

BOILER DESIGN, OPERATION & MAINTENANCE TECHNOLOGY

COURSE OUTLINE 2020

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TRAINING TITLE

BOILER DESIGN, OPERATION & MAINTENANCE TECHNOLOGY

VENUE

Dubai, UAE

DURATION

5 Days

DATES

19 - 23 April 2020

PRICE

US\$4,000 per attendee including training material/handouts, morning/afternoon coffee breaks and Lunch buffet daily.

TRAINING INTRODUCTION

This is an intensive course and will be based upon a mixture of classroom instruction and discussion combined with workshop sessions. It will also make use of multi-media materials and involve small group and individual problem-solving workshop sessions to reinforce the learning experience

TRAINING OBJECTIVES

The course is broadly designed to incorporate all issues related to boilers starting with design aspects, installation, operation, control and boiler maintenance. Other issues are included within the course such as legal requirements and regulations, environmental and safety aspects, energy consumption, boiler efficiency and water treatment. For more course details, please refer to the course topics.

TRAINING AUDIENCE

Boiler Design Engineers (Mechanical and Chemical), Boiler Inspectors, Steam Plant Operators, Maintenance Technicians, Engineers & Managers, Operation Managers, Safety Officers & Technicians, Environmental Officers, and Boiler Design Engineers are recommended to attend the course.

COURSE OUTLINE

- Introduction and course overview & steam generator types
- Fundamentals of heat transfer calculations, steam generation & boiler circulation calculations
- Boiler fuels & heat transfer in boiler furnaces & heat balance calculations & numerical simulation models for a modern boiler design
- A comparison of shell boilers and water tube boilers supercritical (once through) boiler technology
- Waste heat boilers & packaged steam generators
- Main boiler components
- The Ljungström® Air Preheater
- Superheaters performance
- Efficient operations and maintenance strategies for industrial gas boilers
- Boiler performance characteristics
- Safety valves and measuring equipment for boilers
- Boiler fitness survey for condition assessment of industrial boilers
- Boilers water treatment
- Boilers control and operation sequence
- Flue gas and soot cleaning technologies and environmental regulations
- Acoustic leak detection and steam oxidation testing
- Burners control modules with case studies
- Boiler thermal efficiency testing. Boiler vibration problems

TRAINING CERTIFICATE

MAESTRO CONSULTANTS Certificate of Completion for delegates who attend and complete the training course

METHODOLOGY

Our courses are highly interactive, typically taking a case study approach that we have found to be an effective method of fostering discussions and transferring knowledge. Participants will learn by active participation during the program through the use of individual exercises, questionnaires, team exercises, training videos and discussions of "real life" issues in their organizations. The material has been designed to enable delegates to apply all of the material with immediate effect back in the workplace.