



THE  
**SYSTEMS**  
GROUP

VICES • FAB & MA

**SES**

Engineered  
Equipment

**Nidec**

All for Industry

RUSSULA

FALK

**SKF**

Heraeus

tenova

tenova  
METALS

PRIMETALS

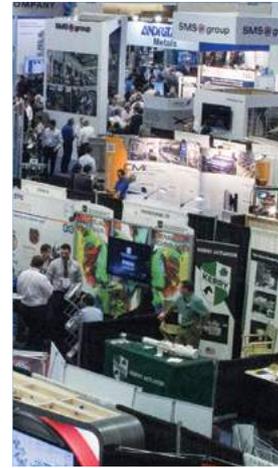
NSK  
TODOT

Pyrotech

COMET

# AISTech<sup>®</sup> 2017

The Iron & Steel Technology  
Conference and Exposition



## AISTech 2017: A Retrospective

By Sam Kusic, news editor



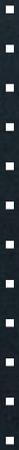
What happens when this Steel City association travels to a Music City destination? You get a steel technology conference in tune with the industry and its host city.

And together, they made sweet harmony at the 14th installment of AISTech, which was held 8–11 May 2017 at the Music City Center in Nashville, Tenn., USA.

Officially, the conference drew 6,274 people to America's music capital. Previous renditions of AISTech have been better attended, but this year's turnout was healthy for a venue that's further afield than some are accustomed to and for an industry that's continuing to mind travel dollars.



**6,274**  
industry participants



“The new Nashville venue is reflective of the North American steel industry’s southern migration over the past 20 years. We’re very pleased with the industry’s support, which enabled AISTech 2017 to showcase our largest technology conference to date,” said Ron Ashburn, AIST executive director.

## A New Venue

This was actually AISTech’s second trip to the Nashville area, having traveled there in 2004. That year, the conference was held at the famous Opryland resort on the outskirts of town. But this year, the conference took place in the heart of downtown in the city’s new convention center.

And undoubtedly, downtown Nashville suited the convention well. The downtown area was walkable, the hotels were convenient to the Music City Center, and the facility handily accommodated the AISTech exposition. In fact, AIST staff fielded not a single negative comment about the venue.

## Manufacturing on Display

Despite being something of an unknown, exhibiting companies clearly were willing to give the venue a chance and voiced their support with their registrations.



This year, 535 companies took up 91,600 square feet of exhibition hall space. Strictly in terms of numbers of exhibiting companies, it’s AISTech’s second-best turnout.

“By their nature, steel industry suppliers are inherently efficient with their time and money. The AISTech exposition represents a strong value proposition for all suppliers of products and service to the steel industry. It’s a good investment,” Ashburn said.

## A Rebounding Market

One thing noticeably absent from AISTech 2017 was the industry gloom that shadowed the weeks leading up to last year’s conference. A year ago, prices were plummeting, mills were idling and scores were being put out of work.

In the year since, the crash has been arrested and the industry has stabilized.

“Yes, challenges remain, but steelmakers are slowly regaining lost ground. As our markets have stabilized, we’ve seen cautious optimism and enough confidence to undertake some sizable capital investments,” Ashburn said.



..... **504**

technical presentations



Still, the industry remains challenged by global excess capacity and unfairly traded imports. Panelists at the annual Town Hall Forum spoke to those challenges.

“We can’t allow China and other nations to continue to harm our domestic industry for the period of time it’s going to take to have that capacity removed. We hope we will see under the Trump administration firm and measurable dates for capacity reduction,” said Jim Dudek, vice president of asset revitalization and manufacturing excellence at United States Steel Corporation.

## Steel Knowledge

The conference featured more than 500 technical presentations related to all aspects of steelmaking, from basic metallurgy to processing of finished steels. The technology conference began with the Howe Memorial Lecture, which this year was delivered by University of Cambridge metallurgist and professor Sir Harry Bhadeshia. He spoke to a standing-room-only crowd about hydrogen embrittlement, a problem that was first

described more than a century ago and has bedeviled steelmakers and steel users the world over.

## Roll On, Big River

From a technical perspective, one of the more significant developments in the past year has been



# 1,130

President's Award  
Breakfast attendees



the opening of the Big River Steel facility, a modern, technologically advanced electric arc furnace facility designed to produce value-added steels for the electrical and automotive markets.

