

Pipe and Tube A Practical Training Seminar

24–27 September 2018

Omni Houston Hotel at Westside Houston, Texas, USA Featured Plant Tour: TMK-IPSCO Baytown



Non-Members

US\$1,160

after 13 August 2018

US\$945

by 13 August 2018

Registration Includes

Registration fee includes breakfast and lunch Tuesday and Wednesday, reception Tuesday, breakfast Thursday, 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 Omni Houston Hotel at Westside. Please call the hotel at +1.800.843.6664 by 31 August 2018 to secure the AIST discount rate of US\$135 per night for single/double occupancy.

AIST Members US\$845 US\$1,060

after 13 August 2018

by 13 August 2018

TMK-IPSCO Baytown

Featured Plant Tour

About the Program

This seminar will provide attendees with a broad understanding of the role of pipe and tube in the growing energy markets. The presenters will begin with basic discussions on the various manufacturing methods for producing pipe and tube as well as how steelmaking chemistry is responding to the challenges and opportunities presented by deepwater and horizontal drilling. Presentations will include safety, non-destructive testing, electric resistance welding, pipeline identification, heat treating and coating systems. Attendees will also learn about advances in drilling and fracking processes that are changing the game for the industry.

Who Should Attend

This training seminar is designed for anyone interested in gaining a better understanding of the opportunities for pipe and tube products in today's changing energy market. This includes steel mill personnel, i.e., mill managers, metallurgists, engineers, sales, maintenance; pipe mill personnel, i.e., mill managers, metallurgists, engineers, sales and maintenance; and the energy sector, i.e., managers, petroleum engineers, material science engineers, drilling supervisors, purchasing managers, midstream managers and line pipe construction managers.

Professional Development Hours

This course may qualify for up to 13 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 Pipe & Tube Technology Committee.









Schedule of Events

Monday, 24 September 2018

4–6 p.m. Registration

Tuesday, 25 September 2018

7 a.m. Registration and Breakfast

8 a.m. Introduction

8:05 a.m. Keynote Speaker Piotr Galitzine, TMK-IPSCO

8:45 a.m. Break

9 a.m.

Steelmaking Operations for Pipe and Tube

Frank Baumgardner, Nucor Steel-Decatur LLC

This presentation provides an overview of melting, ladle treatment, casting and rolling of hot band coils for API use; chemistry used for grades and how that has changed over time; effects on quality related to each of the processing steps; and a communication and partnership approach to success.

9:45 a.m. Break

10 a.m.

Hot Rolling — Thermomechanical Processing of Steel for Conversion Into Pipe and Tubular Products

Rafael Mesquita, CBMM North America Inc.

This presentation discusses the physical metallurgy of pipeline steels and the design of microstructure to achieve optimum properties.

11 a.m. Break

11:15 a.m.

ERW, Spiral, U&O Pipe Manufacturing Process

Nico Goessens, SMS Group GmbH

This presentation covers relevant manufacturing processes for welded tubes and pipes — longitudinally submerged-arc welded largediameter pipes (LSAW), high-frequency welded tubes (ERW) and helical submerged-arc welded pipes (HSAW/SSAW). Noon Lunch

1 p.m. Seamless Pipe Production for the Energy Markets Thomas Wagner, SMS group An overview of the seamless pipe production process and applications for the energy market will be presented.

1:45 p.m. Break

2 p.m.

State-of-the-Art ILI Services for Material Property Verification Ollie Burkinshaw, Rosen Group

State-of-the-art in-line inspection (ILI) services are now available to support oil and gas operators in their quest of completing material property verification on aging assets. This presentation will provide an understanding of why material verification is required, the challenges entailed and effective solutions.

2:45 p.m. Break

3 p.m.

Post-Weld Heat Treatment on ERW Welded Pipe Sasha Tupalo, Thermatool Corp.

During high-frequency welding, the OD and ID of the pipe wall experience the highest temperatures, which creates a heat-affected zone (HAZ). Induced heat changes the microstructure and tensile properties of the HAZ and reduces the toughness. Post-weld heat treatment is used to regain the tensile properties of the HAZ that are comparable to the base material.

