

## SEMINARS

### New Stability Analysis Seminar Now Online

R. Shankar Nair's award-winning presentation *A New Approach to Design for Stability* is now available as a "Boxed Lunch" presentation at [www.aisc.org/elearning](http://www.aisc.org/elearning). This hour-long presentation provides a clear, concise overview of the stability analysis and design provisions of the 2005 AISC specification.

R. Shankar Nair is a principal and senior vice president of Teng & Associates, Inc. in Chicago. He received his Ph.D. from the University of Illinois at Urbana-Champaign in 1969 and is licensed to practice engineering in 44 states. He is a member of the National Academy of Engineering and was the winner of the 2007 T.R. Higgins Lectureship Award. Nair currently serves as Chairman of AISC's Task Committee on Stability Analysis and Design and was responsible for the development of the stability analysis and design provisions in the 2005 AISC specification.

The course is free to view and continuing education credit can be obtained by watching the presentation and then purchasing and completing an online quiz on the course content. Check out all of AISC's online continuing education courses at [www.aisc.org/elearning](http://www.aisc.org/elearning).

## CONFERENCES

### Register Now for The Steel Conference!

If you haven't registered yet for the 2008 North American Steel Construction Conference, there's still time! More than 3,000 engineers, fabricators, erectors, and detailers are expected to attend this year's Steel Conference, which will take place April 2–5 in Nashville, Tenn. See the advance program in the December 2007 issue or visit [www.aisc.org/nascc](http://www.aisc.org/nascc) for a complete schedule of conference events and instructions for pre-registration.

With nearly 90 technical sessions, The Steel Conference is the industry's premier education event. It provides structural engineers, steel fabricators, erectors, and detailers with practical information and the latest design and construction techniques. The conference is a key networking opportunity. Its extensive trade show features products and services ranging from fabrication machinery, galvanizing, and connection products to detailing and engineering software. The conference also incorporates the Structural Stability Research Council's Annual Stability Conference. Online registration is available through March 27, 2008. After March 27, registrations will be taken on-site, but at higher rates.

## AISI NEWS

### Boring Retires from AISI, Is Succeeded by Wills

The American Iron and Steel Institute (AISI) has announced that Delbert F. Boring, P.E., vice president of construction market development, has retired from the Institute after 31 years of service.

Boring joined AISI in 1976 as regional director of construction codes and standards and was eventually promoted to director of construction codes and standards. In 2003, he was promoted to vice president of construction market development, where he was responsible for developing and implementing the Market Development Strategic Plan 2005–2009 for AISI's Construction Market program. He was also responsible for oversight of AISI's Codes and Standards program.

Robert J. Wills, P.E., currently AISI's director of construction codes and standards, has assumed responsibility for AISI's Construction Market program. Wills, who has over 18 years of experience with AISI, served as director of construction codes and standards, where he was responsible for managing steel industry activity related to the development processes for numerous national, state, and local building code organizations, ensuring that the resulting regulations reflected current practice and did not inhibit the safe use of steel products.

## CODES

### Changes to AWS D1.5 and D1.3

The American Welding Society recently announced the latest version of its *AASHTO/AWS D1.5M/D1.5:2008—Bridge Welding Code* to be used in conjunction with the *AASHTO Standard Specification for Highway Bridges* or *AASHTO LRFD Bridge Design Specifications*. This code covers the best practices and general provisions of routine bridge welding applications.

Significant updates from the previous version, as provided by Todd Niemann, P.E., Structural Metals and Bridge Inspection Engineer with the Minn. Department of Transportation and *AASHTO/AWS D1.5* Chairman, include:

- ✓ The addition of HPS 50W and HPS 70W and the deletion of 70W.
- ✓ Updates to Tables 4.1, 4.2, 4.4, and 4.5 (filler metal, preheat, and stress relief requirements).
- ✓ New WPS and PQR forms and revised samples of these forms.

- ✓ Illustrations for measuring camber.
- ✓ Optional supplemental moisture-resistant designators.
- ✓ Machining and testing tolerances for performance test specimens.
- ✓ Additions and revisions to usage, handling, and storage requirements for consumables in fracture-critical applications.
- ✓ Revisions to inspection personnel qualifications.
- ✓ Additions for Commentary for Sections 2,3,4,5, and 6 and Annex G.

*AWS D1.3: D1.3-98, Structural Welding Code—Sheet Steel* has also been updated recently. According to D. Robert Lawrence II, CWI, CWE, Buildings Division Welding Engineer with Butler Manufacturing Co. and Chair of *AWS D1.3*, significant changes to this Code include:

- ✓ A new table for the selection of the proper code—D1.1 or D1.3—including selection possibilities of the applicable

code when there is a code overlap.

- ✓ A table of essential variables for prequalified and qualified welding procedures.
- ✓ A new section for exception from some of the requirements of D1.1 for Arc Plug, Arc Spot, and Arc Seam welds for the attachment of decking, with commentary.
- ✓ Corrections for the applicable thickness ranges for qualified Welding Procedures in the figures.
- ✓ Updates to the material listings while retaining the older listings when there has been an ASTM name designation change without real physical changes (A-1008 and A-1011), including the addition of high-formability materials.
- ✓ Clarification of the qualification inspection and testing requirements.
- ✓ Corrections to formulas.
- ✓ Improvement of the sketches to better depict the desired and important details and dimensions.

