



Course 8106-3 CEU's: 2.1

This course is for technicians, engineers or others who have responsibility for troubleshooting and optimization of the powerhouse area including boilers, steam headers and turbines with the goal of achieving reliable load response, efficient operations and low emissions.

Overview

Boiler & Powerhouse Applications & Problem Solving– Course 8106) is a 3-day course that draws on the depth of experience that EnTech has accumulated during years of investigating and improving the performance of power boilers, waste fuel boilers, steam headers, PRV's and turbines. The course focuses on a broad scope of process variability and operational stability issues that affect process reliability, energy usage and steam header stability. Issues examined include the impact of process design and control design on process stability. Topics include the affect of the water/steam system on boiler drum level dynamics from a thermodynamics perspective, improving the speed-of-response of a boiler to set point and load changes, stabilizing the steam header pressure and temperature controls, etc. A high fidelity dynamic simulator provides the basis for lab work.

Prerequisites

Participants should have taken Modern Loop Tuning (9032) or Process Control for Engineers 1 (9030), or possess similar process control knowledge, or they should have already been exposed to the EnTech Toolkit software.

Topics

- **Boiler Thermodynamics**
- **Steam Drum Process Dynamics**
- **Drum Level 3-Element Control**
- **Feed forward Drum Level Control**
- **Plant Master/Boiler Master Control**
- **Air/Fuel Combustion Control**
- **O₂ & Furnace Draft Control**
- **Steam Header, PRV & Turbine Control**
- **Valves, Dampers & Variable Speed Drives**

Course Location: Control Dynamics, Inc.
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PO Box 509
Midlothian, VA 23113

Sponsored By: Control Dynamics, Inc.

To Enroll or for More Information: Connie Goodman – Phone: (804) 858-5878
Email: Connie.Goodman@Control-Dynamics.com

Course Dates: TBD **Registration Deadline:** 3 weeks prior to course date

Price: \$2,025.00– Purchase order or payment required at the time of enrollment. PO, checks & credit cards are acceptable

Providing Training with the Latest in Process Control Methods & Technologies!
Enroll As Soon As Possible – Seating Is Limited.