Attendees learned more about the mill's ramp-up from chief executive David Stickler, who delivered the William T. Hogan, S.J. Lecture during the annual President's Award Breakfast.

He said the mill has been reaching milestones more quickly than had been expected. In January, it set a first-full-month production record, making 63,000 tons. By the end of February, it was turning a profit before interest, taxes, depreciation and amortization. And by April, it was running at four-fifths of its rated capacity.

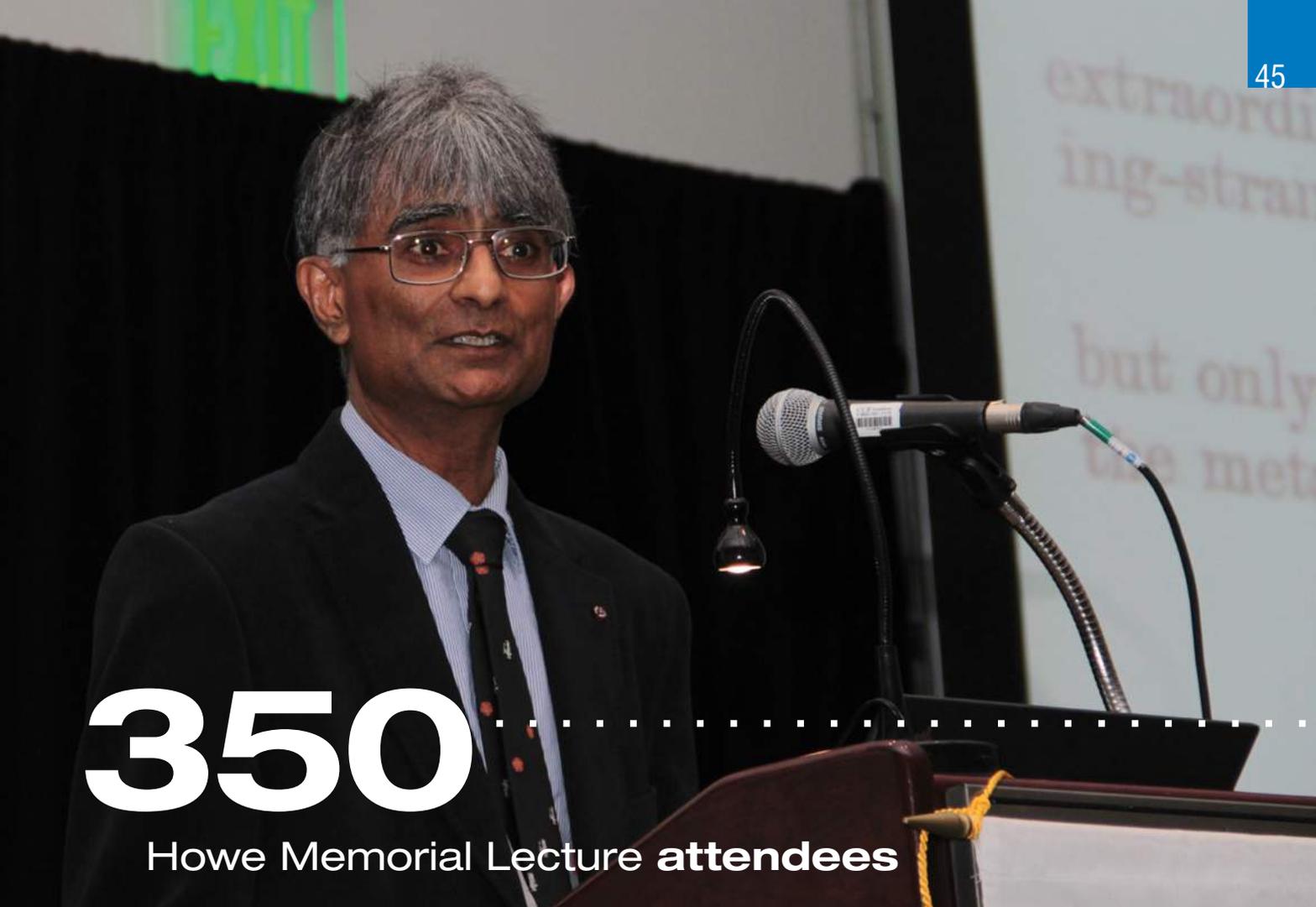
Stickler said the ramp-up of Big River's mill has, from the get-go, proceeded quite well, pointing out that it managed to produce prime, commercial-grade steel in its first heat. He also touted the mill's automation and the efficiencies that automation has allowed for. As it is, Big River will be capable of producing 4,000 tons of steel per man per year, he said.

