Combustion Control System Course

Venue Information

Venue: London UK

Place:

Start Date: 2026-07-07

End Date: 2026-07-11

Course Details

Net Fee: £4750.00

Duration: 1 Week

Category ID: EAPET

Course Code: EAPET-3

Syllabus

Course Description

The course covers the fundamentals of boilers, utility power plants cycles, and combustion. This is followed by a brief tutorial on control theory, then a detailed discussion of combustion control, feedwater control and steam temperature control. The course is ideal for someone involved in all control equipments related to power plant controls, or as a refresher for experienced personnel.

Course Objectives

This course provides basic knowledge of combustion fundamentals including the burning of fossil fuels, municipal incineration, the burning of solid wastes and catalytic incineration as well as NOx and SOx emission control systems. The participants successfully completing this course will understand combustion principles and the design parameters influencing the achievement of combustion efficiency.

A scientific calculator is required for these exercises.

Course Outlines

- Review of basic concepts (Physics, Chemistry & Thermodynamics)
- Combustion fundamentals
- Fuel properties
- Formation of air pollutants in the combustion process
- Pollution emission calculation and F-Factor method
- Thermal and catalytic incinerations
- NOx/SOx control equipment
- Standard Product Line - Applications, Components, Diagnostics, BMS, Combustion Management, Servo Motors, Field Sensors, Start Up, Option Parameters, Fuel profiles, light off programming
- Expanded Product Line - Applications, Components, Diagnostics, O2 Trim, Variable Speed, Analogue I/O, Lead Lag, Start Up, Option Parameters, Fuel profiles, Alarm Functions
- O2 Trim System - Application, Installation, Day to Day, Advantages
- Communications Software - ComFire Software, Installation, Plant Monitoring, Trending, Logging, Alarm functions
- Sales Information - Pricing and Selection, Attractive Features, Customer Benefits, Fuel Savings