

Upcoming Events

Pipe and Tube — A Practical Training Seminar

23–26 September 2019
Doubletree Birmingham Perimeter Park
Birmingham, Ala., USA

Secondary Steelmaking Refractories —

A Practical Training Seminar

14–17 October 2019
Hilton Palacio Del Rio
San Antonio, Texas, USA

Continuous Casting —

A Practical Training Seminar

21–24 October 2019
Holiday Inn Downtown Memphis
Memphis, Tenn., USA

The Making, Shaping and Treating of Steel: 101

29–30 October 2019
Hilton Milwaukee City Center
Milwaukee, Wisc., USA



Sponsored by

Plant tour:

Steel Dynamics Inc. –
Engineered Bar
Products Division
or
Indianapolis Indians
Victory Field

Maintenance & Reliability for the Next Generation

10–12 September 2019
Embassy Suites Downtown
Indianapolis, Ind., USA



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About the Program

The AIST Maintenance & Reliability Technology Committee, AIST Lubrication & Hydraulics Technology Committee, and industry leaders have joined together for 2019 Maintenance & Reliability for the Next Generation. This workshop-based training seminar will provide attendees with hands-on instruction, tools, and the best available technologies for mechanical, electrical, lubrication, hydraulics, management system maintenance and reliability solutions. In addition, maintenance and outage planning, system design, and maintenance troubleshooting and techniques will all be covered. Manufacturing reliability is an integral part of sustainability in the metals industry. Improvement in reliability is essential to assuring manufacturing results at the lowest cost. Both operations and maintenance personnel must understand the direction their organizations need to take with respect to improving and managing their equipment maintenance programs.

Who Should Attend

The conference is intended for maintenance, operations and engineering personnel. It is useful for individuals who are in middle management or frontline supervisor positions, as well as maintenance, operational, and reliability personnel responsible for equipment reliability processes, including planners, schedulers, senior tradesmen, maintenance managers, maintenance engineers, plant engineers, project engineers, maintenance superintendents, operators and operations managers. Maintenance technology, equipment and service suppliers should also attend.

Professional Development Hours

This course may qualify for up to 18.5 Professional Development Hour (PDH) credits. Each attendee will receive a certificate listing the quantity of PDH credits earned for the course. This course is not approved for PDH credits in New York, Florida, North Carolina and Oklahoma.

Organized By

AIST's Maintenance & Reliability and Lubrication & Hydraulics Technology Committees.

Registration Includes

Registration includes breakfast and lunch Tuesday and Wednesday, reception Wednesday and Thursday, plant tour, and a course workbook or flash drive including presentations.

Hotel Accommodations

A block of rooms has been reserved at Embassy Suites by Hilton Indianapolis Downtown. Please call the hotel at +1.317.236.1800 by 19 August 2019 to secure the AIST discount rate of US\$159 for single/double occupancy.

| AIST Members | | AIST Non-Members | |
|-----------------|--------------------|------------------|--------------------|
| US\$895 | US\$995 | US\$1,110 | US\$1,210 |
| by 29 July 2019 | after 29 July 2019 | by 29 July 2019 | after 29 July 2019 |

Student Rate

The AIST Foundation is pleased to provide assistance to students interested in attending AIST Technology Training Conferences. Program details are available online at AIST.org > Students & Faculty, or contact Shannon Kiley at +1.724.814.3064.

Company Discount

Three or more individuals from the same facility attending any one seminar can receive a 10% discount per person. All registrations must be received together along with payment to qualify for the discount. Not applicable with any other discount.

Cancellation/Substitution

If you must cancel, please email or fax a notice of cancellation to skiley@aist.org or +1.724.814.3064, and a refund will be issued. Cancellations received less than two weeks prior to the event are non-refundable. If you would like to send a substitute, a new registration form must be faxed for that person, indicating the replaced person on the form. Be certain that the membership status is equivalent or note otherwise.

Sponsorship Opportunities Available

Please contact Shannon Kiley at +1.724.814.3064.

AIST.org

Schedule of Events



Monday, 9 September 2019

4–6 p.m.
Registration

Tuesday, 10 September 2019

7 a.m.
Registration and Breakfast

8 a.m.
Welcome
Carl Garringer, Steel Dynamics Inc. – Structural and Rail Division

8:10 a.m.
Group Activity

8:45 a.m.
Safety: It's All About Maintenance and Reliability
Justin Hoover, Steel Dynamics Inc.
This presentation will focus on the importance of why safety is all about maintenance and reliability. Without logic and employee involvement, how can we as an industry be confident that we are keeping everyone safe?

9:30 a.m.
Break

9:45 a.m.
Reliability Achievement Award Overview
Ken Flowers, Butech Bliss

10 a.m.
2019 Gold Reliability Achievement Award Winner – From Firefighting to First-Class Maintenance
Don McDaniel and George Miconi, Worthington Steel Columbus Steel Division
A road map to improving reliability is provided in this session.

10:45 a.m.
Maintenance and Reliability: What Does Good Look Like
Randy Heisler, Life Cycle Engineering

11:30 a.m.
Digital Transformation: A Primer and Maintenance Applications
Patrick Gallagher, Management Science Associates

Noon
Lunch

1 p.m.
Our High School Training Program
Don McDaniel, Worthington Steel Columbus Steel Division

1:30 p.m.
Journeyman Training
Jim Sberna, AK Steel – Middletown Works
This presentation will illustrate the joint venture (AK Steel and IAM LL 1943) internal accredited apprenticeship program.

