

NSCC Keynote Predicts Steel Surplus

New Orleans (April 13, 1998) – The historical city of New Orleans provided a nearly perfect backdrop for the successful 1998 National Steel Construction Conference (NSCC). The three-day conference featured information on products and services, technologies, and management practices in the structural steel industry. And the city offered a host of dining and entertainment experiences—from the rowdiness of Bourbon Street in the French Quarter to the quaint streets of the Garden District.

Nearly 1,500 attendees learned about the latest economical, educational and technological information in the industry. There were 28 providing information on topics ranging from “Engineering and Quality Criteria for Steel Structures” to “Safety on the Jobsite.” “The technical sessions were informative, speakers knowledgeable and well prepared. And there were good, diverse topics to choose from,” explained one attendee on his evaluation form. Added another: “I appreciated the tremendous networking opportunities available. Everybody is represented at the conference—it’s truly an industry-wide conference.”

The exhibit hall gave people the chance to get the latest information on products and services in the steel construction industry, including engineering and detailing software, connection materials and large fabrication machinery. This year’s exhibit hall was a sell-out with more than 60 companies displaying their wares.

The kick-off event for the conference was a keynote address by Daniel R. DiMicco, president and general manager of Nucor-Yamato Steel Co. According to DiMicco, the tight steel market that has existed since last summer will be alleviated during the next few months. And by the end of this century, there will actually be a large steel surplus in the U.S.

According to DiMicco, the tight steel market, which has resulted in allocations being implemented by the major domestic steel mills, is the result of a confluence of events. On the one hand, there has been a steady increase in demand as a result of the booming economy. On the other hand, production has declined, primarily due



Daniel R. DiMicco (left), president and general manager of Nucor-Yamato Steel Co. is congratulated after his NSCC keynote address by Robert Freeland (right), AISC's Chairman and president of Havens Steel Co.

to the shutdown of the large integrated mills such as Bethlehem and USS, as well as Northwestern Steel and Wire's shutdown of its Houston Mill. As a result of these changes, industry capacity has declined 225,000 tons during the past eight years while demand has risen from 3.44 million tons in 1991 to 3.63 million tons in 1997. However, during the next two years, three new mills are expected to open: Nucor-Berkeley (South Carolina) with a capacity of 400,000 tons, Steel Dynamics with a capacity of one million tons, and Chaparral Steel-Virginia with a capacity of 900,000 tons.

Matching DiMicco's presentation in popularity was the T.R. Higgins Lecture. More than a 1,000 people heard Abolhassan Astaneh-Asl, Ph.D., P.E., present his paper “Seismic Performance and Design of Bolted Steel Moment-Resisting Frames.” The paper focused on four areas of bolted moment-resisting frames:

- How bolted moment-resisting frames have performed during past earthquakes such as the 1994 Northridge earthquake;
- How the frames performed during laboratory tests;
- Why the moment-resisting frames performed well during these situations, and
- How to design safe, reliable and cost-efficient steel bolted moment-resisting frames.

The T.R. Higgins award is presented to an outstanding lecturer and author whose technical papers have made a significant contribution to the literature regarding fabricated structural steel. Astaneh will repeat his paper at a minimum of six seminars around the country.

The 1999 conference in Toronto (May 19-22) will be the premiere of the North American Steel Construction Conference (NASCC). AISC decided to change the name of the conference from NSCC in recognition of the increasingly globalized marketplace. “The goal of the North American Steel Construction Conference is to grow in numbers and significance to the point where anyone designing in steel or fabricating steel will feel left out if they don't attend,” explained James Stori, president of STS Steel, Inc. and the Chairman of the NASCC Committee. “Unification of various industry elements—educators, design engineers, fabricators and detailers—will be advanced through communication in the general and technical sessions.

“The tone set by Professor Astaneh in this year's T.R. Higgins Lecture was one on technical research leading to practical solutions for real life engineering problems. This will be furthered in Toronto and future conferences as the industry leaders provide information to help us design better buildings more efficiently.”

Correspondence

From time to time, MSC reviews industry-related software and products and publishes the reviewer's opinions as a service to our readers. Occasionally, the manufacturer of a reviewed product is unhappy with the review. Late last year, Jacques Cattan reviewed at CAEinc's request, CAEinc's structural engineering software program and his opinion regarding the usability of the product was published in the January 1998 issue. CAEinc responds to the review in the following unedited letter:

Dear Editor:

CAEinc., Pre-installed Firmware SETS (Structure Engineering Turnkey System) is a plug-&-run System and contains a series of integrated programs; Pre-processor, hyper-STRUDL(USP), SAP, SUPER ETABS, Post Processor, etc. to do complete structure works.

Cattan did not actually log into SETS and CAEinc's software meter plus hardware meter confirmed ZERO usage while Melnick, editor/publisher of Modern Steel Construction, had custody of the big System for about five months between Sep., 1997 through Jan. 1998. During this period Melnick refused any technical assistance from CAEinc.

