



AISTech 2005 Review:

The Iron & Steel Technology Conference and Exposition

by Joann Cantrell, Editor, *Iron & Steel Technology*

The Association for Iron & Steel Technology's second major conference and exposition in less than eight months proved AIST and the steel industry as victors. Key steel producers, suppliers, corporate executives and leaders, AIST members, exhibitors and academia came together for a successful turnaround on May 9–12 in Charlotte, N.C., for AISTech 2005 — The Iron & Steel Technology Conference and Exposition and ICS 2005 — The 3rd International Congress on the Science and Technology of Steelmaking. With the backdrop of the Charlotte Convention Center, the global steel industry participants who exceeded 3,600 parted from AIST's four-day event with a promise made good to leave smarter, better equipped to move forward, and better motivated to generate new ideas and promote continuous improvement in the industry. Daniel R. DiMicco, vice chairman, president and chief executive officer of Charlotte-based Nucor Corp., called 2004 a "blowout year," a description that could also apply to AISTech 2005. North America's largest full-line steel convention, which will now be an annual spring event, included 330 technical presentations and 251 exhibits from both domestic and international companies.

AIST Foundation Golf Classic

AISTech 2005 kicked off with the AIST Foundation Golf Classic on Sunday, May 8 at Charlotte's Highland Creek

Golf Club, an 18-hole championship course. The challenging layout of the area's best course made for an enjoyable tournament with the bonus of picture-perfect weather and a generous outcome of \$19,000 for the AIST Foundation. Many golfers left happy on Sunday evening, including players in the winning foursome. Three of the foursome are pictured below right, from left to right: **Jim Brooks**, Superbolt; **Ted Leczo**, AIST Foundation past president; **Bob McCurdy**, Superbolt; and **Mike Farley**, Injection Alloys. Missing from the photo: **Bernard Schiefer**, MECC-USA.

Exhibit Hall, Technical Sessions and ICS

AISTech 2005 surpassed the impressive figures of the previous exposition, with a 15 percent increase in participating exhibitors and a 16 percent jump in square footage of the show floor area, which sported a lively NASCAR theme. The conference program, developed by Operating Committee members from iron and steel producers, suppliers and academia, focused on all aspects of ironmaking, steelmaking, finishing processes and equipment technologies. The technical conference saw a 50 percent increase in sessions (including ICS) and generated a 25 percent increase in registrants.

AIST Foundation Golf Classic



Howe Memorial Lecture



compared to 2004. Registrants of ICS 2005 — The 3rd International Congress on the Science and Technology of Steelmaking — were afforded full reciprocity with the AISTech conference, providing a tremendous opportunity for the dissemination of global steel technology. The ICS program also included a banquet on Wednesday, May 11 in the Grand Ballroom of the Omni Charlotte Hotel. Jean-Pierre Birat, manager of Arcelor Research, was the keynote speaker, with a presentation entitled, “The Greening of Steel: The Blast Furnace in the Garden.” Papers presented during the technical sessions were made available to conference attendees and are available through AIST in the form of a softbound set of proceedings or CD-ROM. (For more information, see the AIST publications on pages 100–101 or visit www.SteelLibrary.com.)

Howe Memorial Lecture

Dr. Gordon A. Irons of McMaster University presented the 2005 Howe Memorial Lecture, “Developments in Electric Arc Furnace Steelmaking,” on Monday, May 9. The Howe Memorial Lecture was established in 1923 to honor Henry Marion Howe, and each year a lecturer is selected in recognition of outstanding individual contributions to the science and practice of iron and steel metallurgy or metallography. This year, Dr. Irons dis-

cussed the generational progress and developments in EAF steelmaking as well as projections on where such developments will take the industry.

Town Hall Forum

A panel of leading industry executives participated in the Town Hall Forum moderated by **John D. Callaway** on Tuesday, May 10. The candid dialogue on industry issues, concerns and opportunities was open to AISTech conference attendees who also had the opportunity to submit questions to panelists that included **Keith E. Busse**, president and chief executive officer, Steel Dynamics Inc.; **Phillip E. Casey**, chairman of the board and chief executive officer, Gerdau Ameristeel; **Michael Coslov**, chairman and chief executive officer, Tube City IMS Corp.; **Daniel R. DiMicco**, vice chairman, president and chief executive officer, Nucor Corp.; **Donald A. Pether**, president and chief executive officer, Dofasco Inc.; **Clyde P. Selig**, president and chief executive officer, CMC Steel Group; and **John P. Surma Jr.**, president and chief executive officer, U. S. Steel Corp.

