news

RESOURCES

Online Crane Reference Materials

A new online crane reference library contains dimensions, load charts, and other information for numerous cranes. San Leandro, Calif.-based Bigge Crane and Rigging offers the resource at **www.bigge.com/crane-information**. The company also has created a complementary 384-page PDF guide that includes basic information for most of the equipment in its rental fleet. To get the free download, go to **www.bigge.com/crane-charts/crane-guide.html**. Also on that page, don't miss the links to "How to Read a Crane Chart" and "How to Use Crane Hand Signals."

CONTRACT DOCUMENTS

CSI Joins ConsensusDOCS Coalition

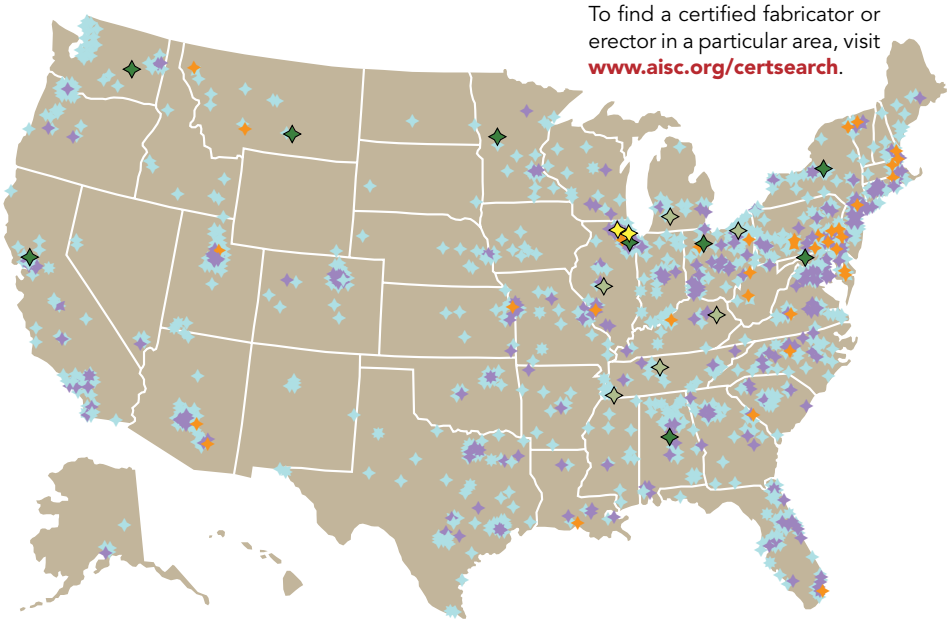
The Construction Specifications Institute has joined the ConsensusDOCS Coalition, whose mission is the creation of fair and balanced construction contracts. CSI joins 27 other leading construction industry associations in supporting the coalition.

A national organization of more than 13,000 volunteers, CSI includes specifiers, architects, engineers, contractors, facility managers, product representatives, manufacturers, owners and others who are experts in the building industry.

ConsensusDOCS offers a catalog of more than 90 contract documents covering all methods of project delivery. More information is available on the web at **www.consensusdocs.org**.

Newly Certified Facilities: August 1–31, 2010

To find a certified fabricator or erector in a particular area, visit **www.aisc.org/certsearch**.



Existing Certified Fabricator Facilities

Existing Certified Erector Facilities

Existing Certified Bridge Component Facilities

Newly Certified Fabricator Facilities

Newly Certified Erector Facilities

Newly Certified Bridge Component Facilities

Newly Certified Fabricator Facilities

Altra Steel, University Park, Ill.
American Steel, Inc., Billings, Mont.
Delta Steel Erectors, Benicia, Calif.
Fab-Weld Steel, Inc., Randolph, Ala.
Ohio Steel Fabrication, LLC, Findlay, Ohio
R & S Steel, LLC, Rome, N.Y.
Specialty Welding, Inc., Moses Lake, Wash.
Talley Metal Products, Inc., Hagerstown, Md.
White Oak Metals, Inc., Dalton, Minn.

Newly Certified Erector Facilities

Harold O'Shea Builders, Springfield, Ill.
River City Erectors, LLC, Rossville, Tenn.
Sentry Steel Service Co., Inc., Hendersonville, Tenn.
Standafer Builders, Inc., West Liberty, Ky.
Steelcon, Inc., Kalamazoo, Mich.
Structural Building Systems, Inc., Hudson, Ohio

Newly Certified Bridge Component Facilities

FGS Fabrication, LLC, Huntley, Ill.
Midwest Fence Corp., Chicago, Ill.