He also refused CAEinc full page color ads that was to further introduce to the end users a long term lease concept to let users USE-FIRST-PAY-LATER with ABSOLUTE AUCTION PRICE that users decide after uses/lease. It is a revolutionary idea to radically change present mode of payment method so that no single end user will have to risk the agony/disaster when purchases a software product that turns out to be NOT COST EFFECTIVE. Currently in this respect, no end user is given enough time actually needed to intelligently/really SHOP/COMPARE for the most cost effective use/purchase of a program. And at the same time, this idea will solve permanently the problem of MISREPRESENTATION of bad apple(s) in software industry.

Also for 4 months Melnick was unwilling to make CAEinc ads at STEEL MARKETPLACE correct professionally to convey above message (Sep. through Dec. 1997). He waived all ads charge \$1200.0 against CAEinc with an apology only lately in

a fax letter of Feb. 4, 1998.

Cattan gave negative conclusion in complete oppositeness to overwhelming information and/or evidences to his knowledge from sources that CAEinc had provided in SETS Package in early September, 1997 that CAEinc had run in various ads since July 1997 at Modern Steel Construction and that he had otherwise been exposed. (UTP, CAEinc first software with break-through in non-linear theory, had been out in 1970 before U S copy right law gave protection to software in 1976 and before P C was born. Since then, CAEinc has been marketing software by various means/channels both at home and abroad; some as follows: various U S main frame computer centers, CAEinc Idris/Unix computer center, ads in ENR and Civil Engineering magazines, direct mails, etc. When CAEinc software was used first at home and abroad, most of CAEinc competitors were not born yet.)

CAEinc did not receive the MSC Magazine on time but 3 weeks late on Jan. 26, 1998 when it first came to CAEinc's attention regarding this matter. CAEinc immediately contacted MSC and offered to go to Chicago to prove Cattan's mistake in person to parties of MSC concerning this matter. MSC dragged things off and offered flip-flop proposals/request to CAEinc in a delay tactics. To this date, MSC still refused, after repeated requests, to provide CAEinc information/data how Cattan had come to that conclusion even MSC had been fully informed of NO-LOG-IN and ZERO usage.

Still, MSC has breached one basic issue between MSC and CAEinc of mutual understanding that the review was to promote vendor's products and in return to induce further ads from the Vendor.

CAEinc asks for help from you/readers. Meanwhile, CAEinc will continue to seek remedy through all channels including possible law suite against parties of MSC responsible for the damage to CAEinc.

C Yang
CAEinc

Editor's Note: It is MSC's policy to edit submitted advertising for grammatical and

other potential errors. In accordance with our advertising policy, MSC edited the advertising mentioned in CAEinc's letter. Subsequent to the publication of the advertisement, CAEinc expressed dissatisfaction, and MSC refunded CAEinc's advertising charges. We have also offered to have CAEinc's software evaluated by a mutually agreeable independent reviewer. Finally, it is MSC's policy that editorial and advertising are independent.

Dear Editor:

Jeffrey Post's article (MSC, March 1998) provided some interesting and useful comments on welding issues for steel-framed structures, particularly on topics such as joint prequalification, welder qualification, and the importance of preheat. But I was very surprised to see him refer to A36 and A572 (50) as "poor toughness steels". In fact, the CVN toughness survey that was conducted by AISC in 1995 for these steel grades shows the exact opposite. Mr. Post's negative opinion of the most common U.S. structural steels is clearly based on faulty welding practices rather than the properties of the materials themselves.

Reidar Bjorhovde
Professor of Civil Engineering,
University of Pittsburgh

Structural Engineers World Congress

The first Structural Engineers World Congress, SEWC '98, is scheduled for July 19-23 in San Francisco. It will cover all aspects of structural engineering, both technical and professional practice. "The world is fast becoming one large community in engineering," explained Roland L. Sharpe, President, SEWC. "Today, structural engineers are involved in designing facilities of all types on most countries. It is increasingly critical that we understand other countries' cultures and governmental and environmental requirements so that safe, economical buildings and structures are designed and constructed everywhere, both now and in the 21st century."

Among the 144 featured sessions are:

- Tube action/Construction of star-shaped 80-story skyscraper (Japan)
- Structural design of Shanghai World Financial Center
- New Generation of design codes for steel buildings
- Three-dimensional analysis of a 13-story steel building with weld connection damage
- Critical review of SMRF connection in new hi-rise buildings
- Canadian developments in limit states design and evaluation of steel highway bridges
- Inspection and rehabilitation of the Madison Avenue swing bridge
- Main stadium structure for Sydney Olympics 2000
- Analysis & design of masts & towers

In addition, keynote presentations will be made by four eminent engineers: W.J. Hall from the Dept. of Civil Engineering at the University of Illinois; P.R. Head, Chief Executive, Maunsell Europe, U.K.; Mamoru Kawaguchi, Hosei University, Japan; and Leslie E. Robertson, P.E., S.E., Leslie E. Robertson Associates, New York City.

