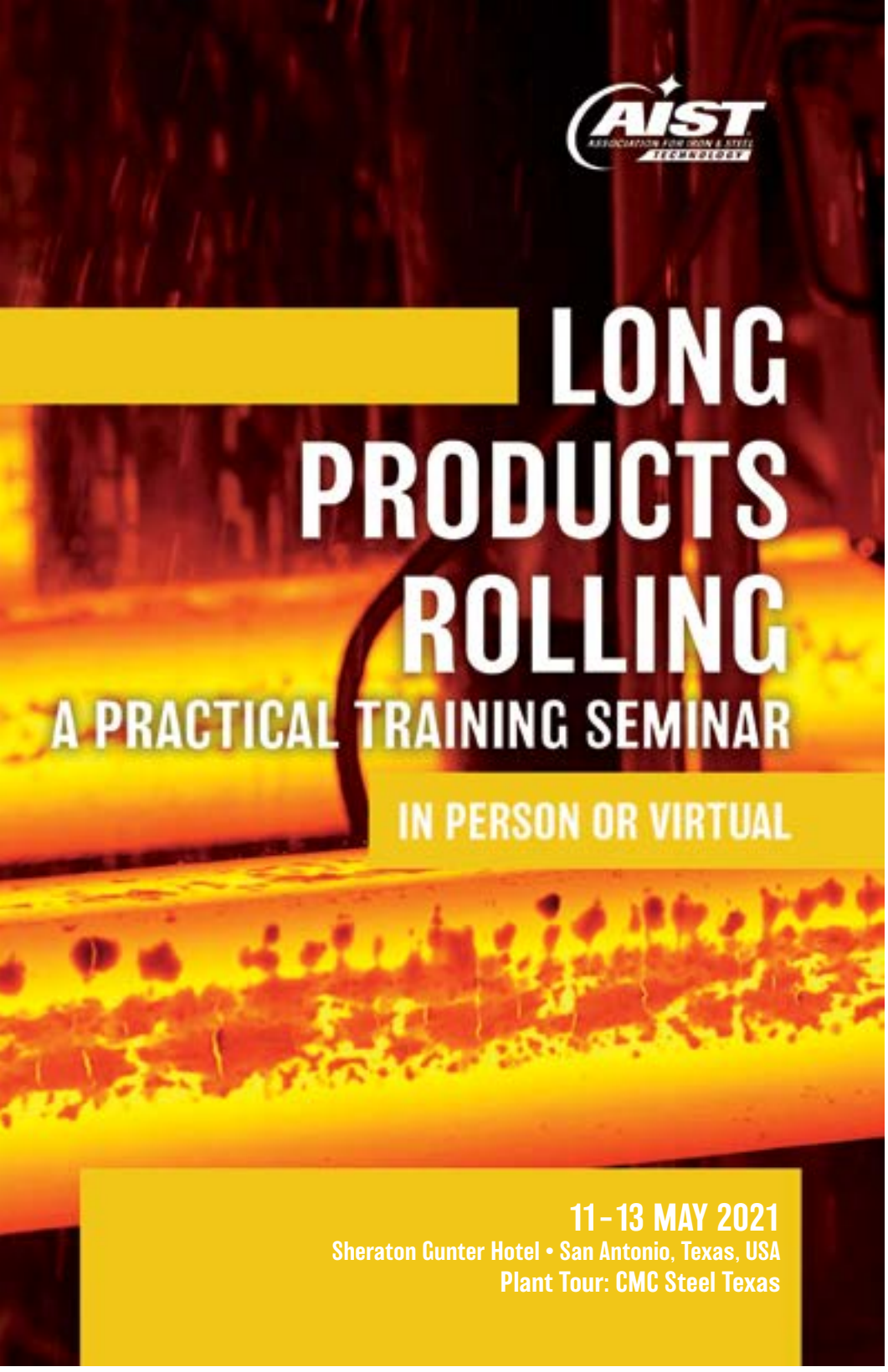


ABOUT THE PROGRAM

This seminar will give an introduction to the process, equipment and ancillaries utilized to produce long products; the primary focus is on the process and equipment customarily found within the rolling mill building, i.e., reheat furnace, rolling mill and finishing end. The seminar will contain both theoretical presentations and real-world case studies from long products producers in North America. The presenters represent a cross-section of industry experts in equipment, process, operations and maintenance. The seminar aims to expand an attendee's knowledge of the complete process and how safety, quality, yield, and facility utilization can be affected at each step.