3:45 p.m. Break

4 p.m.

Maintenance and Service in the Pipe Industry Larry Smith, SMS group Inc.

This presentation will discuss capabilities within the steel industry to repair and modernize aged equipment. A detailed service program can help guarantee consistent strict tolerance during your rolling process.

5–6 p.m. Reception

Schedule of Events (cont'd)



Wednesday, 26 September 2018

7 a.m. Breakfast

8 a.m. Introductions

8:05 a.m.

Safety in the Pipe Industry

Chakeyla Manuel, TMK-IPSCO

The key to the successful execution of the HSE process is the ability to establish a common platform for mitigating risk exposures discovered from both lagging (incident-based) and leading (assessment-based) work processes. Integration of these typically disparate processes and systems provide leaders with information that raises the awareness of and improves responsiveness to resolving management system weaknesses that can expose the company to operational risks, compliance issues and other costly consequences.

8:30 a.m. Break

8:45 a.m.

Premium Connection Testing and Qualification for Shale Drilling Ryan Broussard and Dhiren Panda, TMK-IPSCO

With the recent explosion in horizontal shale drilling activity, operators and tubular manufacturers face new challenges in threaded connection design, testing and qualification. Loading conditions in onshore shale wells differ significantly from traditional offshore applications, upon which most of the existing industry testing standards are based. Learn how companies are validating products in an environment where torsion, fatigue and industry economics play a new role not seen in the past.

9:45 a.m. Break

10 a.m.

Pipe Threading Lubrication

Robert Evans, Quaker Chemical Corp.

Water-based metalworking fluids are often used to minimize cutting insert wear, and improve thread quality in the cutting of high-strength API pipe materials. Such fluids perform this function by providing lubrication and facilitating heat removal at the cutting edge, as well as enhancing the ease of chip removal from the cutting area. This presentation will discuss the friction conditions and lubrication required in the thread cutting process, as well as the function, types and mechanisms of action of water-based thread cutting fluids. It is often useful and beneficial to have capabilities to evaluate the performance properties of a thread cutting fluid prior to use of the fluid in an industrial thread cutting operation. This presentation will also discuss current methods useful for the testing of fluids under controlled laboratory conditions, enabling for a data-driven selection of a given fluid for use. 10:45 a.m. Break

11 a.m.

Specialty Fittings, In-Line Inspection, Material Verification Services Gregory Donikowski, TD Williamson Inc.

Noon Lunch

1 p.m

, NDT-Electromagnetic Inspection Systems Dan Trefelner, Forester

1:45 p.m. Break

2 p.m.

Pipeline Corrosion Colin Criminger, Corrpro Companies Inc.

2:45 p.m. Break

3 p.m.

Pipeline and Refinery Inspection via Drone Technology Jeremy Wang, The Sky Guys

Unmanned aerial vehicles (UAVs), or drones, are a rapidly growing tool for conducting safety-critical inspections and surveying missions across heavy industry. In particular, the safety and speed of UAVs, combined with the advanced capabilities of new sensors, offers novel approaches to inspecting pipelines and refineries. Whether it is detecting leaks, corrosion or other structural faults, this presentation will systematically cover the key applications of UAVs to the oil and gas sector.

3:45 p.m. Break



Schedule of Events (cont'd)



4 p.m.

Federal Pipeline Regulations

Bill Lowry, Pipeline and Hazardous Materials Safety Administration Federal minimum pipeline safety regulations are at 49 Code of Federal Regulations Parts 190 through 199 and include requirements for the use of steel pipe in hydrocarbon transportation service. Presentation topics include materials, design, construction and testing requirements as well as pipeline integrity assessment methodologies.

4:45 p.m. Overview and Tour Instructions

5 p.m. Adjourn

Thursday, 27 September 2018

6 a.m. Breakfast

7 a.m. Plant Tour of TMK-IPSCO Baytown

Noon Return From Plant Tour and Conference Adjourn

