



Boiler Safety Seminar

Two-Day, A Third day with expanded material can be presented

I. Introductions

- Attendees Introductions
- Purpose of Course
- Operator Responsibilities

II. Boiler Basics

- Definitions and Types
- Thermodynamics
- Water treatment

III. Flame SafeguardSystem

- Sequence ofOperation
- Purge Requirements
- Safety Interlocks
- Ignition and Proof of Flame
- Flame Detectors
- Shutdown Procedures

IV. Operating and SafetyControls

- Purge Interlocks
- Low Fire Interlocks
- Airflow Interlocks
- Temperature Interlocks
- Pre-Ignition Interlocks

IV. Codes and Standards

- ASME National Board
- Code Requirements
- CSD-1 and NFPA 85

V. Combustion Equipment

- Types of Burners
- Coal Fired Equipment
- Combustion Air classification
- Fuel Delivery systems
- Gas train requirements
- Venting requirements

VI. Combustion Theory and Tuning

- Components required
- Combustion requirements
- Proper fuel/air mixture
- Tuning the burner/boiler

VII. Interlock and leak testing

- Pre-start check list
- Engineering assessment
- Valve leak testing
- Interlock testing

