



# Furnaces & Atmospheres for Today's Technology

## June 16-18, 2014 Holiday Inn Express, Meadville, PA

### Tuesday, June 17

- ▶ **Application & selection of furnaces**  
Basic information on selecting the configuration for your application
- ▶ **Fundamentals of Heat Transfer**  
Impact of heat transfer on furnace and load design
- ▶ **Bulk Atmospheres, Guest Presentation by Praxair, Inc**  
How to set up cost efficient systems
- ▶ **Generated Atmospheres**  
Using generators to produce protective atmospheres
- ▶ **Vacuum Furnaces 101**  
How they work
- ▶ **General Refractory Design**  
*Guest Presentation by Ceramic Fiber Engineering*  
How design impacts equipment cost and efficiency
- ▶ **Alloy Applications, Guest Presentation by Rolled Alloys**  
Discussion of alloys used in furnace applications
- ▶ **Quenching & Quenchants, Guest Presentation by Houghton, Intl.**  
How quenching works, what kinds of mediums are used in heat treat

### Wednesday, June 18

- ▶ **Temperature & Power Control 101**  
How systems work
- ▶ **Analyzers, Guest Presentation by Super Systems, Inc.**  
How they are used in different applications
- ▶ **Heating Elements**  
Common element styles and applications
- ▶ **Fuel Facts & Combustion**  
Fuel fired heating systems, how they work & what works best
- ▶ **Furnace Maintenance**  
Keeping your equipment running efficiently

#### HANDS ON DEMONSTRATIONS

- ▶ **Combustion Systems**  
Live demonstration of combustions set up and fine tuning
- ▶ **Atmospheres**  
Operation and set up of exothermic and endothermic generators
- ▶ **Vacuum**  
Basic physics principles relating to vacuum technology
- ▶ **PLANT TOUR**

#### SCHEDULE OF EVENTS

##### Monday, June 16

6:00-7:30 PM Registration & Hospitality

##### Tuesday, June 17

6:45-8:00 AM Continental Breakfast

8:00 – 4:00 Program • 12:00-1:00 PM Lunch

6:00 – 10 PM Dinner with **Dan Herring, The Heat Treat Doctor**

##### Wednesday, June 18

6:45-8:00 AM Continental Breakfast

8:00-11:45 AM Program • 11:45-1:00 PM Lunch

1:00—3:30 PM Shop Tour & Demonstrations

This two day seminar is held every year for industry professionals to present basic, practical information for individuals with new heat treat responsibilities or those who plan to purchase new or used equipment.

#### ENROLL NOW:

Reserve your place now since enrollment is limited. Register in advance by filling out the registration form and return via email to [beth.ryan@secowarwick.com](mailto:beth.ryan@secowarwick.com), or fax to 814-724-1407.

**Questions? Call Beth Ryan at 814-332-8400**

#### COST:

**\$400 per person. Register by May 16, 2014 for a 10% Early Bird discount.** This furnace seminar is designed to be non-commercial and educational. You will receive all of the technical information presented in the seminar. Tuition will include classroom lectures, continental breakfast, breaks, lunches, (1) dinner meeting and a plant tour. Lodging and other meals are not included. Full fee will be charged without properly canceling or substituting another person. We accept company or personal checks, Visa or American Express, with payment due on the first day of the seminar.

#### LODGING:

**Make your hotel reservations directly at the Holiday Inn Express, 1-814-724-6012 or 1-888-465-4329**, and mention that you qualify for the SECO/WARWICK block room rate. The Holiday Inn Express is located at 18240 Conneaut Lake Road, Meadville, PA 16335

#### LOCATION:

Meadville is located in northwestern Pennsylvania, south of Erie and north of Pittsburgh on Interstate I-79, Exit 147A. The nearest commercial airport is in Erie (40 miles). Other commercial airports are located in Youngstown (50 miles), Cleveland (100 miles), and Pittsburgh (100 miles).

### Attend this event to learn about...

- Equipment selection, designs & best practices
- Industry trends
- Running your equipment efficiently
- How design impacts cost

### What attendees tell us they like the best:

"Meeting the SECO personnel and discussing various heat treat/furnace issues with them"

"As a maintenance tech, the round table, the controls and maintenance forums were the most beneficial."

"Maintenance and installation section"

"Analyzers"

"Factory tour and demonstrations"

"Vacuum furnace discussions, heating elements, sensors, heat transfer and maintenance"

"Generated atmospheres, analyzers and keynote"