2 p.m.
Digital Transformation
Greg Savernik, U. S. Steel – Great Lakes Works

2:30 p.m.
Break

2:45 p.m.
Maintenance Scheduling Procedures Using MMS Systems
Trent Richards, RedList

3:45 p.m.
Break

4 p.m.
Condition Monitoring II
Bob Miller, IVC Technologies
This presentation gives a brief overview of condition monitoring, including advances in technologies and applications.

4:30 p.m.
A Novel Platform for Monitoring Fluid Health and Filter Life
Mrinal Mahapatro, Pall Corp.
Traditional methods of determining fluid health under operating conditions involve sample collection and laboratory analysis, a time-consuming process. Further, contamination introduced during fluid sampling can erroneously raise alarms or mask underlying issues. A robust fluid and filter monitoring platform utilizing the latest in sensor and electronics technology can be harnessed to overcome these limitations. Further, sensor data can be relayed wirelessly to a secure cloud-based location, allowing dynamic algorithms to predict key properties. An in-line monitoring technology coupled with cloud-based architecture is a powerful tool that will allow predictive decisions to be made in a timely manner.

5 p.m.
Reception

Wednesday, 11 September 2019

7 a.m.
Breakfast

8 a.m.
Plant Tours:  Steel Dynamics Inc. – Engineered Bar Products Div.
or
Indianapolis Indians Victory Field Tour

Noon
Lunch

1 p.m.
2019 Co-Silver Reliability Achievement Award: Burner Reliability Improvement and Optimization
Kyle Tew, Steel Dynamics Inc. – Structural and Rail Division

1:30 p.m.
Inside a Gearbox
Cory Mecham, Rexnord Industrial Services
This presentation discusses key considerations to the design and maintenance of gearboxes along with troubleshooting aides.

2 p.m.
Gear Oil Training
Howard Lockhart, Klüber Lubrication
Not all gear oils are alike. Gear oils differ in oil type, viscosity and additive packages to provide tailored performance characteristics to meet specific application conditions. Selecting the appropriate gear oil for your application will extend equipment life, increase productivity and improve energy efficiency.

2:30 p.m.
Break

2:45 p.m.
Couplings
Vincent Warth, The Timken Co.
A technical review of the various types of couplings and common application usage will be given.

3:15 p.m.
Proper Lubrication for Spindles/Couplings
Brian Kusak, Quaker Chemical Corp.
A greased coupling can help to maintain torque transfer and prolong equipment life. This presentation will review lubricating grease and the features of a good grease for coupling lubrication.

3:45 p.m.
Variations in Lubricant Chemistry and Their Performance
David Rosenthal, American Chemical Technologies Inc.
Maintenance managers have come to accept a lubricant's top-off compatibility and rated hour life as appropriate identifiers to its "equivalent" nature when considering alternative supply sources. This presentation will review the differences in chemistries, specifications and performance attributes that are seen with the various approaches to lubricant formulation across a few base fluid families. Results of laboratory testing and in-field experiences will be shared for several synthetic lubricant technologies. The presentation will leave participants with a greater knowledge of compressor lubricant formulation theory and the ability to make more informed decisions in the lubricant selection process.

4:15 p.m.
Break

4:30 p.m.
Roundtable Discussion and Reception

Thursday, 12 September 2019

7 a.m.
Breakfast

8 a.m.
2019 Co-Silver Reliability Achievement Award: Chemical Cleaning at Acid Regeneration Plant
Marc McLeod, ArcelorMittal Dofasco G.P.
Review of the chemical cleaning system installed at the acid regeneration plant, which significantly reduced maintenance costs and equipment downtime.

8:30 a.m.
Pumps – Improving Pump Reliability and Condition-Based Monitoring
Robert Jennings, HydroAire Inc.
The session will begin with a brief overview of pump and system interaction and how to adapt older pumps to the ever-changing system requirements through the advances in pump design, metallurgy, rerates and redesign. The session will focus on solving the problem, rather than simply fixing the pump, and will discuss cost-effective solutions and upgrades that provide pump reliability improvements and energy savings that often pay for the upgrades with a 12- to 18-month return on investment. The session will close with a discussion on maintaining pump reliability through condition-based monitoring.

9 a.m.
Closed-Loop Position Control Fundamentals
Denis Poirier, Eaton Hydraulics - Training Services
This presentation will address the fundamental principles associated with a closed-loop position control system. Cylinder feedback and basic proportional-integral-derivative closed-loop tuning will also be discussed.

9:45 a.m.
Break

10 a.m.
Hydraulic Fluids Cleanliness and Fluid Compatibility
Shawn Waggoner, RelaDyne

10:30 a.m.
Effective Maintenance Scheduling With CMMS Constraints
Randy Heisler, Life Cycle Engineering
Having trouble generating a detailed maintenance schedule because of the constraints of your CMMS? This presentation will provide examples of how to get around those constraints and produce a schedule that is easy to understand and effective in showing available labor hours and work order information that leads to efficient weekly resource utilization and schedule compliance.

11 a.m.
Air-Oil Lubrication: Further Analysis of a Growing Technology

11:30 a.m.
Wrap-Up and Adourn