People and Firms

- **Robert H. Luffy**, P.E., who since 1973 has been chief executive officer of American Bridge Company, will retire from the company effective December 31, 2010. Luffy began his career with American Bridge as a field engineer on the New River Gorge Bridge in West Virginia in 1972. Since becoming CEO during a troubled time in the company's history, Luffy has engineered a resurgence of the firm followed by sustained growth and operating success. **Michael Flowers**, P.E., currently chief operating officer of the company, will assume the role of chief executive officer upon Luffy's retirement.

- **Francis "Duffy" Shea** has been appointed president of Alamo Iron Works (AIW), San Antonio, Texas. In this position, he will be responsible for all aspects of AIW's steel and industrial supply business. Shea has more than two decades experience in the industrial marketplace and supply distribution, most recently serving as chief operating officer, vice president and general manager of Designer Building Solutions of Denver. AIW is a recent acquisition of Charlotte, N.C.-based Industrial Distribution Group.
- **Chicago Metal Rolled Products**, which has been owned and operated by the same family for four generations since it began in 1908, recently launched a revamped website at **www.cmrp.com**.
- Cleveland-based architectural engineering and management services company **Middough, Inc.**, is celebrating its 60th anniversary. Founded in 1950 as W. Vance Middough & Associates, one of the firm's first clients was LTV Steel, which today is ArcelorMittal and still a Middough customer. Middough recently opened its 13th office, which is in Houston.
- The Department of Architectural Engineering at Pennsylvania State University recently named **Glenn Bell**, P.E., CEO of Waltham, Mass.-based Simpson Gumpertz & Heger Inc. (SGH), a 2010 Honorary AE Centennial Fellow. The award recognizes of Bell's active participation in the department and contribution to its overall success and growth. Among other activities, Bell has been a member of the department's Industrial Advisory Board for the last 10 years.

OBITUARY

William Milek, Former AISC VP of Engineering and Research

Craftsmanship requires an eye for design, attention to detail and the skill to create. William Milek brought these qualities to models and furniture he built at home and the concepts he developed and implemented in his work at AISC.

Many of the provisions you use from AISC and AWS D1 were crafted by Milek. He also wrote the last significant reorganization of the design chapter of the AWS code as well as AISC and AWS information on lamellar tearing.

Milek had steel in his blood. During his breaks from college, he worked as a detailer at Omaha Steel Works, where his father was the chief engineer. Milek graduated from the University of Nebraska in 1941 and enlisted in the Army, planning to get a year of military service under his belt and return to Omaha and work as an engineer. Stationed in Hawaii on December 7, 1941, he subsequently served in the Pacific Theater throughout the war building runways, hospitals barracks near, and in some cases in, combat zones.

He went back to Omaha after the war, where he did work as an engineer and met John Griffiths of Paxton & Vierling Steel. It was Griffiths who told Milek that AISC was looking for a regional engineer. After a few years in that position, he was asked by Ted Higgins to come work in AISC headquarters in New York.

In New York, he assisted Higgins and became the director of research. When Higgins retired in 1968, Milek was promoted to vice president of engineering and research.

There were many notable accomplishments as Milek led the engineering effort at AISC. Among these were development of a specification for bolted joints and provisions for fatigue-loaded connections, working with John Fisher and others. Milek was the staff engineer as LRFD was being developed by Theodore Galambos, and was instrumental in the implementation of LRFD, which was issued as a new method of designing steel structures a year after he retired.

A feature that made him well known in the structural engineering community was a column he wrote called "One Engineer's Opinion." In those columns, which were cited for years, Milek discussed relevant issues of the time and helped establish a reputation for credibility at the Institute.

After his retirement, Milek continued volunteer work in committees at AISC, AWS and RCSC until the 1990s when his health prevented him from attending meetings. Even then he would review specification drafts and *Engineering Journal* articles, always happy to share opinions and advice. That advice and friendship I will miss. I am sure I am not alone.

—Thomas J. Schlafly

William A. Milek, 92, died September 3, 2010. A resident of Glen Ellyn, Ill., Milek joined AISC in 1955 as a district engineer based in his home town of Omaha, Neb. He ultimately became vice president of engineering and retired from that position shortly after AISC moved to Chicago in 1983. Milek is survived by his children John, Tom, Anne and James; two brothers, Robert and David; two grandchildren and one great-grandson.

CONTEST

Student Bridge Contest 2011 Rules Available

The official rules for the 2011 Student Steel Bridge Contest, sponsored by AISC and ASCE, have been released. They are available as a PDF download at **www.aisc.org/steelbridge**.