WHO SHOULD ATTEND

Personnel involved in the production or promotion of long products, i.e., mill managers, rollers, roll shop, floor operators, maintenance, sales, downstream processors and other support personnel who wish to gain a better understanding of the long products production process and final end products.

ORGANIZED BY

AIST's Long Products Technology Committee.

PROFESSIONAL DEVELOPMENT HOURS

This course may qualify for up to 18.25 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.

BRING YOUR OWN YOUNG PROFESSIONAL
Visit AIST.org/byoyp for more information.

REGISTRATION INCLUDES

In-person event registration includes breakfast and lunch Tuesday–Thursday; reception Tuesday; plant tour with bus transportation; and a course workbook or flash drive including presentations. Virtual event registration includes Zoom link to access live presentations and online link to download conference materials.

HOTEL ACCOMMODATIONS

A block of rooms has been reserved at the Sheraton Gunter Hotel. Please call the hotel at +1.210.227.3241 by 12 April 2021 to secure the AIST discount rate of US$139 per night for single occupancy.

AIST MEMBERS In Person or Virtual	NON-MEMBERS In Person or Virtual
US$945	US$1,190

FEATURED PLANT TOUR

CMC Steel Texas

UPCOMING EVENTS

Hot Sheet and Plate Rolling Fundamentals – A Practical Training Seminar
8–11 February 2021
Virtual Meeting

DRI & HBI: Logistics, Production and Utilization Seminar
1–3 March 2021
Virtual Seminar

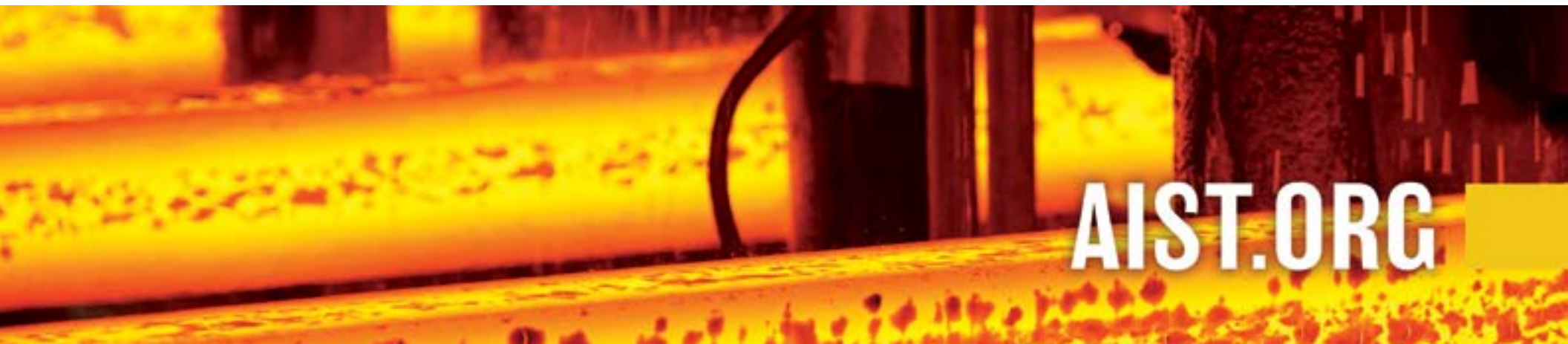
Digital Transformation Forum for the Steel Industry
17–20 May 2021
Omni William Penn Hotel
Pittsburgh, Pa., USA

Modern Electric Furnace Steelmaking Fundamentals – A Practical Training Seminar
24–28 May 2021
Nashville Marriott at Vanderbilt University
Nashville, Tenn., USA

Maintenance Solutions: Fundamentals and New Frontiers
21–23 September 2021
Embassy Suites San Antonio Riverwalk
San Antonio, Texas, USA

Association for Iron & Steel Technology
186 Thorn Hill Road
Warrendale, PA 15086-7528 USA
+1.724.814.3000 • Fax +1.724.814.3005 • AIST.org

NON-PROFIT
U.S. POSTAGE
PAID
Pittsburgh, PA
Permit No. 498



SCHEDULE OF EVENTS

Monday, 10 May 2021

4–6 p.m. CST
Registration

Tuesday, 11 May 2021

7 a.m. CST
Registration and Breakfast

8 a.m. CST
Introduction

8:05 a.m. CST
Welcome and Overview of CMC Steel Texas
Christopher Welfel, CMC Steel Texas

8:30 a.m. CST
Changing the Mindset for a Safer Environment
Robbie Sims, Nucor Steel – Berkeley

9:30 a.m. CST
Break

9:45 a.m. CST
Rod/Bar Products and Applications
Robert Cryderman, Colorado School of Mines
This presentation provides a summary of bar and rod applications in finished parts, as well as how the parts are used in service. Key processes utilized to convert hot-rolled product into finished parts are described, including straightening, inspection, cold finishing, forging, in-process heat treatment, machining and final heat treatments.

