Seminar focuses on economical design

While attendees responded favorably to the educational content in AISC’s latest lecture series, many disliked the format. As a result, beginning with the Dallas lecture, AISC has cut the program by two hours. Now, the lectures will begin at 1:30 and conclude at 6:30.

The 1999 Lecture Series, “Essentials of Steel Design Economy,” is designed to give engineers the tools they need to do their job within the time and budget constraints created by a project’s owner.

The seminar will feature five lectures:
- Planning for Steel Design Economy
- Decision Making in System Selection and Layout
- Decision Making in Member Selection
- Economy in Connection Detail
- Project Review

These lectures will focus on giving a designer a better understanding of the economics of the steel fabrication/erection process and will focus on specific items the design engineer can use to reduce fabrication and erection costs, such as optimal bay sizes and layout and the use of repetitive member sizes. “The presenters have taken a step back to reveal the overall design perspective instead of drowning the audience in tedious technical calculations we all know how to use,” explained one attendee at a presentation in January.

As part of the lectures, an example of a moment connection will be presented and then analyzed for economy in design, fabrication and erection. Also included in the lecture will be an assessment of the different roles and perspectives of members of the construction team.

“The seminar should help to improve communication and understanding between the design-detail-fabrication-erection team,” explained Robert F. Lorenz, P.E., AISC’s Director of Education. “We’ll provide tips that will allow design professionals to anticipate detailed solutions to special conditions.”

Full seminar brochures will be automatically mailed to all MSC subscribers. If you do not receive one at least six weeks prior to the seminar date, please fax 312/670-5403 and request one or you can view the full brochure on AISC’s web site at www.aisc.org

Joint AISC/SSPC Certification Program

AISC and SSPC: The Society for Protective Coatings are pleased to announce the introduction of two coordinated and equivalent quality programs to certify structural steel fabrication shops that paint and paint shops that coat structural steel.

This announcement is the culmination of a two-year project to coordinate equivalent quality programs, incorporating the expertise of both AISC and SSPC while avoiding the necessity of two quality certification programs for one facility.

AISC will continue to offer its Sophisticated Paint Endorsement (SPE) quality program, which is part of its program to certify steel fabricating shops, at no extra cost to participants of its shop certification program. SSPC will continue to offer shop painting certification under its QP 3 program. Both programs have been available to the industry the past few years but have recently been revised to provide equivalent and superior evaluation of quality criteria.

Facility owners can have the confidence to specify either an SSPC-QP 3 certified paint shop or an AISC SPE certified fabrication shop, knowing that they will receive bids from shops with equivalent capability for contracts calling for shop painting of fabricated structural steel.

Beginning later this year, both organizations will begin offering equivalent certifications for shop painting in three categories: (1) enclosed shop; (2) covered shop; and (3) open shop.

The enclosed shop category will be issued to shops which demonstrate that they normally conduct coating operations in an enclosure or building (four walls to
grade and a roof) which is not subject to outdoor weather conditions and blowing dust. The covered shop category will be issued to shops that normally conduct coating operations under cover; that is, out of direct exposure to outdoor weather. The open shop category will be issued to those shops that normally conduct coating operations in a field or yard exposed to outdoor weather conditions and blowing dust.

All shops, regardless of category and which organization evaluates them (AISC or SSPC), will be required to meet similar requirements for Management Functions, Technical Capabilities and Quality Control Procedures and Practices. Requirements will be verified during an audit conducted annually at the shop's facility by an independent auditing company.

A special task group, made up of fabricators, Department of Transportation engineers and industrial customers, began meeting in early 1997 to reconcile differences between the two organizations' certification programs. In order to ensure that the AISC and SSPC programs are equivalent, the Task Group looked at three key function areas of the audit: Management, Technical Capability, and Quality Control. The Task Group developed equivalent evaluation criteria for both the AISC and SSPC audits.

Safety, Health and Environmental Compliance, which is evaluated by the SSPC under its QP-3 program, but not by AISC under its quality program, is not addressed in the equivalency evaluation. The task group agreed that these areas are important, but the two organizations deal with them in different fashions. SSPC's QP 3 program remains the only independent program available for evaluating a shop's capability to perform hazardous paint removal and disposal operations for those owners who contract to de-lead structural steel or other pieces (e.g., vessels or fleet equipment) in the shop.