As usual, the Problem Statement lays out an interesting and challenging steel bridge project for students to design, fabricate and build. Notable changes in the 2011 specifications include (but are definitely not limited to):

- a longer length
- inclusion of a cantilever section at one end of the bridge
- a change from specific footings to foundation easements
- modified member size requirements

As is customary, entries will be designed and built as 1:10 scale models of the proposed structure.

To learn more, visit **www.aisc.org/steelbridge**. To view photos from the final round of 2010 competition on the *Modern Steel Construction* website, go to **www.modernsteel.com/photos**.

CODES

New Code of Standard Practice Now Available

AISC has released its 2010 *Code of Standard Practice for Structural Steel Buildings and Bridges* (AISC 303-10). The new edition of the *Code* reflects industry advancements and provides engineers, owners, architects, general contractors, and others associated with construction in structural steel, with a useful framework for a common understanding of acceptable standards when contracting for structural steel.

Since publishing the first edition of the *Code* in 1924, AISC has constantly surveyed the structural steel design community and construction industry to determine standard trade practices. Since then, this *Code* has been updated periodically to reflect new and changing technology and industry practices.

Like the 2005 edition, the 2010 edition is not a complete revision of the *Code* but does include important changes and updates. Among the most significant changes in the 2010 *Code* are improvements in how connection design delegation is handled.

"The significant improvement in Section 3.1.2 is the result of collaboration between the AISC Code Committee and the Council of American Structural Engineers (CASE) Guidelines Committee," said Charles J. Carter, AISC vice president and chief structural engineer. "It represents a solution to connection design delegation that the design community and steel construction industry have needed for many decades."

Based on the deliberations of a fair and balanced committee consisting of structural engineers, architects, a code official, a general contractor, fabricators, a steel detailer, erectors, inspectors, and an attorney, the following modifications have been made in the 2010 revision of the *Code*:

- The scope in Section 1.1 has been revised to cover buildings and other structures in a manner that is consistent with how buildings and other structures are treated in AISC 360 (the AISC *Specification for Structural Steel Buildings*). A similar and corresponding revision has been made in Section 1.4.
- The list of documents referenced in Section 1.2 has been editorially updated.
- Section 1.9 has been added to emphasize that not all tolerances are explicitly covered in the *Code*, and that tolerances not covered are not to be assumed as zero.
- Clarification has been added in Section 2 that base plates and bearing plates are considered structural steel if they are attached to the structural frame, but not if they are loose items that do not attach to the structural steel frame.
- Editorial improvements have been made in the Commentary to Section 3.1 to improve upon the list of items that should be provided in the contract documents, as well as to link column differential shortening and anticipated deflections to information that has been added in the Commentary to Section 7.13.
- Explicit requirements have been added in Section 3.1.2 as "option 3" for when connection design work is delegated by the Structural Engineer of Record (SER) to be performed by another engineer. Provisions covering connection design by the SER (option 1) and selection or completion of basic tabular connections by a steel detailer (option 2) also have been revised for consistency with and distinction from option 3. Additionally, the defined term substantiating connection information has been added to the Glossary, and revisions also have been made in Section 4 to correspond with the addition of option 3 in Section 3.1.2.
- Information has been added to the Commentary in Section 4.1 to summarize the importance and benefits of holding a pre-detailing conference to open lines of communication and develop a common understanding about the project.
- Section 4.7 has been added to address requirements for erection drawings.
- Section 6.4.3 has been modified to better address incidental camber in trusses. Information has been added in the Commentary to Section 7.10.1 to better describe the provisions that relate to special erection conditions or other considerations that are required by the design concept, as well as to highlight special considerations in the erection of cantilevered members.
- The intent in Section 7.13.1.2(d) has been clarified in the text as well as with the relocation of supporting Commentary.
- The intent in Section 10.2.5 has been editorially clarified for groove welds in butt joints and outside corner joints.
- The document has been editorially revised for consistency with current terms and other related documents.

The 2010 *Code of Standard Practice* is available as a free download PDF at **www.aisc.org/freepubs**.

EDUCATION

2010-2011 Scholarship and Fellowship Award Winners Announced

AISC, in association with members of the structural steel industry, recently awarded 24 scholarships/fellowships totaling $85,500 for the 2010-2011 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.

AISC Education Foundation – $5,000 ea.

Fred R. Havens Fund:
- Matthew Bandelt, Villanova University
- Deborah Blass, George Washington University

Klingelhofer Fund:
- Michael Weinert, University of Washington
- Aleksandr Yaroshevich, California State University, Sacramento

U.S. Steel Fund:
- Peter Fritz, Santa Clara University
- Steven Fulmer, North Carolina State University

W&W AFCO Steel Fund:
- Roger Mock, Georgia Institute of Technology

AISC Memorial Fund – $2,500 ea.

