



Centrifugal Compressor & Steam Turbine: Operation, Maintenance & Troubleshooting

Centrifugal Compressor & Steam Turbine training seminar entails a study of gas compression and expansion laws applied to industrial processes followed by an illustration of the different types of rotating machines usually encountered in plants, and their related aspects. The aim is to provide a satisfactory approach to the problems posed by compressors and turbines and the means to solve them.

Objectives

At the end of this training course, participants will have:

- Knowledge of how to optimally maintain the equipment for the benefit of the company
- An understanding of the construction and operational constraints of centrifugal compressors and steam turbines
- Hints and Tips for practical application of monitoring technologies so as to achieve the best results

Who Should Attend?

- Engineers, Operators, and Technicians in Maintenance, Engineering and Production
- Anyone who wishes to update themselves on Maintenance Engineering Technologies, judges the suitability of these technologies for their needs, and learns how to implement them for the benefit of their organisations

Course Outline

Gas Laws & Compression Theory

Compression and Expansion Fundamentals

- Gas Equations
- Practical Compression Laws
- Mollier Diagrams

Compression and Expansion Mechanisms

- Compression Basics
- Blade Types
- Dynamic Effects
- Simple Calculations





Practical Applications

Compressor and Turbine Performance and Operation

- Affinity Laws for Centrifugal Impellers
- Characteristic Curves
- Operational Problems
- Capacity Control Methods
- Commissioning

Steam Plant & Turbines

Steam Turbines

- Turbine Characteristics
- Steam Conditions
- Control Systems
- Safety Devices
- Associated Equipment

Turbine Construction & Maintenance

Construction and Systems

- Construction
- Bearings & Seals
- Rotor Dynamics
- Associated Systems
- Typical Mechanical Incidents

Engineering Aspects

Engineering

- API Specifications
- Information required for Bidding