

MECHANICAL COURSES

BOILER DESIGN, OPERATION and MAINTENANCE (M66AE)

OBJECTIVE:

This course will enhance the knowledge and experience of participants on the design and maintenance of boiler applications.

WHO SHOULD ATTEND?

The course is suggested for engineers who work in the field of boiler operation and maintenance.

COURSE CONTENT:

- Introduction
- Boilers
- Selection of Equipment
- Boiler Design and Heat Balance
- Boiler Construction
- Moisture, Superheaters and Reheaters
- Economizers and Preheaters
- Heating of Feed Water
- Boiler Furnaces
- Applications
- Maintenance

Duration: 5 Days

Date:	Venue:	Cost:
Feb 9 – 13	Jubail	SR7,000
Jul 26 – 30	Sharm El-Shaikh	SR8,000
Nov 15 - 19	Qatar	SR8,000

BOILER EFFICIENCY (M31A)

OBJECTIVE:

This seminar provides knowledge and skills in increasing the efficiency of a Boiler.

WHO SHOULD ATTEND?

This seminar is recommended for anyone involved in Boiler.

COURSE CONTENT:

1. Where energy is lost and gained in the power plant cycle.
2. Using enthalpy as a measure of energy
The meaning of steam quality and how to determine the enthalpy of the steam at the turbine exhaust
3. How to convert units of mechanical work to units of electrical work
4. How to determine the turbine cycle efficiency
The effect of changing mainstream temperature on turbine cycle efficiency
5. The effect of changing condenser backpressure on turbine cycle efficiency
6. How to determine boiler efficiency
7. How boiler efficiency and turbine cycle efficiency can be used to determine overall plant efficiency
8. The difference between gross plant heat rate and the net plant heat rate
9. What factors determine boiler efficiency
The effect of changing main steam pressure on turbine cycle efficiency

Duration: 5 Days

Date:	Venue:	Cost:
Feb 16-20	Dammam	SR6,000
Aug 2-6	Dammam	SR6,000