



Long Products

A Practical Training Seminar

19–22 February 2018

Embassy Suites by Hilton Fort Worth Downtown

Fort Worth, Texas, USA

Featured Plant Tour: Gerdau Long Steel North

America Midlothian Mill



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 along with 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.

Professional Development Hours

This course may qualify for up to 17.5 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 Long Products Technology Committee.



Featured Plant Tour

Gerdau Long Steel North America Midlothian Mill

Registration Includes

Registration includes breakfasts and lunches Tuesday, Wednesday, and Thursday; reception Tuesday; plant tour with bus transportation; and a course workbook or flash drive including presentations.

Hotel Accommodations

A block of rooms has been reserved at The Embassy Suites by Hilton Fort Worth Downtown. Please call the hotel at +1.817.332.6900 by 26 January 2018 to secure the AIST discount rate of US\$169 per night for single occupancy.

AIST Members

US\$845

by 8 January 2018

US\$945

after 8 January 2018

Non-Members

US\$1,060

by 8 January 2018

US\$1,160

after 8 January 2018



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Schedule of Events

Monday, 19 February 2018

4–6 p.m.
Registration

Tuesday, 20 February 2018

7 a.m.
Registration and Breakfast

8 a.m.
Introduction

8:05 a.m.
Welcome and Overview of Gerdau Long Steel North America Midlothian Mill

8:30 a.m.
Changing the Mindset for a Safer Environment
Joe Jacobin, Nucor Steel–Berkeley, and Derek Voight, Nucor LMP Steel Inc.
This presentation discusses ideas to change the safety mindset and bring changes to your company. Just like maintaining a healthy lifestyle, changing a company's safety culture is an ongoing, continuously improving task that, in the long run, will pay dividends.

9:30 a.m.
Break

9:45 a.m.
Rolling Mill Metallurgy
Terry Rasmussen, Nucor Steel–Nebraska
This presentation will discuss general metallurgy of steelmaking and rolling.

11 a.m.
Lunch

11:15 a.m.
Obtaining Value From Your Environmental Management Program
Sean Wilson, Nucor Steel Seattle Inc.
Thoughts and experiences on moving your EMS from a required risk management system to something that adds value to the entire organization.

Noon
Lunch

1 p.m.

Pass Design and Rolling Theory

Joseph Kennedy, Quad Engineering Inc.

This presentation focuses on 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.

2:30 p.m.
Break

2:45 p.m.

Descaling and Spray Issues in Hot Rolling

Lesli Peterson, Spraying Systems Co.

This presentation will cover the descale process and how spray nozzles are used in the descale process.

3:45 p.m.
Break

4 p.m.

Rod/Bar Products and Applications

Robert Cryderman, Colorado School of Mines

This presentation will describe various customer applications for bar and rod.

5 p.m.
Reception

Wednesday, 21 February 2018

7 a.m.
Breakfast

8 a.m.
Plant Tour of Gerdau Long Steel North America Midlothian Mill 🏭

Noon
Lunch

1 p.m.

Work Rolls

Bill Posey, SinterMet LLC

This presentation will focus on all rolls that come in contact with the wire rod or bar during hot rolling.

2:30 p.m.
Break

Schedule of Events (cont'd)

2:45 p.m.

[Nucor Steel–Texas Spindle Supports](#)

Kevin Barbee, Danieli Corp.

A review of the need, design and implementation of new design spindle supports in Nucor Steel–Texas' TXI Rolling Mill. The TXI Rolling Mill was installed in 1999/2000 for the production of merchant products. During the subsequent years, many factors led to the degradation of the spindle supports and consequent steady rise in conversion cost. Nucor and Danieli began collaborating in 2013 to replace the spindle supports while including key improvements to facilitate improved safety, maintenance and operations.

4 p.m.

Break

4:15 p.m.

[MSTS Long Products Review](#)

Robert Cryderman, Colorado School of Mines

Thursday, 22 February 2018

7 a.m.

Breakfast

8 a.m.

[Torque and the Rolling Stand: Part 1](#)

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.

9 a.m.

Break

9:15 a.m.

[Torque and the Rolling Stand: Part 2](#)

Kevin Barbee, Danieli Corp.

10:15 a.m.

Break

10:30 a.m.

[Nucor Steel–Auburn Finishing End Revamping](#)

Jarrold Prill, Nucor Steel–Auburn, and Mirko Dorigo, Danieli Corp.

Nucor Steel–Auburn commissioned a new finishing end in November 2016. This was the facility's largest capital project to date.

11:30 a.m.

Lunch

12:30 p.m.

[Motors, Drive and Speed Control](#)

Steve Pegg, Russula Corp.

A detailed overview of the electrics and automation in a long products rolling mill.

1:45 p.m.

Break

2 p.m.

[Nucor Steel Kankakee Inc. Automation Upgrade](#)

Steve Pegg, Russula Corp.

3 p.m.

Break

3:15 p.m.

[Commercial Metals Company – Texas Reheat Furnace Upgrade](#)

4:30 p.m.

Question and Answer Session

5 p.m.

Conference Adjourn

