

**Training Title**

**BOILER DESIGN, OPERATION & MAINTENANCE TECHNOLOGY**

**Training Duration**

**5 days**

**Training Venue and Dates**

<b>Boiler Design, Operation &amp; Maintenance Technology</b>	<b>5</b>	<b>06-10 January, 2025</b>	<b>\$5,500</b>	<b>Dubai, UAE</b>
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**Trainings will be conducted in any of the 4 or 5 star hotels.**

**Training Fees**

- **5,500 US\$ per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Lunch.**

**Training Certificate**

**Prolific Consultants FZE Certificate of Course Completion will be issued to all attendees.**

**COURSE OVERVIEW**

**COURSE DESCRIPTION**

***This is an intensive short 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***

**COURSE 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.***

**SUITABLE FOR:**

***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.***

**TRAINING METHODOLOGY:**

A highly interactive combination of lectures and discussion sessions will be managed to maximize the amount and quality of information and knowledge transfer. The sessions will start by raising the most relevant questions, and motivate everybody find the right answers. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on daily basis to examine the effectiveness of delivering the course. Very useful Course Materials will be given.

**COURSE OUTLINE :-**

- *Introduction and course over view & 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*

**Case Studies, Last Day Review, Discussions & Pre & Post Assessments will be carried out.**

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