

# Advanced Maintenance Management





## **Advanced Maintenance Management**

### Introduction:

This training program offers participants an in-depth understanding and practical skills necessary for effectively managing maintenance operations in industrial and organizational settings. It empowers participants to lead and implement maintenance excellence initiatives within their organizations.

## **Program Objectives:**

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

- Understand advanced principles and methodologies in maintenance management.
- Develop skills in implementing preventive, predictive, and reliability-centered maintenance strategies.
- Learn techniques for optimizing maintenance processes and improving asset performance.
- Gain insights into advanced maintenance technologies and tools.
- Enhance capabilities in leading and managing maintenance teams effectively.

## **Targeted Audience:**

- Maintenance Managers.
- Reliability Engineers.
- Plant Engineers.
- Maintenance Supervisors.
- Asset Managers.
- Maintenance Planners.

## **Program Outline:**

#### Unit 1:

#### Advanced Maintenance Management Principles:

- Overview of advanced maintenance management concepts and methodologies.
- Understanding the principles of reliability-centered maintenance RCM.



- Steps for implementing total productive maintenance TPM and lean maintenance practices.
- Developing maintenance strategies aligned with organizational goals.
- Case studies on successful implementation of advanced maintenance management principles.

#### Unit 2:

#### Predictive Maintenance Technologies:

- Introduction to predictive maintenance PdM technologies and techniques.
- Steps for implementing condition monitoring methods such as vibration analysis, thermography, and oil analysis.
- Utilizing predictive maintenance tools and software for data analysis and decision-making.
- Developing predictive maintenance programs and schedules.

#### Unit 3:

#### Asset Performance Optimization:

- Strategies for optimizing asset performance and reliability.
- Analyzing equipment failure modes and implementing root cause analysis RCA.
- Steps for implementing asset management strategies for lifecycle optimization.
- Enhancing equipment reliability through performance metrics and KPIs.
- Real-world examples of asset performance optimization initiatives.

#### Unit 4:

#### Maintenance Process Improvement:

- Techniques for optimizing maintenance processes and workflows.
- Steps for implementing continuous improvement methodologies such as Six Sigma and Kaizen.
- Developing maintenance planning and scheduling best practices.
- Enhancing maintenance data management and analysis.
- Exercises on improving maintenance processes and workflows.

#### Unit 5:



#### Leadership in Maintenance Management:

- Principles of effective leadership in maintenance management.
- Developing maintenance leadership skills, including communication and team building.
- Managing change and driving organizational culture towards maintenance excellence.
- Steps for implementing safety and compliance standards in maintenance operations.