

€ TRAINING

Operation and Maintenance of Rotating
Equipment





Operation and Maintenance of Rotating Equipment

Introduction:

This training program provides participants with comprehensive knowledge and practical skills essential for effectively managing and maintaining rotating equipment. It empowers them to enhance equipment reliability, minimize downtime, and optimize operational performance in industrial settings.

Program Objectives:

At the end of this program, participants will be able to:

- Understand the principles of operation and maintenance for rotating equipment.
- Develop skills in performing routine maintenance tasks and inspections.
- Learn techniques for troubleshooting common issues in rotating machinery.
- Gain insights into industry standards and best practices for equipment management.
- Enhance capabilities in optimizing the performance and lifespan of rotating equipment.

Targeted Audience:

- Maintenance Engineers.
- Mechanical Technicians.
- Plant Operators.
- Reliability Specialists.
- Facility Managers.
- Maintenance Supervisors.

Program Outline:

Unit 1:

Fundamentals of Rotating Equipment:

- Overview of various types of rotating equipment pumps, compressors, turbines, etc..
- Key components and working principles of rotating machinery.

- Importance of proper operation and maintenance for equipment reliability.
- Roles and responsibilities of personnel involved in managing rotating equipment.
- Case studies on the significance of rotating equipment in industrial processes.

Unit 2:

Operation and Start-up Procedures:

- Procedures for safely operating and starting up rotating equipment.
- Understanding operating parameters and performance indicators.
- Monitoring equipment performance during operation.
- Implementing safety measures and protocols during equipment operation.
- Exercises on equipment operation and start-up procedures.

Unit 3:

Routine Maintenance and Inspections:

- Performing routine maintenance tasks, such as lubrication and alignment.
- Inspecting equipment for signs of wear, damage, or degradation.
- Identifying and addressing common maintenance issues.
- Developing preventive maintenance schedules and programs.
- Case studies on the importance of routine maintenance in equipment reliability.

Unit 4:

Troubleshooting and Problem-Solving:

- Techniques for diagnosing and troubleshooting equipment malfunctions.
- Identifying root causes of equipment failures.
- Implementing corrective actions and repairs.
- Utilizing diagnostic tools and technologies for troubleshooting.
- Real-world examples of troubleshooting challenges and solutions.

Unit 5:

Industry Standards and Best Practices:

- Overview of relevant industry standards API, ISO.
- Understanding regulatory requirements for equipment operation and maintenance.
- Implementing best practices for equipment management.
- Documenting and reporting maintenance activities.