



Training Program:

Power Plant Maintenance

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Introduction:

The objective of this module is to present and discuss the various types of maintenance that must be carried out in a steam power plant. We also look at documentation, which is required for planning and control of maintenance. Also demonstrated are typical maintenance tasks that are normally performed on major items of equipment during plant inspection outages and major overhauls.

Who Should Attend?

Electrical Engineers, Power Generation Engineers, Power System Protection Engineers, Process Control Engineers & Personnel, Electrical and Instrumentation Technicians & Design Engineers, Maintenance Technicians & Supervisors, Plant Operators & Technicians, Oil & Gas Industry Personnel

Course Objectives:

By the end of this course delegates will be able to:

- The objectives of maintenance, namely to retain equipment availability, capability and efficiency.
- The definition and relationship of different types of maintenance such as running maintenance, preventive maintenance, major overhaul, predictive maintenance, and breakdown maintenance.
- The principals of preventive maintenance, i.e. regular scheduled inspection and replacement of components where necessary
- The application of predictive maintenance through condition monitoring
- Condition monitoring techniques, on line and off line

- The application of NDE (Non-Destructive Examination) techniques

Course Outline:

- Typical running maintenance activities
- Reliability Centred Maintenance RCM
- The effect of operating regime on equipment deterioration
- The need for planning, control and co-ordination of maintenance activities
- Typical documentation, which is used for maintenance control
- The critical importance of recording measured values during overhaul inspection
- The need to keep the equipment history file updated
- Spare parts data
- Flexibility of the maintenance schedule
- Typical boiler maintenance activities, during operation and during overhaul
- Boiler predictive maintenance activities
- Boiler internal inspection
- Maintenance of boiler auxiliary equipment
- Typical outage schedule for turbine maintenance
- Turbine condition monitoring activities
- Typical maintenance activities during turbine overhaul
- Maintenance of turbine auxiliary equipment
- Generator running maintenance activities
- Generator overhaul activities

- Generator condition monitoring
- Typical transformer maintenance activities
- Typical switchgear maintenance activities

Accreditation:

BTS attendance certificate will be issued to all attendees completing a minimum of 80% of the total course duration.