## AISC NEWS

## AISC Offers Advice on Recent HSS Issues

Questions first arose a few months ago about the mechanical properties of imported HSS, as well as the credibility and reliability of the documentation provided when the imported products entered the U.S. and Canada. At that time, AISC advised that it was premature to draw any conclusions until information could be assembled and independently reviewed.

Since then, we have collected the available data, which represents a limited number of tests on mechanical and chemical properties. AISC staff and industry materials consultants have reviewed this data and noted the following:

- ✓ Many of the tests were performed to different procedures and protocols than are required for HSS in ASTM A500, and therefore lacked uniformity for analysis.
- ✓ Testing speeds varied significantly among the tests that were reported to us.
- ✓ There was no control or tracking of the location of test specimens as to what position they came from in the width and length of the coil.

Despite these factors, each of which will induce significant variations in the testing results, the mean of the independent test results was similar to the mean of the material test report (MTR) values. As should be expected, these factors did result in a higher standard of deviation. Accordingly, it is AISC's conclusion that this does not represent a building code issue.

"Perhaps the most important recommendation is that the buyer should know and evaluate their material supply chain," stated Roger Ferch, P.E., AISC's president. "As with any other purchase, don't just look at the quoted price, but also consider the quality, reputation, and experience of the supplier." Also, it is important to verify that the material and its documentation meet ASTM A500 requirements when they are received. A few MTRs AISC received with the information submitted to us were for material that had been accepted by the purchaser with metric values reported on the MTRs that did not meet the minimum ASTM requirements. Such deviations can be avoided with simple receiving inspection of the material to ensure it is as it was ordered.

In addition, AISC has received reports of seam weld quality concerns with imported

HSS. The seam weld deficiencies that led to these concerns can be seen on the California Division of the State Architect website ([www.dsa.dgs.ca.gov/labs/hss\\_pictures.htm](http://www.dsa.dgs.ca.gov/labs/hss_pictures.htm)), based upon their discovery of weld seam problems in some imported HSS. As can be seen in the photographs on the site, the defective material is such that the defects are identifiable through visual inspection.

The limited information that is available to date on this topic and the anecdotal nature of reports of weld seam defects leads us to believe there is no crisis in HSS supply, and no dramatic response is necessary. "Producer quality control is an essential part of the supply chain, and we believe that North American producers are routinely exercising good QC processes," explained Louis F. Geschwindner, Ph.D., P.E., vice president of engineering and research at AISC. "Receiving inspection at various levels is a routine method to evaluate supplier quality control, and we believe that steel service centers and fabricators are properly performing this function. Where a supplier is new or unknown, these reports may be cause to increase vigilance to ensure that the material they supply is acceptable."

AISC will continue to monitor these situations and keep the design community and construction industry informed of any changes. If additional information is needed, please contact AISC's chief structural engineer, Charles Carter, P.E., S.E., at [carter@aisc.org](mailto:carter@aisc.org) or contact the AISC Steel Solutions Center at [solutions@aisc.org](mailto:solutions@aisc.org).

## ENGINEERING JOURNAL

## Call for EJ Papers

AISC is always looking for *Engineering Journal* articles on interesting topics pertinent to steel design, research, and fabrication methods, or new products of significance to the uses of steel in construction. We are especially seeking technical articles with practical applications in the steel industry. If you have a new idea or an improvement on an old idea, please submit your paper for publication in EJ.

Please send your paper in duplicate to Cynthia Duncan, Editor, c/o AISC, 1 E. Wacker Drive, Suite 700, Chicago, IL, 60601, or e-mail your submittal to [duncan@aisc.org](mailto:duncan@aisc.org).

Detailed information on our review process and requirements for submittals can be found in each *Engineering Journal* issue or at [www.aisc.org/ej](http://www.aisc.org/ej).

In addition, all published papers are eligible for the Best EJ Paper of the Year award. Cast your vote for the best *Engineering Journal* paper of 2007 at [www.aisc.org/ejsurvey](http://www.aisc.org/ejsurvey) and become eligible for a free trip to the 2008 Steel Conference, held April 2-5 in Nashville. A drawing will be held in early March 2008.

All articles published in *Engineering Journal* in 2007 are included in the survey (excluding Discussions). The winning author will also receive free registration to the 2008 NASCC, as well as round-trip airfare and a one-night stay at the conference hotel.

Cast your vote today! Votes will not be accepted after February 28, 2008.

## letters

## Green in Practice

In your December Editor's Note on sustainability, you posed the question, "What are you doing to be green at your company?" We have a very small office and are trying to use real cloth towels to minimize the amount of paper towels we use.

Dyson actually makes a hand dryer that works. I used it at an architect's office in New York. The suction almost removed my wedding ring.

When reviewing drawings, we always ask for them electronically. We only print them on paper when necessary.

Most interesting, I am getting com-

ments during my formal presentations to architects that they are "considering" low floor-to-floor height systems for buildings that normally would not require low floor-to-floor heights. Some architects have mentioned schools, office buildings, and modest two- to three-story structures. Lowering floor-to-floor heights reduces the amount of building materials used and decreases the volume of the building for heating, cooling, etc.

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