AISTech participants had an opportunity to see some automation and other modern manufacturing processes at work during the mill tours. This year, participants had an opportunity to walk through Bridgestone Corp.'s La Vergne plant, which makes truck and bus tires; Nucor's Decatur sheet mill; and Gerdau Construction Products' Nashville facility.

## New Leadership

AISTech marks the annual change in leadership at AIST as the association's board president concludes his or her one-year term. This year, it was Wendell Carter, vice president and general manager of ArcelorMittal's Indiana Harbor steel works in East Chicago, Ind., USA, who handed off the reins.

Reflecting on the past year and the industry at large, Carter issued a call to leadership to the next generation of steelworkers during the President's Award Breakfast, telling



# 350

## Howe Memorial Lecture attendees

them that there has never been a more opportune time to be involved in steelmaking.

“For those of my generation, and there are many of us, the whistles are blowing, our shifts are ending. It’s time to go home, kick up our feet and have a beer. Or several. And for you that means we’re relinquishing our seats at the controls and behind the managers’ desks. You don’t have to wait for that opportunity; it’s now. You can begin making your own marks and stake your own claims in this business. The paths to advancement are wide open for you,” he said.

And at the same time, he encouraged those in the industry at large to be ambassadors.

“We need to think not only about how to produce steel better, but how to promote it better. We need to be visiting every college campus and we need to be persuading school administrators that steel is a viable and lucrative career path. We need to be talking with students on those campuses, telling them of the opportunities there are for talented, creative and hard-working men and women,” he said.

Perhaps one of the most dedicated women in the steel business is AIST’s own Gerry Kane, who retired in June, concluding a 47-year career. Kane, through her hard work and commitment came to be one of the steel industry’s most well-known faces.



### Case Study 1

#### ICDP Rolls in F5 to F7

Supplier Part Type	Typical Rolls	Normal Operating Cost			Premium	
		Team	Roll Cost	Condition (24-CR2 9999)	Rollback P/C	Condition (P-CR2)
Team A	2,600,127	2,196	\$20,700	\$0.176	\$2,724	\$0.000
Team B	147,336	2,424	\$21,700	\$0.168	\$0	\$0.000
Team C	774,000	2,674	\$28,500	\$0.174	\$34,914	\$0.125
Team D	1,801,114	2,564	\$20,000	\$0.147	\$154,624	\$0.070
Team E	3,274,000	2,284	\$21,000	\$0.160	\$24,907	\$0.000
Team F	2,147,170	2,284	\$24,000	\$0.210	\$18,400	\$0.000
Team G	3,488,019	2,137	\$24,000	\$0.190	\$7,400	\$0.000
Team H	3,102,377	1,930	\$20,415	\$0.164	\$48,000	\$0.176

Introduction History of TCO Case Studies Conclusions

113

technical sessions

# US\$30,000

raised for **AIST Foundation**



“She is the reason behind AIST’s global leadership in advertising and exposition sales,” said Ashburn.

A fixture at AISTech, this show was her last, and the association took the opportunity to say good-bye to Kane during the President’s Award Breakfast.

Calling her to the dais, Ashburn spoke to her decades of service to the association and the steel industry.

“Gerry, on behalf of all staff, past, present and future, and for many of our members, you have been our inspiration, our mentor, our resident fashion designer, and — in good times and bad — our friend, and godmother. With an infectious smile, unparalleled grace and disarming charm, you’ve shown us how to be the very best. Your youthful enthusiasm and can-do attitude have profoundly impacted us all, and now embody the true spirit of this organization,” Ashburn told the audience, who responded with a standing ovation.

## A Lucky Day

There was applause aplenty for another industry participant, Ernesto Scarpitti, the

safety manager at Delta Railroad Construction Inc. Scarpitti won the annual pickup truck giveaway and left with the keys to a brand new 2017 Chevy™ Silverado.

To win the pickup, Scarpitti had to pick the lucky key from a row of keys, of which only one would unlock the truck. He chose the 12th set, a nod to his wedding day, 12 October. ♦