Moderator John Callaway began the forum in search of a concise headline on the current state of the steel industry, and Michael Coslov responded with “American

Technical Sessions



Town Hall Forum



Steel Is Back,” immediately generating nods of agreement from the other panelists. How to maintain the winning streak in the U.S., industry consolidation, safety in the mills, transportation, and the recruitment of women and minorities were hot topics among the executives who took part in the two-and-a-half-hour discussion.

Coslov told the Town Hall audience exceeding 1,200 that the surviving companies in the industry are happy to see consolidation, the management that’s in place now as well as the resources. “It’s much easier to sell to someone when you know you are going to get paid,” he said.

“Consolidation on our suppliers’ side has been very important,” said Donald Pether. “Our customers are extremely large, with needs for research and development of new products, so there’s an issue of being competitive for an availability of raw materials and having the technical capability of providing new products to customers. That ties in with the sustainability issue. Obviously, with size, there’s an improvement in terms of sustainability. A new wave of consolidation may foster a model that may be different from what we’ve seen over the last few years, and that’s yet to play out.”

“2004 was really a blowout year, and it will be followed by another strong year,” said Nucor’s Daniel DiMiccio. “It’s much easier to be responsible when you have a healthy industry. When people are trying to survive, you have a different behavior, and what we saw several years ago was an industry that was very sick, where there were a large number of players who were working just to survive. Consolidation is driving us in the direction where we can become a healthier industry



both domestically and globally, and have the money to do the things we know need to be done to have a long-term, sustainable industry.”

There may be more consolidation on the horizon, yet at a slower pace. Keith Busse said that the industry is under better management than it had been historically. “I think consolidation has mattered greatly, and I think you’ll see consolidation continue.”

Busse sees more opportunity for greenfield operations in North America, noting that U.S. steel production is around 105 million tons annually, with demand at nearly 130 million tons. That shortfall opens the door for more operations. “We hit a home run in 2004, but prosperity is sustainable. We’re no longer having to live with the desperate acts of dying men or the companies that believe the next 100,000 tons they sell will be their salvation. We’re probably not likely to see the highs we saw in 2004, nor are we likely to see the bottom that we reached in 2003.”

Callaway asked the group how the industry handles its prosperity to shape the business for years

Town Hall Forum Panelists



Keith E. Busse
Steel Dynamics Inc.



Phillip E. Casey
Gerdau Ameristeel



I Michael Coslov
Tube City IMS Corp.



Daniel R. DiMicco
Nucor Corp.



Donald A. Pether
Dofasco Inc.



Clyde P. Selig
CMC Steel Group



John P. Surma Jr.
U. S. Steel Corp.

to come. “We made acquisitions of about 400 million,” said Phillip Casey. “And with that comes the stewardship responsibility of raising the standards, not only of the hard assets, but of the talent pool as well. One of the lasting investments we made was to focus on training, recruiting, development and creating a growth platform with our infrastructure, hopefully making us able to participate in continued consolidation.” Casey also indicated that the industry is at a crossroads and the next few years will redefine the future of the steel industry in North America.

As the discussion moved on, Callaway’s straight-forward question, “How are you doing on safety?” prompted passionate and firm responses from several panelists.

“The way we measure our safety performance is a trend that is moving in the right direction, yet having even one serious accident, or even worse, one fatality, is a crushing defeat,” said U. S. Steel’s John Surma. “Our view of safety is an important company virtue that we have wrapped our value system around. Since 1907, safety has been a key pillar of that value system. We’ve

reworked our compensation system to have short-term incentives based on the prevention of injuries. We will be putting a financial reward behind that as one of the key determinants. All the analysis says that the safest companies are the best operators, the most reliable, the ones with the best financial returns over the long term, and the most cost-effective. For me, that’s an easy thing to wrap our company’s value system around because it’s the right thing. To be the best company, we’re not going to be where we have to be if we’re not there on safety.”