Daniel Choe, University of California, Berkeley
Amy Kuo, University of Illinois, Urbana-Champaign
Steve Lauer, Purdue University
Andrew Mathis, University of Kentucky

AISC/Associated Steel Erectors – $3,000 ea.

Ross Brazzale, Illinois Institute of Technology
Erica Fisher, Purdue University
Timothy Gregor, University of Illinois, Urbana-Champaign
Amy Kuo, University of Illinois, Urbana-Champaign
Steve Lauer, Purdue University
Michael Zelisko, University of Illinois, Urbana-Champaign

AISC/Great Lakes Fabricators and Erectors Association – $5,000

Karl Krueger, Michigan Technical University

AISC/Southern Association of Steel Fabricators – $2,500 ea.

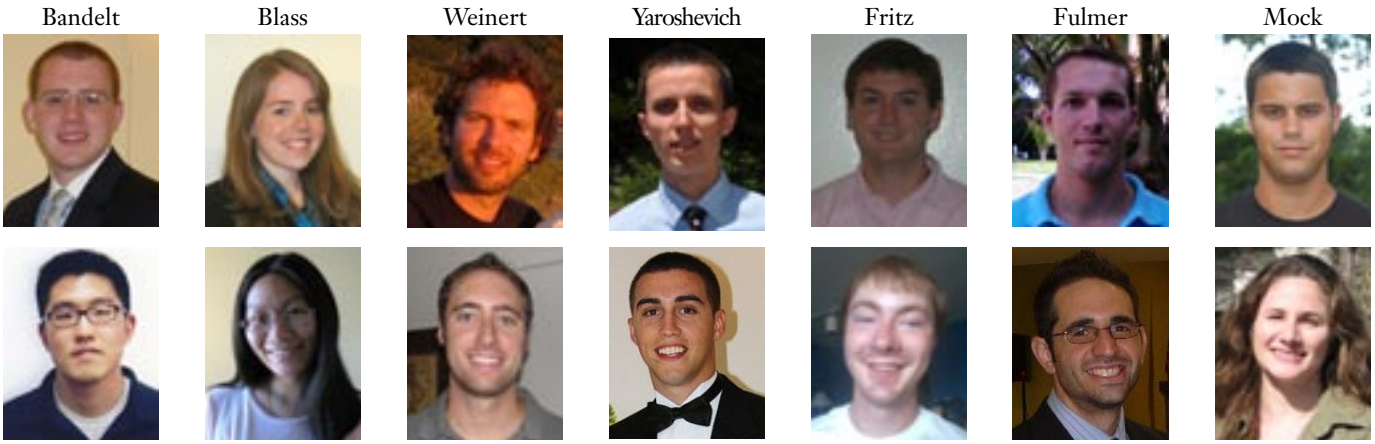
George Kantrales, Auburn University
Andrew Mathis, University of Kentucky

AISC/Structural Steel Educational Council – $2,500 ea.

Daniel Choe, University of California, Berkeley
Gillian Montgomery, Stanford University

AISC/W&W Steel Oklahoma State University Awards – $2,500 ea.

Meagan Busby, Oklahoma State University
Andrew Royce, Oklahoma State University



AWARDS

Tekla Announces 2010 BIM Award Winners

A gold processing plant in Northern Mexico has been named the winner in the "Industrial/Civil Model—Steel and/or Concrete" category of the 2010 Tekla North America BIM Awards. The Mercedes Gold Processing Plant's complex model included structural steel, miscellaneous steel, and mechanical steel and components (bins, hoppers, material conveying system) ensuring fit-up and compatibility among the many vendor components within the structural steel framework.

Winners in the other categories include two components of Pittsburgh's new Consol Energy Center—the hockey arena and its impressive parking garage—and the state-of-the-art Sutter Medical Center Castro Valley in California.

This year's competition attracted a record number of Tekla Structures users—26 of them—to submit their 3D models. View all the entries (not just the winners) on the Tekla website at http://bit.ly/agf0O7.

letters

Specifying FRP Shims

In a current project being designed in Chicago, we provided a detail for a condition that has potential for thermal bridging. Upon reading your article "Steel Framing and Building Envelopes" in *MSC* (January 2010), we specified a "Fiberglass Reinforced Plastic" shim plate. The detail is a hanging beam with tension transferred via bolts and no compression on the plastic plate. The contractor has asked us what material this plate should be. Do you have a specific material/product that you have specified in your projects? Or has "FRP" managed to be sufficient in your specifications?