After ensuring the auditing criteria were the same for both the AISC and SSPC programs, the task group then evaluated how each organization audited and rated the shops to ensure that auditing and scoring were done similarly.

Both AISC and SSPC strongly recommend that facility owners require that any shops hired for painting or for fabrication of structural steel to be painted to provide in-service corrosion resistance be certified to the AISC SPE or the SSPC-QP 3 programs. This helps ensure that the owner's contracts are awarded to capable shops that have been evaluated independently to the highest standards. AISC and SSPC offer the following sample contract language for owners requiring certified shops:

“All shop painting of structural steel shall be done by companies that are certified by the American Institute of Steel Construction (AISC) under its Sophisticated Paint Endorsement (SPE) quality program or by SSPC: The Society for Protective Coatings under its QP 3 quality program. Shops shall be certified to category (choose enclosed shop, covered shop, or open shop). The companies shall be fully certified for the duration of time they are performing surface preparation and coating application. Optional statement for those requiring enclosed or covered shop: The complete coating system shall be applied in (designate type of shop) except for field touch up painting.”

Both AISC and SSPC expect to have their equivalent certification programs completely phased in by the middle of next year (2000). For more info on the AISC program, contact: AISC Certification, One Wacker Drive, Suite 3100, Chicago, IL, 60601-2001. Telephone: 312/670-2400. Email: qualcert@aiscmail.com or visit the AISC web site at www.aisc.org.

For information on SSPC-QP 3, contact: SSPC Shop Certification Program, 40 24th Street, 6th Floor, Pittsburgh, PA, 15222.

Telephone: 412/281-2331, ext. 238. Email: rowe@sspc.org or visit the SSPC Online at www.sspc.org.

2nd EDI Technical Workshop—June 23-25, Irvine, CA

To help introduce the CIMsteel Integration Standards (CIS) to the U.S. software development community, AISC, together with Black and Veatch, Fluor Daniel and Bechtel Corporation, a three-day workshop for software development companies.

This second workshop will serve as a continuation (and not a repeat) of the first technical workshop. The workshop will focus upon an offering an interactive environment enabling attending companies to become very familiar with the CIMsteel Integration Standards Version 2.0. Admission to the workshop is $300.

Please contact Steven E. Hamburg, P.E., AISC Director of Electronic Communications (hamburg@aiscmail.com; ph: 312/670-5413) if you have any questions or refer to www.aisc.org.
Dear Editor:

I was very pleased and honored by your article about me in the April 1999 issue. In the title, you credit me with being the “Father of LRFD.” I am, of course, very flattered by this distinction, and I own up to having a lot to do with the development of this new method of design. I am writing this letter to acknowledge the role of others in the saga of LRFD.

This design method would never have gotten off the ground without the vision and dedication of Dr. Ivan Viest, then working at Bethlehem Steel, who conceived the idea in 1968 of starting a research project to explore the possibility of developing a modern steel design standard for buildings. He shepherded the project, as chair of the advisory committee, through the early years of research, keeping the researchers on a practical path that eventually led to an acceptable specification. He pushed forward or held back, as needed, keeping always in mind the goal of a workable document. I want to express my gratitude to Ivan for this steadfast support through the 17 years it took to bring the LRFD Specification from conception to adoption.

The second colleague to whom I am indebted is Dr. M.K. Ravindra, who was my co-worker in the first three years of research. Thanks to him we had a firm probabilistic basis for the developing specification. He patiently taught me probability theory and its application. We had a wonderfully creative three years together during 1969-1972 at Washington University in St. Louis. I want to hereby also express heartfelt thanks to Ravi.

There were also others who were instrumental in the early years of research on LRFD. I had a most talented, diligent and wise advisory committee: Lynn Beedle, Allin Cornell, Ed Gaylord, John Gilligan, Bill Hansell, Ira Hooper, Bill Milek, Clarkson Pinkham and George Winter. To them I also tender my thanks and appreciation. Finally, I want to thank the American Iron and Steel Institute for the financial sponsorship of the project.

Respectfully yours,

Ted Galambos