Clyde Selig reflected on some personal advice that was passed on to him many years ago. He remembered a quote that he encourages others to heed: “Asking me to overlook a simple safety violation is like asking me to change my entire attitude toward your life.”



Town Hall Question-and-Answer Session



President's Award Breakfast



Selig explained that each and every industry employee has that responsibility and can prevent fatalities that can happen in the plants. SMI's South Carolina plant developed the ORO Program — Others Reminding Others — a concept that warns that every individual is responsible to correct a safety violation and not look the other way.

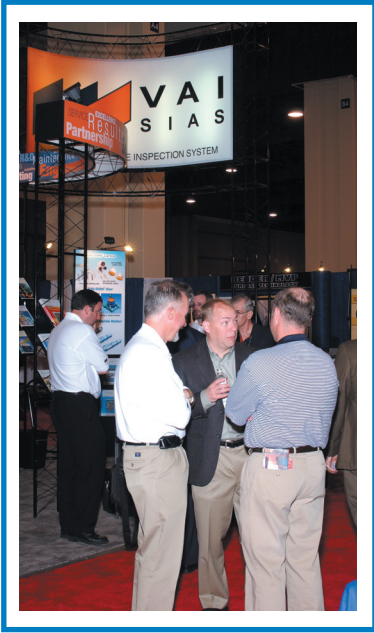
During the Town Hall question-and-answer session, AISTech 2005 Conference Planning Committee Chair, Harriet Dutka (pictured on page 22, bottom right), manager of the Timken Faircrest Plant in Canton, Ohio, reproached the industry for failing to reach out to women as a potential source of new talent. The producers agreed that a concerted effort has to be made not only to bring women into the predominately middle-aged, white male steel fraternity, but to attract other minorities and young technical professionals as well.

Donald Pether spoke of Dofasco's mentoring program for all new employees and added that the company is also working with universities to pro-

mote the opportunities that the steel industry has to offer. He also encouraged producers to take advantage of the change in the technically savvy generation. "These young people have been computer literate since the age of seven. Those are the skills we need. In the last decade, we have not always done what was required to be exemplified as a quality employer, and we now have to show people how that is changing."

Surma agreed. "We have not availed ourselves fully, and we want to do more to welcome more people of diverse backgrounds to steel." Surma said that U. S. Steel plans to hire approximately 240 people into management positions, accounting for 8 percent of the company's work force.

When a member of the audience asked what universities could do to recruit young talent and students to the steel industry, Coslov eagerly replied, "Invite us to your schools. We have one thing to offer and that's opportunity. We can help by telling our new steel story."



In another discussion, the Town Hall panel of steel executives expressed their frustration with leaders of the North American railroads. While consolidation has been good for the domestic steel industry, it clearly has not been good for the railroads, with not only a shortage of cars, but serious problems in terms of the ability in delivering steel products in a way that's sufficient. Busse warned of the dangers of oligopolies and said the issue is another lobbying interest that the steel industry has to make on its own behalf.

DiMicco's candid assessment of the crisis depicted a serious issue affecting any industry that moves products by rail or truck. "They (the railroads) are not helping the domestic manufacturer, and they did not build for the future, despite making a commitment to service their customers. They have woefully under-invested in their infrastructure whether by track cars, locomotives or people. We all strive for the maximum efficiencies in our operations to minimize cost, and this hurts our ability to compete efficiently in the marketplace. If we

lose those efficiencies because we can't get the product to our customers when they need it, it builds inefficiency into the whole delivery chain — from the time that we're bringing scrap into our plant, to the time that we're shipping our product and it arrives to our customers. Those inefficiencies mean dollars and cost, and they hurt."

Coslov pointed out that the outgrowth is dysfunctional economics, creating artificial shortages and an artificial chain of events.

As a solution, Casey suggested a focus on marine freight, noting that an old law still in effect hinders marine shipping. Legislative action could allow marine freight to be more conducive to the movement of products such as steel.

To conclude the Town Hall Forum, John Callaway asked Phil Casey what message he would give to someone wanting to join the steel industry who was concerned about a culture clash. Casey replied, "Every young,



Gerdau Ameristeel Plant Tour



dynamic graduate coming out of college wants to do something meaningful in their life, and this industry gives you the opportunity to do that, to change the old dynamics. We need more females, more minorities, and we have to recruit globally. If we don't do that, if we don't bring the steel industry into the 21st century, then it will disappear in North America." Surma also acknowledged a gender gap and reiterated a need for technical leaders.