To receive more information, call 888/895-1872 (email: sewc98@aol.com; web: sewc.org).

A/E/C Systems '98

Architects, engineers and contractors can hear about the latest computer applications for their industry at this year's A/E/C Systems '98 June 2-5 in Chicago. In addition to a truly huge exhibition, the show features a large number of seminars, such as:

- Structural engineering for high design projects;
- Sport Cyber Design;
- Design/Build by design professionals; and
- Integrating CAD and databases.

Concurrent with A/E/C Systems is Build USA, a conference for design professionals, owners, facility managers, specifiers and others in the building industry.

For more information on A/E/C Systems '98, call 800/451-1196 (web: aecsystems.com).

Lincoln Electric Announces 1998 Professional Programs

The Lincoln Electric Co. plans to hold three production and design welding seminars at its state-of-the-art Welding Technology Center in Cleveland.

- **Blodgett's Design of Steel Weldments (Sept. 14-18):** This intensive five-day seminar will be conducted by a team of experts led by Omer W. Blodgett, P.E., ScD., Senior Design Consultant, and Duane K. Miller, P.E., ScD, Manager of Engineering Services. This program has been designed for those who have the responsibility of improving weld quality and productivity while reducing manufacturing costs. Essential design issues will be discussed such as determining weld size, controlling distortion, metallurgy & cracking, transferring force, and designing specific components. Cost: \$395 (3.3 CEUs)
- **Blodgett's Design of Steel Structures (Oct. 19-23):** This comprehensive five-day seminar, also conducted by a team of experts led by Omer W. Blodgett, P.E., ScD., Senior Design Consultant, and Duane K. Miller, P.E., ScD, Manager of Engineering Services, is

aimed at welding professionals who are responsible for improving quality, reducing costs and conserving material through the efficient use of structural steel. The seminar will review the most critical elements of designing weldments for structural steel applications, including determining weld size, controlling distortion, metallurgy & cracking, designing for fatigue, shock & torsional loads, and transferring force. Topics to be reviewed also will include: mechanical properties of welded connections; achieving ductility; designing for seismic conditions; and the importance of inspection and the applicable welding codes. Cost: \$495 (3.3 CEUs).

- **Production Welding (Sept. 29 - Oct. 1).** This four-day seminar is designed for engineers, welding superintendents, welding foremen, quality control personnel and inspectors. The program will review methods to improve quality and productivity while reducing welding costs. Additional subjects to be covered include: processes and procedures; basics of weld design & metallurgy; safety concerns; non-destructive testing; and future trends in welding. Courses will be led by Lincoln Electric application engineers and will include demonstrations of all the major arc welding process. Cost: \$295.

Registration forms and further information can be obtained by requesting Bulletin numbers ED-45S, ED-45W or ED-45P from The Lincoln Electric Co., 22801 St. Clair Ave., Cleveland, OH 44117-1199, Attn: Registrar, Professional Programs (ph: 216/383-8025; fax: 216/383-2240; web: lincolnelectric.com/educate).

HSS Seminars Continue

In response to the growing popularity and use of hollow structural sections, AISC has held, and will continue to hold, HSS seminars throughout the U.S. The seminar, offered in association with the Steel Tube Institute and the American Iron & Steel Institute, will review and cover all aspects of HSS design and connections, including both simple and moment connections.

"The course is based on AISC's new *HSS Connection Manual*, which provides a consistent basis from which HSS connections can be designed, including simple shear and moment connections," explained Charles Carter, P.E., AISC's Director of Manuals. "It presents the information that has been synthesized into a single practical sourcebook on HSS connection design.

The seminar, to be offered in 13 cities, will run all afternoon and into the evening. Sessions include:

- Materials and Specifications;
- Welding & Bolting;
- Shear Connections;
- Moment Connections;
- Tension & Compression Connections, Column Splices, Base and Cap Plates;
- Truss Connections and Examples;
- Constructability.

Cost of the seminar, including dinner, is \$175 for non-AISC members (\$135 for each additional attendee from the same firm) and \$140 for AISC members (\$100 for additional attendees from the same firm).

The seminar will include extensive hand-out material, but will not include the new HSS Connections Manual, which is now available and can be purchased for \$72. The seminar starts at 1:00 p.m. in each city and runs through 9:00 p.m. It has a continuing education value of 6.0 Professional Development Hours or .6 CEUs.

All *Modern Steel Construction* subscribers will automatically receive a detailed program mailing. If you don't receive one, please send a fax to 312/670-5403.

1998 HSS Seminar Schedule

May 28	Cincinnati
May 29.....	Chicago
May 19.....	Boston
May 20	New York
June 2	Denver
June 3	Kansas City
June 16.....	Los Angeles
June 17.....	San Francisco
June 18	Seattle