in the bookstore.

EVENTS

NASSPA's Steel Sheet Piling Symposium

The Symposium will be held at The Westin Crown Center, Kansas City, Mo., October 23, 2009. The North American Steel Sheet Piling Association is presenting this symposium

following the Deep Foundation Institute's Annual Conference. The half-day event will include technical presentations on steel sheet piling design practices and case studies

illustrating steel sheet piling applications. A buffet lunch will also be provided to attendees. More information at www.dfi.org.

People and Firms

• Scholarships Awarded by AISC Member Firms

AISC, in association with members of the structural steel industry, awarded 15 scholarships/fellowships totaling \$46,000 for the 2009–2010 academic year. We would like to thank our industry partners for their continuing generous support of student programs. Congratulations to the very deserving students who have been awarded scholarships and fellowships for the upcoming school year.

• 2009-2010 Scholarship Awards:

AISC/Associated Steel Erectors of Chicago—\$3,000: Hannah Durschlag, Northwestern University

AISC/Southern Association of Steel Fabricators—\$2,500: Laura Schultz, Georgia Institute of Technology

AISC/W&W AFCO Steel—\$5,000: Roger Mock, Georgia Institute of Technology

• 2009-2010 Fellowship Awards:

AISC/Associated Steel Erectors of Chicago—5x\$3,000: Seth Hoffman, University of Illinois, Urbana-Champaign; Rusty Kucher, Illinois Institute of Technology; Andrew Langferman, Purdue University; Brenna Katherine Roether, Bradley University; Kristi Selden, Purdue University

AISC/Fred R. Havens—\$5,000: Christopher Putman, Stanford University

AISC/Klingelhofer—\$2,500: Neal Kwong, University of California, Berkeley

AISC/Rocky Mountain Steel Construction Association—\$3,000: Douglas Midkiff, Colorado School of Mines

AISC/Southern Association of Steel Fabricators—\$2,500: Scott Pabian, University of Kentucky.

AISC/Structural Steel Educational Council—2x\$2,500: David Grilli, California State University, Sacramento; Joanna Huey, Stanford University.

AISC/US Steel—\$2,500: Kelly Young, The Ohio State University.

AWARDS

Kulicki Honored by AISI and AASHTO

The American Iron and Steel Institute's Steel Market Development Institute (SMDI) Steel Bridge Task Force and the American Association of State Highway and Transportation Officials (AASHTO) Technical Committee for Structural Steel Design have named John

M. Kulicki, Ph.D., P.E., as the recipient of the 2009 Richard S. Fountain Award. Kulicki is the chairman and CEO of Modjeski and Masters. The award is named for the founder of the Steel Bridge Task Force.



AISI

John M. Kulicki, P.E. (second from right) accepts the 2009 AISI/AASHTO Richard S. Fountain Award. Presenting the award are Dennis R. Mertz, professor of civil engineering at the University of Delaware (far left); Alex Wilson, manager of customer technical services for ArcelorMittal USA and chairman of AISI's Steel Market Development Institute Steel Bridge Task Force; and Ed Wasserman, director of structures for the Tennessee Department of Transportation and chairman of the AASHTO-T14 Committee (far right).

CORRECTION

The steel fabricator and erector were inadvertently not identified in the August 2009 MSC article about the Jacksonville, Fla., Naval Air Station Hangar (page 46). AISC member PKM Steel Service Inc., Salina, Kan., was the structural steel fabricator for this project and AISC member LPR Construction Co., Loveland, Colo., was the steel erector.

letters

Unregulated Engineering

Matt Thomas (July 2009 MSC, p. 66) brings up a good point about the proper use of software in the engineering profession. The issue, however, is not so much that engineers are blindly relying on computers and software, but that sub sectors of the construction industry are relying on non-licensed technicians and sales people using proprietary software to provide engineering services. It is interesting that he mentions the Hartford Civic Center as a lesson. I would like to say lesson learned, but the L'Ambiance Plaza collapse in Bridgeport, Conn., and a lesser known prefabricated roof truss collapse show that lessons may be getting overlooked. Connecticut and other states as well need to clamp down on people "engineering" without a license. They also need to define more broadly what situations require the involvement of Professional Engineers.

Peter J. Cloudas, P.E.
Stamford, Conn.

More on the Connection Debate

I have been reading with great interest the articles about design connection responsibility. In the eight years that I've been practicing,

no one has been able to give me a clear explanation about this topic.

It's my personal opinion that the code should include only two options—one in which the engineer of record designs all the connections, and one in which the fabricator is responsible for the design, and the engineer of record merely checks them as part of shop drawing review. I see no reason for any gray area in between that makes it even more difficult to explain the available options to a client.

I also want to express my opinion from a design consultant's point of view regarding the letter by Peter Officer in the July 2009 issue of MSC (page 18). I completely agree that without a complete scope of work it is difficult to make an accurate bid, and that the cheapest bid may win if it is not carefully reviewed by all the parties involved, including the design professional of record. However, a similar observation can be made for the design professional. The client will be inclined to go to the one that gives faster results and whose fees are lower. Then the question is: how many extra hours would the design of all the connections on a project take? Including those hours may well make the design consultant less competitive.

The effort to educate clients on this matter has to be shared by design professionals and fabricators alike. In the end, the premium paid to the engineer or the fabricator for connection design should be similar, and the client needs to understand clearly the pros and cons of the two alternatives.

Truly Guzman, P.E.
New York

The Message is More Than Words

I was very disappointed to find a picture of a woman in a bikini, focusing on her breasts, stomach and thighs, as part of an ad campaign for American Galvanizers Association. The current trend in the construction industry is to promote, retain and encourage women in math, science and technology careers. Advertising of this type is inappropriate for a trade magazine. A disregard for a woman's negative reaction is a marginalization of her value to the industry. As a member of AISC, I would appreciate it if you could communicate to AGA that women are numbered among your valued readers and contributors and that they should choose advertising that is positive for women. Your consideration is appreciated.

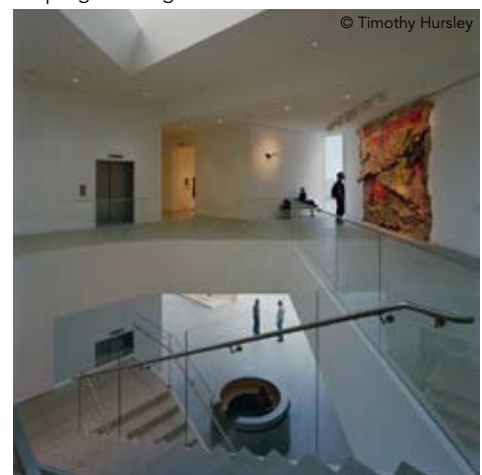
Rachelle Clark

AWARDS

Engineering Creativity & Innovation Recognized

With structural engineering from Walter P Moore, Houston, Nerman Museum of Contemporary Art has won the "New Buildings Under \$30 Million" project category in the 2009 Structural Engineers Association of Kansas & Missouri (SEAKM) Awards Program. The program is sponsored by SEAKM to recognize creative achievement and innovation in structural engineering.

Located on the campus of Johnson County Community College, Overland Park, Kan., Nerman Museum of Contemporary Art is the largest contemporary art museum in the four-state region. The elegant, minimalist building opened to international acclaim for its architecture, art collection and exhibition programming.



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