



CONTINUOUS CASTING

A PRACTICAL TRAINING SEMINAR



ABOUT THE PROGRAM

The key focus of the program is to discuss the practical aspects of casting slabs, billets and blooms, starting with a historic perspective on continuous casting, followed by casting machine design. The first day covers casting principles regarding mold fluxes, solidification and oscillation, water treatment, reoxidation and quality issues, including caster breakouts. The second day addresses maintenance issues, including mold design and mechanisms, caster rolls and bearings, and caster hydraulics. A panel discussion, with participants that have more than 100 years of combined casting experience, concludes the program.

12-15 OCTOBER 2015
CHARLESTON, S.C., USA
THE FRANCIS MARION HOTEL

SCHEDULE OF EVENTS

MONDAY, 12 OCTOBER 2015

4-6 p.m.
Registration

TUESDAY, 13 OCTOBER 2015

7 a.m.
Registration and Continental Breakfast

8 a.m.
HISTORICAL PERSPECTIVE OF CONTINUOUS CASTING
JACK YOUNG, HATCH LTD.

MORE INFORMATION AT
AIST.ORG/TECHNOLOGYTRAINING

9 a.m.

CONTINUOUS CASTING DESIGN AND TECHNOLOGY (SLAB AND LONG PRODUCTS)

WALT ANTOS, PRIMETALS TECHNOLOGIES USA LLC, AND JOSEPH LAUGHLIN SMS USA LLC

General technology and design considerations for long and flat product casting technology.

9:45 a.m.

Break

10 a.m.

AN OPERATOR'S GUIDE TO CONTINUOUS CASTING FLUX – WHAT IT IS, WHAT IT DOES AND HOW IT IS USED

11 a.m.

INITIAL SOLIDIFICATION AND OSCILLATION MARK FORMATION

BRIAN THOMAS, UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Noon

Lunch

1 p.m.

SPRAY NOZZLE BASICS

STEPHEN SWOOPE, DELAVAN, AND ERIC ROSENOW, NALCO, AN ECOLAB COMPANY

A review of secondary cooling and the various types of nozzles used in casting. A practical overview of nozzles for operators with a technical edge for maintenance managing the equipment.

1:45 p.m.

SOURCES OF REOXIDATION AND WHY TO AVOID

RONALD O'MALLEY, MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

2:45 p.m.

Break

3 p.m.

CASTER BREAKOUTS AND THEIR PREVENTION

WILLIAM EMLING, SMS USA LLC

Review of various causes for breakouts and discussion of systems and solutions designed to prevent them. This talk will closely follow the chapter in *The Making, Shaping and Treating of Steel®*, 11th Edition, Casting Volume.

3:45 p.m.

CASTER QUALITY DEFECTS AND THEIR POTENTIAL CAUSES

RONALD O'MALLEY, MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY

5 p.m.

Adjourn

WEDNESDAY, 14 OCTOBER 2015

7 a.m.

Continental Breakfast

8 a.m.

MOLD DESIGN, COPPER-BASED ALLOYS AND MOLD FAILURE MECHANISMS (SLAB AND LONG PRODUCTS)

IAN BAKSHI, KME AMERICA INC.

9 a.m.

MOLD AND COPPER MAINTENANCE AND COATING TECHNOLOGIES

10 a.m.

Break

10:15 a.m.

CASTER ROLL MAINTENANCE AND OVERLAY TECHNOLOGIES

11:15 a.m.

CASTER BEARINGS – TYPES OF BEARINGS, FAILURE MODES AND PREVENTIVE MAINTENANCE

Noon

Lunch

1 p.m.

CASTER HYDRAULICS – FAILURE MODES AND PREVENTIVE MAINTENANCE

1:45 p.m.

BILLET AND BLOOM CASTER MAINTENANCE

2:30 p.m.

Break

MORE INFORMATION AT
AIST.ORG/TECHNOLOGYTRAINING

2:45 p.m.

PANEL DISCUSSION

RONALD O'MALLEY, MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY; RICHARD BESICH, ARCELORMITTAL INDIANA HARBOR; IAN DEEKS, NUCOR STEEL-SOUTH CAROLINA

4 p.m.