10:45 a.m. CST
Rolling Mill Metallurgy
Andrew Schless, Nucor Steel – South Carolina

Noon
Lunch

1 p.m. CST
Pass Design and Rolling Theory
Joseph Kennedy, Quad Engineering Inc.
This presentation will cover pass design terminology, basic rolling principles, and examples of their application and how an operator can use rolling theory to improve decisions made in the mill.

2 p.m. CST
Break

2:15 p.m. CST
Pass Design and Rolling Theory, Part II
Joseph Kennedy, Quad Engineering Inc.

3:15 p.m. CST
Break

3:30 p.m. CST
Overview and Start-Up of Sedalia
Jarrod Prill and Thomas Burnham, Nucor Steel Sedalia LLC

4:30 p.m. CST
Question-and-Answer Session

5–6 p.m. CST
Reception

Wednesday 12 May 2021

7 a.m. CST
Breakfast

8 a.m. CST
Reheat Furnace Basics
John Chrobak, Andritz Metals Inc.

9:15 a.m. CST
Break

9:30 a.m. CST
Descaling and Spray in Hot Rolling
Lesli Peterson, Spraying Systems Co.
Basic descale spray theory in the hot rolling process. Topics will cover nozzles used in the process, considerations on how to place the nozzles and nozzle maintenance.

10:15 a.m. CST
Break

10:30 a.m. CST
Technology of Merchant Bar Mills
Mario Fabro, SMS group Inc.
Steel shapes such as angles, channels and flats, commonly known as merchant bars, are used in a variety of industries, such as light commercial construction, industrial fabrication and various manufacturing processes. The forming of these shapes in a rolling mill presents some challenges not present when rolling simple rounds, such as complex pass sequence, guiding, cooling, straightening and packaging. This presentation will cover most of them and the effective solutions in modern merchant bar rolling.

11:45 a.m. CST
Lunch

1 p.m. CST
Torque and the Rolling Stand
Kevin Barbee, Danieli Corp.
This segment provides a comprehensive description of the mechanical components of a rolling mill stand, how they function and how they handle the stress of rolling. An in-depth investigation of both the driveline and the mill stand will include how the components work together, common failure modes, preventive and predictive maintenance strategies, early indicators of functional failures, and product quality problems that can stem from driveline wear.

2:15 p.m. CST
Break

2:30 p.m. CST
Work Rolls
Bill Posey, SinterMet LLC
Discussion regarding multiple types of rolls for hot rolling applications.

3:45 p.m. CST
Break

4:00 p.m. CST
Motors, Drive and Speed Control
Eric Thorstenson, Russula Corp.
Motor, drives and speed control for long products rolling mills.

5:15 p.m. CST
Question-and-Answer Session

Thursday, 13 May 2021

7 a.m. CST
Breakfast

8 a.m. CST
Cutting Technologies and Saw Cutting
Peter Haas, Haas Saw & Supply
This presentation will analyze various saw cutting methods used by long products rolling mills. Included in the discussion will be a detailed review of safety issues, cost calculations, comparison of saw cutting machines and saw blade designs, maintenance and use of saw blades, troubleshooting guidelines, and cutting parameters. Information will also be provided on saw blade tracking, performance analysis, wear life comparison, creating benchmarks for improvement, and planned saw blade changes to prevent mill downtime due to cutting issues.

9:15 a.m. CST
Break

9:30 a.m. CST
Bar Finishing
Kevin Barbee, Danieli Corp.

10:45 a.m. CST
Break

11 a.m. CST
Predictive Maintenance Tools and Strategies for Long Products
Daniel Phillips, Regal Beloit America, Inc.
Performing maintenance on equipment only when the condition warrants it has been proven to be the most cost-effective strategy for industrial organizations. However, efficiently determining the condition can be challenging and requires that the right technology be deployed at the right time. This presentation will cover numerous technologies utilized to monitor and analyze rotating equipment, best practices, and several live case studies.

Noon
Lunch

1 p.m. CST
Plant Tour of CMC Steel Texas

5 p.m. CST
Return From Plant Tour and Adjourn Conference