About the Program
The symposium will deliver practical information and experiences from crane maintenance personnel, crane manufacturers, equipment manufacturers, and engineering consultants who strive to make electric overhead traveling (EOT) cranes and their runways the safest, most reliable, and most durable machinery and equipment in the industry. This two-day program will include presentations focused on safe work practices and ergonomics; electrical, mechanical and structural maintenance techniques; crane inspection technologies; and best practices in EOT crane modernizations. As part of the Crane Symposium program, the Crane Innovator of the Year Award winner will be announced, recognizing the individual who has brought forth the latest in technology, or increased efficiencies in operational and maintenance practices for the continuous improvement of heavy industrial cranes.

Who Should Attend
Plant maintenance staff; applications, electrical, mechanical, safety, service and design engineers; operations and maintenance personnel and management; and those people who supply parts, equipment and services to the industry. Anyone who has responsibility for cranes and crane service and is interested in improvements and incidents in this area should attend.

Organized By
AIST's Cranes Technology Committee.

Event Sponsors
### Sunday, 11 June 2017

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<tr>
<td>4 p.m.</td>
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<td>5 p.m.</td>
<td>Reception</td>
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### Monday, 12 June 2017

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<td>7 a.m.</td>
<td>Registration and Continental Breakfast</td>
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<td>8 a.m.</td>
<td>Introductions and Opening Remarks</td>
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<td>8:15 a.m.</td>
<td>Crane Maintenance Inspection and Repair Guideline</td>
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<td>8:45 a.m.</td>
<td>Replacement Ladle Cranes</td>
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<td>9:15 a.m.</td>
<td>A Review of Case Histories in Failure Analysis of Rails and Thermite Welds</td>
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<td>9:45 a.m.</td>
<td>Break</td>
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<td>10 a.m.</td>
<td>How to Approach a Crane Capacity Upgrade</td>
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<td>10:30 a.m.</td>
<td>It Really Is Not Magic: Eddy Current Testing for Crane Drum and Pinion Gears</td>
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<td>Enclosed Crane Cab Air Quality</td>
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<td>Periodic Inspection and Testing of Lifting Magnets</td>
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<td>Noon</td>
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<td>1:15 p.m.</td>
<td>Application of AC Squirrel-Cage Motors to Traverse Drives on 250-vdc Cranes</td>
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<td>Break</td>
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<td>2:30 p.m.</td>
<td>Crane Automation Oriented to Warehouse Management Systems and Safety</td>
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3 p.m.
**Is Your Crane Smart?**
Casey Cummins and Pat Buehler, Magnetek
This presentation will explore how today’s wireless and diagnostic smart technology can be integrated with your crane to provide instantaneous, detailed information about your crane’s performance, allowing you to diagnose and troubleshoot from onboard the crane or remotely.

3:30 p.m.
**Reducing Crane Accidents Through Training**
James Lang, Konecranes Inc.
Proper training can reduce up to 70% of crane-related injuries and deaths. This presentation discusses how to prevent accidents involving overhead cranes, as well as recommended training.

4 p.m.
**Panel Discussion**

5:30 p.m.
Dinner on the Gateway Clipper

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**Tuesday, 13 June 2017**

7 a.m.
Continental Breakfast

8 a.m.
**Introduction and Opening Remarks**

8:15 a.m.
**Core of Lifting the Heart of the Machine**
Randy Cantrell, Konecranes Inc.

8:45 a.m.
**Material Handling: The Handling of Coils, Rolls and Slabs in the Steel Mill Environment**
John Novak, Primetals Technologies USA LLC
This presentation is based on the handling of coils, rolls and slabs, and the types of devices best suited for the applications.

9:15 a.m.
**Proper Grouting Techniques for Crane Runways**
Dan Termunde, BASF Construction Chemicals, and Chip Miller, Molyneux Industries Inc.
This presentation will discuss precision grout fundamentals, different grout technologies — epoxy, cementitious and hybrid grout — key physical properties and design considerations. Crane rail project profiles will be highlighted.

9:45 a.m.
Break

10 a.m.
**Meltshop Crane Maintenance and Reliability Practices – Sustained and Enhanced**
Tom Stevely, Nucor Steel Gallatin

10:30 a.m.
**Flash-Butt Rail Welding Update**
Gene Adams, Delta Railroad Construction Inc.
The presentation will cover the maintenance benefits of flash-but welding, safe work practices and different methods of flash-but welding.

11 a.m.
**Applying Lasers for Crane Safety**
Rich Warriner, Foley Material Handling Co. Inc.
This presentation will explore the application of lasers for crane safety, load centering and overload warnings.

11:30 a.m.
**The Evolution of the Crane Technology Committee, Ambitions, Membership and Collaboration**
Charlie Totten, T&M Equipment Co.

Noon
Lunch

1:15 p.m.
**Radio-Based Distance and Position Measurement for Cranes**
Edgardo LaBruna, Janus Automation LLC

1:45 p.m.
**Advancements in Lubrication Technology**
Ricardo Escobedo, Shell Oil Co.
This presentation covers overhead electric cranes lubrication.

2:15 p.m.
Break

2:30 p.m.
**Safety and Ergonomics for Crane Cabs and Cab Operators**
Ajay Bajaj, Flow in Motion LLC, and Mark Barnhoon, Merford
This presentation covers how to make cranes safer through cab and chair design.

3 p.m.
**Safety Requirements: Charge and Teeming Cranes**
Alex Gomez, Grúas Jaso Cranes
Review of the main design characteristics of this type of cranes to improve their safety of operation.

3:30 p.m.
**The Use of Drones for Crane Runway Inspections**
Scott Sambuco and Rich Schutte, Orbital Engineering Inc.

4 p.m.
**Panel Discussion**

4:30 p.m.
Conference Adjourn
Registration

AIST Members

**US$795**

by 1 May 2017

**US$895**

after 1 May 2017

Non-Members

**US$1,010**

by 1 May 2017

**US$1,110**

after 1 May 2017

Registration Includes

Sunday reception; continental breakfasts, lunches and continuous breaks Monday and Tuesday; a dinner Monday evening; and a course workbook or flash drive including presentations.

Hotel Accommodations

A block of rooms has been reserved at The Omni William Penn. Please call the hotel at +1.800.843.6664 by 17 May 2017 to secure the AIST discount rate of US$169 per night for single/double occupancy.
Upcoming Events

> Managing Technology — Big River Steel
12–14 September 2017
Sheraton Memphis Downtown Hotel > Memphis, Tenn., USA

> Sheet Processing and Finishing Lines — A Practical Training Seminar
17–21 September 2017
Ann Arbor Marriott Ypsilanti at Eagle Crest > Ypsilanti, Mich., USA

> Material Handling and Transportation Logistics — A Practical Training Seminar
10–12 October 2017
The Seelbach Hilton > Louisville, Ky., USA

> Continuous Casting — A Practical Training Seminar
16–19 October 2017
Courtyard by Marriott > Fort Wayne, Ind., USA