



AVIDUS ENGINEERING PRIVATE LIMITED (AEPL)
Unfolding Technology

AEPL-T-005
BOILER CONTROL AND
INSTRUMENTATION

TRAINING PROGRAMME

ELIGIBILITY : EIE, ME, CHE
DURATION : 2 WEEKS

- 1. Boiler Overview**
 - ❖ Purpose of Boiler
 - ❖ Boiler Hardware
 - ❖ Water and Steam Circulation
 - ❖ Air and Draft System
- 2. Instrumentation & Control Review**
 - ❖ Symbology
 - ❖ Control Review
 - ❖ Boiler Temp/press/level/flow measurements
- 3. Boiler Demand, Combustion and Furnace Pressure Control Strategies**
 - ❖ Steam demand controls
 - ❖ Boiler firing rate demand
 - ❖ Combustion Controls
 - ❖ Furnace pressure controls
- 4. Boiler Steam Drum Level Control Systems**
 - ❖ Drum level control requirements
 - ❖ Control strategies
 - ❖ Three element control
 - ❖ Super heated steam temp control
- 5. Boiler Combustion Theory and Efficiency**
 - ❖ Products of Combustion
 - ❖ Excess combustion air
 - ❖ Excess air trim control
 - ❖ Calculating Boiler Efficiency
- 6. Boiler Burner Management Systems(BMS)**
 - ❖ BMS requirements
 - ❖ BMS field sensors and hardware
 - ❖ BMS logic
 - ❖ Boiler Safety Valves
- 7. Overview of Boiler Commissioning and Startup**
 - ❖ Major Events
 - ❖ Instrumentation Tasks
 - ❖ Controller parameter Tuning
- 8. Typical Boiler Problems, Probable Causes and Solutions**
 - ❖ Combustion System Problems
 - ❖ Air/Flue gas System Problems
 - ❖ Steam/Feed water System Problems

Visit website for more details :
www.avidus.in



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