—Matt Streid, Chicago

Author Jim D'Aloisio responds:

We've developed a specification for Structural Fiberglass Reinforced Plastic Shapes that we've modified to incorporate requirements outlined in several ASTM standards. These cover such things as flame spread, strength, and physical characteristics.

We have used ½-in.-thick fiberglass-reinforced plastic (FRP) plates and angles to minimize energy loss through steel connections that pass through the insulated building envelope. FRP has fairly high compressive strength, and its thermal properties (it conducts heat 1/1200th the rate of carbon steel) make it a very efficient way to minimize or eliminate thermal steel bridging. So far, we've kept the stresses low—this is a fairly new way of using this material. And we've kept the structural requirements to basically a shim—no flexural stresses. We also recommend using stainless steel bolts for penetrating the material because stainless steel conducts heat only about a third as well as carbon steel.

For larger members and stresses, there are proprietary structural-thermal assemblies, such as the Schock Isokorb system. These are systems that get installed between the interior and exterior steel, across the envelope insulation, to which both the interior and exterior steel is bolted. They can transfer shear, axial, and bending stresses, as well as minimizing thermal transfer. The company has recently published the capacities of its assemblies in Imperial Units, making them much more user friendly in the U.S.

Beware Indeed!

I appreciated your article "Beware of Strings Attached to Stimulus Projects" in the September 2010 issue of *Modern Steel Construction*. I personally have managed two federally funded projects (EDA funds, not ARRA funds) and have discovered for myself—as a project manager—the hassles and grief that are attached to federal funds. Not only did my team and I encounter headaches with the Davis-Bacon requirements, we discovered—much too late and much to our chagrin—that portions of our project would not be funded even after construction was nearly complete. Apparently, the paperwork arrived "incomplete" and no forgiveness was extended to us. Hence, a scramble ensued to secure private funds to pay for work that we expected would be paid for by the federal grant. Therefore, I feel your warning to other consultants and contractors was very timely and necessary.

I do, however, have one point of argument with your article and it is simply this: No stimulus package extended by our federal government can ever produce "…opportunities for contractors to find work in an otherwise stagnant private construction market" or "…extend a lifeline to the construction industry". Perhaps it can in the short term but *never* in the long term and never in anyone's best interest. Simple economics will prove this out: The short-term increase in funding will create greater supply (jobs, inventories, etc.) but leave contractors and suppliers with greater unused inventories, under-utilized equipment and overstaffing problems once the funding is spent because the overall cause of the reduced demand has not been addressed. Hence, the gravity of the situation becomes worse than if no stimulus had been provided and federal debt (i.e., yours and mine) has increased.

As the title of your article states, we must beware of strings attached, especially with the greater, overall picture of federal spending. No amount of extra spending will ever get our country out of debt, as your own personal budgets will attest. Our best option then is to tighten our belts, reject government handouts regardless of how much we think we may need them, and let the economy correct itself. We as a nation have put ourselves in this situation and now a consequence must be paid. It's not the easiest answer but it is the correct one.

Henry David Thoreau once said "For every thousand hacking at the leaves of evil, there is one striking at the root." Gentlemen, let's be striking at the root and not promoting wasteful action!

—Quin E. Whitaker, P.E., MBA
Logan, Utah

EDUCATION

AISC Fall Seminar Series

The AISC Fall Seminar Series is coming to more than 20 cities with four different topics:

- Practical Connection Design for Economical Steel Structures
- HSS Connection Design/Dos & Don'ts of Steel Construction
- Design Steel Your Way II: Efficient Analysis for Steel Design using the 2005 AISC Specification
- Listen to the Steel: Duane Miller on Welding

Each full day session includes lunch and 0.8 CEUs or 8 PDHs. To register, view a map of the different seminar locations, or learn more about the fall seminar series, visit **www.aisc.org/seminars**.

PUBLICATIONS

Engineering Journal Q2 Now Available Online

The Second Quarter 2010 issue of *Engineering Journal* is now available to AISC members online in digital edition format. Members can view the current issue online by going to **http://bit.ly/9OE1NZ**.

New to this issue is the share feature, which allows you to share articles via email and social media web sites such as Facebook. And due to the popularity of the digital edition, the archive feature also has been enabled for the next few issues. The archive feature allows you to browse prior digital editions beginning with First Quarter 2010.

Article searches for the complete collection of *Engineering Journal* articles continue to be available at **www.aisc.org/ej**. Downloads of current and past articles in PDF format remain free to AISC members and ePubs subscribers.

Feel free to e-mail comments and questions to *Engineering Journal* editor Keith Grubb at **grubb@aisc.org**.