President's Award Breakfast

Thomas C. Graham Jr. played host to more than 800 attendees at the President's Award Breakfast on Wednesday, May 11 in the Charlotte Convention Center Ballroom. President Graham noted that the strength of AIST was evident with the sold-out attendance, making it easy to forget the difficult times and industry turmoil that forced consolidation not only in the steel sector, but also for the two predecessor organizations that merged to form AIST. In the 18 months since the creation of the organization, AIST benefitted from recent robust markets in the industry and impeccable timing.

"In 2004, AIST conducted 10 training courses averaging 101 attendees, with 65 percent of those attendees representing more than 50 steel producing companies," Graham said. "In 2005, our three training courses to date have averaged 150 attendees, representing an even higher level of support for the organization's products and services. These major conferences, along with publications, Operating Committees, Specialty Conferences and chapter events, are all products targeted at helping the industry accomplish technical collaboration."

Offering a testimony to the value of attending AISTech, Graham encouraged support for AIST members from their employers and told the crowd, "I can honestly say that in my years in the steel industry, I have never come back from an industry meeting without something that helped my company. Being informed is an absolute prerequisite to success in the industry."

At the President's Award Breakfast, **Keith E. Busse** received the Steelmaker of the Year Award. AIST lauded the president and chief executive officer of Steel Dynamics Inc. (SDI) for his entrepreneurial spirit, distinguished leadership and exceptional contributions to the steel industry. In particular, Busse was recognized for his pioneering efforts in the commercial implementation of thin-slab casting technology and in the innovative creation of SDI.

Busse accepted his award on behalf of the 1,700 people at Steel Dynamics by saying: "The adventures that I've had the opportunity to live are extraordinary. The creation of thin-slab casting and participation in thin-slab casting with others during my time at Nucor and Steel Dynamics would not have been possible without my affiliation with some extraordinary people. I would like to mention a few of those people — first and foremost, Ken Iverson, whom I believe to be the greatest man to grace the steel industry in the past 100 years, or at least one of the greatest pioneers since the days of Andrew Carnegie. And the creation of Steel Dynamics certainly would not be possible without my friendship and affiliation with two

engineers by the names of Dick Teets and Mark Millet. People have asked me what the greatest accomplishment in my career was, and I tell them it is the creation of 1,700 new jobs for 1,700 people who believe in the future of this industry. Beyond a shadow of a doubt, that is my greatest reward.”

AIST also recognized **John E.R. Holditch**, retired from Dofasco Inc., and **Thomas J. Usher**, chairman of U. S. Steel Corp., with AIST Distinguished Member and Fellow Awards for their respective outstanding contributions, dedication, and service to the iron and steel industry. AIST honored **Henri R. Gaye** with the John F. Elliott Lectureship Award and **Gordon A. Irons** with the Howe Memorial Lecture Award.

A keynote address by **Malay Mukherjee**, chief operating officer of Mittal Steel, followed the AIST Awards presentations. In his address, Mukherjee discussed how the steel industry must consolidate, since it still lags other industries in this regard. Mukherjee said that Mittal Steel foresees a time where there will be five major steel companies, each capable of an annual production of 100 million tons. Mittal is also looking with interest to the opportunities in China, home to 2,700 small steel producers, as well as Brazil, Russia and India.

In a follow-up press conference, Mukherjee was asked about specific targets for acquisition. “We are definitely looking at all opportunities,” said Mukherjee in a lighthearted tone. “But we don’t refer to the opportunities as targets. When we do that, they cease to be targets.”



“I leave here today with a great sense that AIST is a very live, vibrant and active organization.”

— **Thomas J. Usher**, chairman of the board, U. S. Steel Corp.



(A complete transcript of Mr. Mukherjee’s address, “Steel in the 21st Century: Creating an Attractive and Sustainable Industry,” and a review of the 2005 AIST Association-level Awards, were published in the July issue of *Iron & Steel Technology*. For reprints, contact AIST customer service at (724) 776-6040, ext. 1.)

