



Specially designed for:

- Cast House Managers
- Melt House Managers
- Plant Engineers
- Operations Personnel

Benefit from focused presentations by industry experts and follow-up discussions with commercial exhibitors:

- Identify cost and time saving opportunities.
- Reduce fuel consumption.
- Increase efficiency.
- Lower maintenance costs.

Registration Only

\$100

Includes:

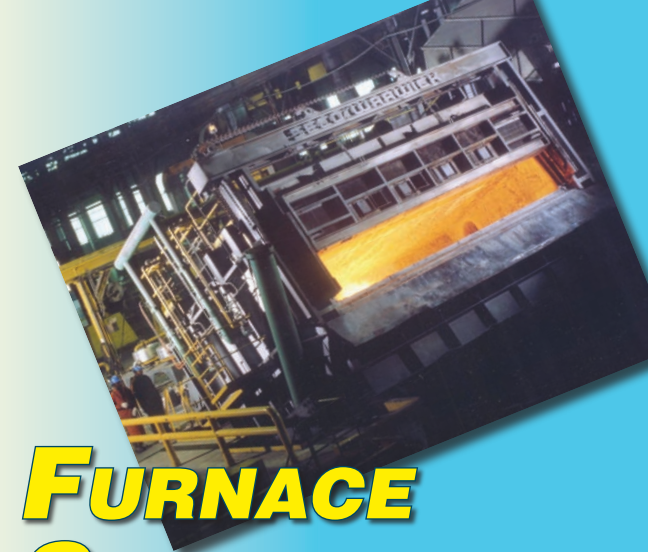
- three-day workshop
- exhibition admission
- aluminum industry plenary session on Monday, March 13

Pre-registration is strongly encouraged. Pre-registrants receive a printed copy of the presentations and supporting product information.

To register, visit the furnace systems technology Web page at www.tms.org/AnnualMeeting.html or contact:

Cindy A. Wilson
TMS Exhibits Coordinator
Tel: (724) 776-9000, x231
Fax: (724) 776-3770
E-mail: wilson@tms.org

*Photos courtesy of
Seco/Warwick, Hauck Manufacturing,
Bloom Engineering*



FURNACE SYSTEMS TECHNOLOGY WORKSHOP

***“Practical Knowledge for
Improved Process Performance”***

TMS2006

135th Annual Meeting & Exhibition

March 12-16, 2006

San Antonio, Texas

Henry B. Gonzalez Convention Center

Workshop Sponsored by TMS Light Metals Division

PRESENTING COMPANIES

Bloom Engineering

EMP/Pyrotek

Gillespie & Powers

Harbison Walker

Hauck Manufacturing

Kromshroder

Maerz Gautschi

Mechatherm

Praxair

Seco/Warwick

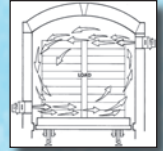
Thermcon Ovens BV

Thorpe Technologies

Learn about the fundamentals of process technology and the equipment involved in melting and process heating applications for aluminum and other non-ferrous metals.

Please see reverse for registration information.

FURNACE SYSTEMS TECHNOLOGY WORKSHOP



PROGRAM

Monday, March 13 (p.m.)

■ **Combustion Process**

Learn about the basics of the chemical process of combustion and the results concerning available heat, advantages of preheated air, types of burners available and their impact, fuels and preheated air on NO_x and CO emissions, the types of fuel/air ratio control systems commonly available and the advantages of each, and heat transfer mechanisms in the furnace.

Tuesday, March 14 (a.m.)

■ **Melters and Holders**

This session addresses the types of furnaces commonly used in cast houses, including types of melters used for various processes, reasonable expectations from different melters, melt rate, fuel efficiency and emissions, types of burners and controls most suitable from a production and economic view, and additional requirements when operating a melter/holder.

Tuesday, March 14 (p.m.)

■ **Process Furnaces**

Discussion focuses on process furnace types and factors that need to be considered for a successful operation, specifically burner types and installation techniques, circulation and heat transfer, atmospheres and purging requirements, effective control systems, and fuel efficiency, production, and emissions.

Wednesday, March 15 (a.m.)

■ **Additional Furnace Considerations and Wrap-Up**

Additional aspects of furnace requirements and ancillary devices to improve production and efficiency are covered in this final session, such as refractory linings, typical applications and special concerns, the benefits and costs of oxyfuel, and the advantages of metal circulation. Concluding presentations summarize the types of systems available and what systems are applicable to specific processes, as well as production and efficiency levels that can be achieved.