

**Predictive Maintenance** 





# **Predictive Maintenance**

REF: O1328 DATE: 18 - 22 August 2024 Venue: Dubai (UAE) - Fee: 5830 Euro

#### Introduction:

This training program is designed to provide participants with comprehensive knowledge and skills to implement and manage predictive maintenance strategies. It empowers them to enhance equipment reliability and reduce unplanned downtime.

# **Program Objectives:**

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

- Understand the principles of predictive maintenance.
- Gain proficiency in various predictive maintenance techniques.
- Learn to use condition monitoring tools and technologies.
- Develop skills in data analysis and failure prediction.
- Implement best practices for effective predictive maintenance.

# Target Audience:

- Maintenance managers and supervisors.
- Reliability engineers and maintenance planners.
- · Plant engineers and operations managers.
- Maintenance technicians and specialists.
- Professionals seeking to enhance their predictive maintenance capabilities.

# **Program Outline:**

#### Unit 1:

#### Fundamentals of Predictive Maintenance:

- Introduction to Predictive Maintenance.
- Benefits of Predictive Maintenance over Traditional Methods.
- Key Components of a Predictive Maintenance Program.



- Predictive Maintenance Technologies Overview.
- Setting Up a Predictive Maintenance Framework.

#### Unit 2:

## **Condition Monitoring Techniques:**

- · Vibration Analysis.
- Thermography.
- Ultrasonic Testing.
- · Oil Analysis.
- Motor Current Analysis.

#### Unit 3:

## Data Collection and Analysis:

- Tools and Instruments for Data Collection.
- Data Acquisition and Storage.
- Analyzing Condition Monitoring Data.
- Identifying Patterns and Trends.
- Failure Prediction and Remaining Useful Life RUL Estimation.

#### Unit 4:

## Implementation of Predictive Maintenance:

- Developing a Predictive Maintenance Plan.
- Integrating Predictive Maintenance with Existing Systems.
- Training and Developing Maintenance Teams.
- Case Studies on Successful Implementation.
- Overcoming Challenges in Predictive Maintenance.

## Unit 5:



## Best Practices and Continuous Improvement:

- Best Practices in Predictive Maintenance.
- Continuous Improvement in Maintenance Processes.
- Performance Metrics and KPIs for Predictive Maintenance.
- Advanced Predictive Maintenance Technologies.
- Future Trends in Predictive Maintenance.