Gerdau Ameristeel Plant Tour

Gerdau Ameristeel’s Charlotte, N.C., mill served as the host plant for AISTech 2005. More than 80 conference attendees traveled by chartered buses and participated in two separate sold-out tours of the minimill outside Charlotte on Monday, May 9 and Thursday, May 12. Meltshop superintendent **Lance Rosenberger** (pictured on page 26) was presented with a plaque from AIST in appreciation for hosting the two-hour guided tour, which included the Consteel® EAF, the 3-strand billet casting machine and the 15-stand continuous rolling mill. Tour participants were divided into small groups, and each person received a much-appreciated set of headphones to hear the guides give detailed and thorough descriptions of the mill equipment and processes. Guides also answered

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questions from participants along the route and following the tour.

Gerdau Ameristeel is the fourth largest overall steel company and the second largest minimill steel producer in North America, with a capacity to produce more than 8.4 million tons annually of mill finished steel products. Gerdau Ameristeel's Charlotte mill is a long products producer of rebar, merchant and structural shape products with an annual melting capacity of approximately 450,000 tons. The plant employs more than 250 people.

AIST Expresses Gratitude

The AIST board of directors would like to extend special thanks to **Harriet Dutka**, Conference Planning Committee Chair; **Roderick Guthrie**, ICS Advisory Board Chair; **Alan Cramb** and **Mihaiela Isac**, ICS Advisory Board Co-Chairs; **George Koenig** of Berry Metal, session chair for the Town

Hall Forum; **John Ferriola** of Nucor Steel, AIST Foundation Golf Committee Chair; and all AIST member volunteers, authors and exhibiting companies who were involved in planning a successful event.

Plan Now for AISTech 2006 in Cleveland

AISTech 2006 — steel's premier technology event for 2006 — will be held at the Cleveland Convention Center, Cleveland, Ohio, May 1–4, 2006. A call for papers has been issued; visit www.aist.org for complete information on how to submit an abstract for consideration.

More than 100 companies have already purchased exhibit booths. For information or to reserve booth space, visit www.aist.org or contact Geraldine Kane (ext. 639 or gkane@aist.org) or Jeffrey Campbell (ext. 640 or jcampbell@aist.org) at (724) 776-6040. ♦

AIST Foundation at AISTech 2005



Bose Wave Music System Raffle

The AIST Foundation held a raffle at AISTech 2005 to raise funds to support AIST Foundation programs. ABB sponsored the raffle of a Bose Wave Music System. All members who donated to the Foundation received a chance to enter the drawing, raising a grand total of \$3,440. Karl Saylor of CCPI Inc., Blanchester, Ohio, was the winner of the Bose System.



The AIST Foundation would like to thank ABB for sponsoring this raffle. Special thanks to H. Duff Hunt, Foundation Trustee, TXI Chaparral Steel, for his efforts in garnering close to \$1,800 in donations to the AIST Foundation through raffle ticket sales.

AIST Foundation NASCAR Donations

NASCAR graciously provided a race car for display in the Exhibit Hall at AISTech 2005. Thank you to all who made donations for the opportunity to have their photo taken in the race car. A total of \$335 was raised to support AIST Foundation



AIST Foundation Golf Classic 2005



The second annual AIST Foundation Golf Classic was the kickoff event for AISTech 2005. The outing was held on Sunday, May 8, 2005, at the Highland Creek Golf Club in Charlotte, N.C. The weather was perfect for the golfers who raised more than \$19,000 to support AIST Foundation programs.

The AIST Foundation would like to thank all the golfers who participated and the companies who sponsored this event. Visit the AIST Foundation Web site at www.aist.org/foundation to view a photo album of the day's activities.



Thank You, Sponsors!

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Contest Winners

Winning Foursome

Bernhard Schiefer, MECC-USA
Jim Brooks, Superbolt
Bob McCurdy, Superbolt
Mike Farley, Injection Alloys

Closest to the Pin

Darrell Applegate, Nucor Steel-Indiana

Longest Putt

Jerry Nelesen, National Recovery Systems

Longest Drive

Todd Miller, Chemical Lime Co.



Highland Creek Golf Club • Charlotte, N.C.

Thank you to the AIST Foundation Golf Committee Chair, John Ferriola, Nucor Corp.

