

GAS TURBINE MAINTENANCE MANAGEMENT (REF:OTSGTMOO1)

Course Description

In recent years modern Gas Turbines have dramatically increased in size and complexity due to improvements in output and efficiency together with increasingly stringent environmental requirements. Therefore the requirements upon the Plant Maintenance Manager are growing as are the options available at his disposal. Therefore this course will assess the requirements for the maintenance management of a modern Gas Turbine and evaluate the options available to meet these requirements.

Who Should attend

This course would be of immense benefit for those involved in the maintenance management of gas turbine plant or those aspiring to that position. It would also be useful for senior operational staff requiring an overview of maintenance management. This course has been scheduled together with the Maintenance Management and Planning course such that attendees of both courses would obtain a sound understanding of the techniques of maintenance planning prior to attending the Gas Turbine Maintenance Management course.

Pre-Requisites

All Attendees should have a sound power generation background.

Course Outcome

At the end of this course you will be able to manage the maintenance of a Gas Turbine.

Day 1

- Evaluation of Gas Turbine Maintenance Strategies
- Breakdown Maintenance
- Planned Maintenance
- Predictive Maintenance
- Predictive Maintenance Techniques
- Vibration Analysis
- Borescope Inspection
- Temperature Profiling
- Thermographic Imaging
- Assessment of Predictive Maintenance Data to build maintenance strategy
- Overview of Gas Turbine Outages
- Combustion Inspection
- Parts requiring Inspection
- Hot Gas Path Inspection
- Parts Requiring Inspection

Day 2

- Maintenance Inspection
- Overview of Inspection Techniques and Assessment of Data
- Dye Penetrant
- Ultrasound
- Eddy Current
- Repair or replace assessments
- Maintenance Outage Planning
- Building an outage plan
- Outage scheduling and costing
- Manpower planning
- Spares Resourcing
- Contractor Assessment and Usage

Day 3

- Maintenance Management
- Costing of Spares
- Spares Pooling (Advantages and Disadvantages)
- Maintenance Contracts
- Spares Contracts
- Service Contracts
- Manpower management and assessment
- Maintenance Management Continued
- Environmental Assessments
- Maintenance Management Systems
- Report Writing and Presenting Data
- Assessment or turbine reliability and performance

