

# Registration Form

HAUCK MANUFACTURING COMPANY  
INDUSTRIAL  
COMBUSTION SEMINAR  
Class Size is Limited.  
Send completed form by 03/01/10 to:

Sherri Storm  
Hauck Manufacturing Company  
PO Box 90  
Lebanon, PA 17042  
717-272-3051 ext. 474  
sstorm@hauckburner.com

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ St: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

Please indicate the sessions(s) you wish to attend:  
SESSION 1 (4/12) 2-Day \_\_\_\_\_ 3-Day \_\_\_\_\_

Fee: 2-day Training \$650/3-day Training \$850



Contact Hauck for payment and recommended hotel information. **Cancellation fees apply.**

[www.hauckburner.com](http://www.hauckburner.com)

## Hauck Technical Seminars

Hauck Manufacturing Company conducts customer training classes throughout the year at its Customer Technical Center located adjacent to the main plant on Hauck's 15 acre campus. Additionally, Hauck offers private company seminars at customer locations both domestically and abroad. Topics span the range of simple product maintenance sessions to advanced sessions on combustion theory and system design utilizing Hauck's e-Solutions for Combustion® engineering software.

Contact Hauck or your local representative for additional information about seminar schedules or to request a proposal for a custom tailored private seminar for your company. The latest seminar information is posted on Hauck's corporate website at

[www.hauckburner.com](http://www.hauckburner.com)



# Hauck Manufacturing Company

## Industrial Combustion Seminar

Flexible Training  
Customized to Your Skill Level

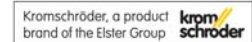
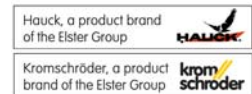
Attend 2 or 3-day Session



April 12-14, 2010

Presented by

Hauck Manufacturing Company  
Customer Technical Center  
100 North Harris Street  
Cleona, PA 17042



Combustion Expertise...Quality  
Products...World-Class Customer Service

# Hauck Manufacturing Company Industrial Combustion Seminar

April 12-14, 2010

## DAY 1 - Basic Combustion Principles

Fundamentals of Combustion  
Fluid Flow/Flow Measurement  
Air/Fuel Ratio and Controls  
Burner Types and Applications  
Combustion Air Sources  
Flame Safety and Supervision  
Lab Exercises and Demonstrations

## DAY 2 - Advanced Combustion Principles

Emissions/Flue Gas Analysis  
Air and Fuel Piping  
Burner Selection and Sizing  
Low NOx Burner Systems  
Lab Exercises and Demonstrations

## DAY 3 - e-Solutions for Combustion®

Heat Transfer  
Burner Application Analysis  
Combustion System Design  
Blowers and Sound Attenuation  
Design for Non-Standard Conditions  
Lab Exercises and Demonstrations

Choose to attend the two-day or  
3-day session for training that is  
customized to your needs.

\$650 for 2-day session  
\$850 for 3-day session

Contact Hauck for multiple attendee  
discount schedule.



**HAUCK INDUSTRIAL COMBUSTION SEMINAR:** Hauck has updated its combustion training to create the most flexible seminar customizable to suit your training requirements. From basic combustion science to advanced computer-driven modeling of combustion applications, this seminar offers the information you need to make the most efficient use of your combustion equipment. Attend the two day or three day session depending on your training needs.

**BURNER SIZING:** Learn how to calculate the total fuel input needed for your furnace and process requirements and relate that to a burner selection. Work on a sample problem with several different design criteria.

**SYSTEM DESIGN:** Discover the advantages and disadvantages to various air/fuel ratio control methods. Determine optimum furnace zone configurations and burner selection.

**PIPING DESIGN:** Learn about basic air and fuel piping practices, control component selection, fluid mechanics, and orifice meters.

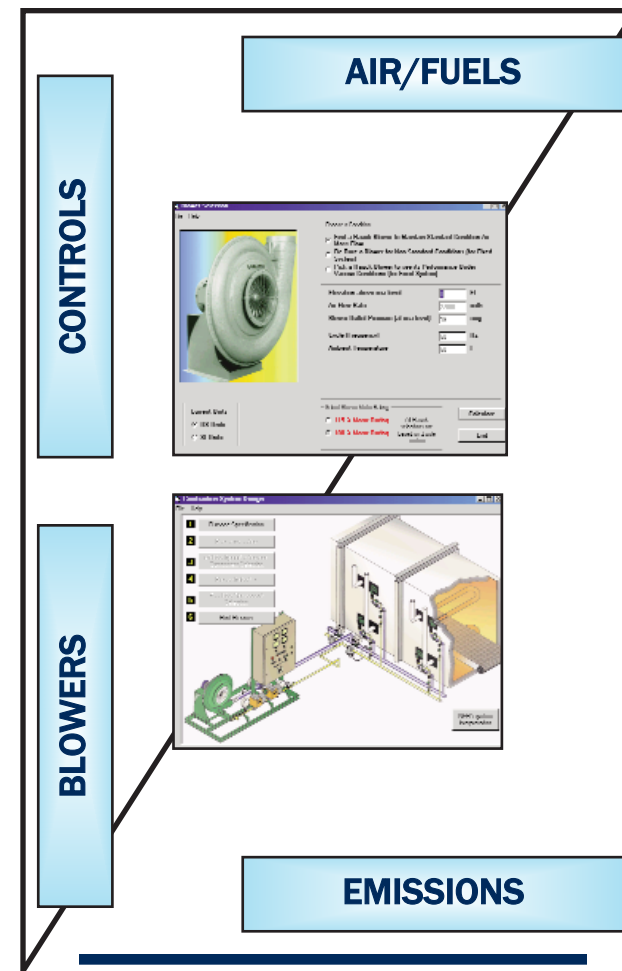
**BLOWERS AND SOUND:** Using fan laws, perform blower sizing and performance for standard and non-standard conditions. Calculate sound pressures at distances and determine blower sound levels with silencers.

**EMISSIONS:** General discussion of emissions and design decisions that impact emission levels.

**LAB:** Class work is supplemented by hands-on exercises in Hauck's Combustion Laboratory demonstrating real-world design issues.



**E-SOLUTIONS FOR COMBUSTION:** Day 3 of the seminar will focus on using e-Solutions as a tool to solve combustion design issues. The 4.0x version of e-Solutions will be installed free of charge on each Day 3 attendee's computer - a \$295 value.



For More Information Contact:

SHERRI STOM

HAUCK MANUFACTURING COMPANY

PO BOX 90 100 NORTH HARRIS STREET

LEBANON, PA 17042

PH: 717-272-3051 FAX: 717-273-9882

### Seminar Registration Fees

\$650 for 2-day session  
\$850 for 3-day session

Registration fee includes lunch and dinner,  
hospitality suite and seminar manual.

Class size is limited. Accommodations not  
included in registration fee. Transportation  
to/from hotel can be provided.