Reception

THURSDAY, 15 OCTOBER 2015

7 a.m.

Continental Breakfast

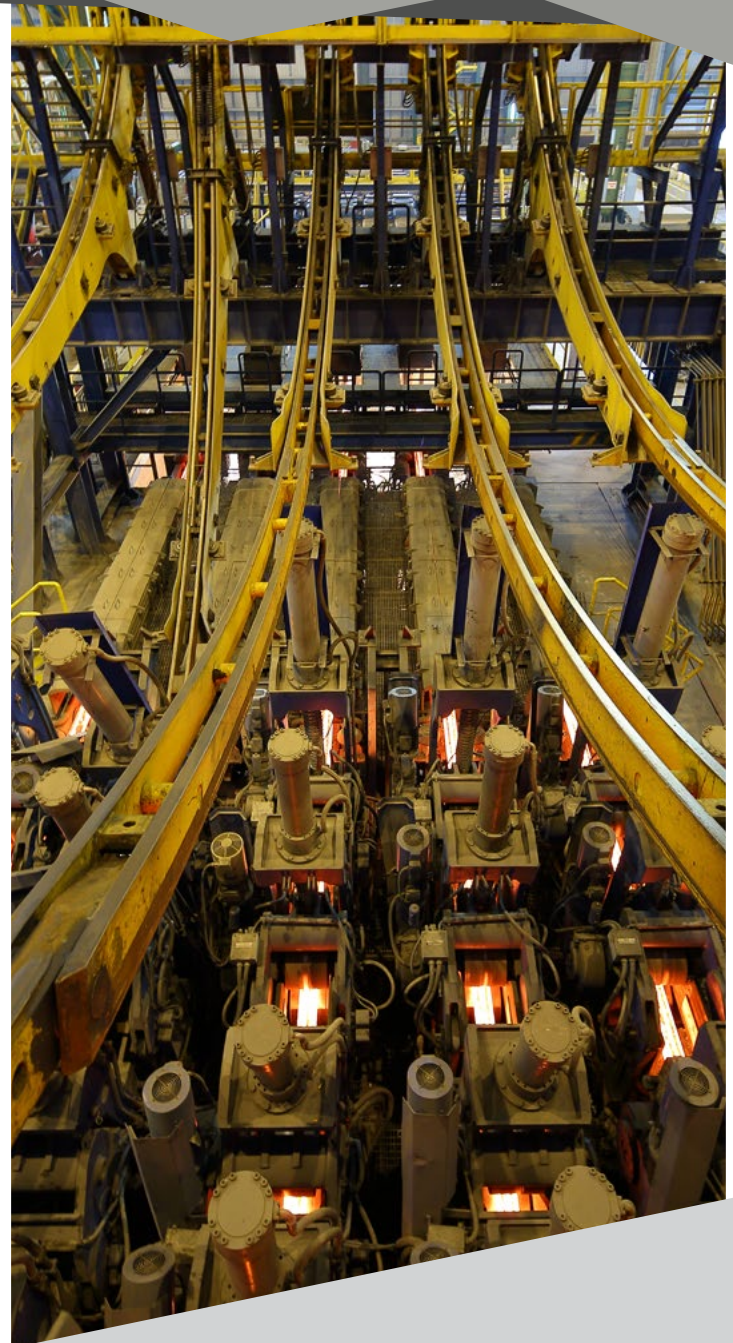
8 a.m.

PLANT TOUR OF NUCOR STEEL-BERKELEY



Noon

Return From Plant Tour and Adjourn



REGISTRATION FEES

Advance registration by 31 August 2015: Member US\$745, Non-member US\$960. Registration fee after 31 August 2015: Member US\$845, Non-member US\$1,060. Registration fee includes continental breakfasts, lunches, and continuous breaks Tuesday and Wednesday, reception Wednesday, continental breakfast Thursday, plant tour, and a course workbook or flash drive including presentations.

MORE INFORMATION AT
AIST.ORG/TECHNOLOGYTRAINING

REGISTER NOW