

Rotating Equipment Optimization with Continuous Reliability Improvement CRI





# Rotating Equipment Optimization with Continuous Reliability Improvement CRI

REF: O418 DATE: 15 - 19 September 2024 Venue: Istanbul (Turkey) - Fee: 6375 Euro

#### Introduction:

This program is designed to provide delegates with a comprehensive understanding of how to use a combined predictive and preventive maintenance approach coupled with proper failure monitoring to achieve maximum reliability and performance from rotating equipment.

## **Program Objectives:**

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

- Apply the proven methodologies and templates which are introduced.
- · Focus on key areas of reliability.
- Understand the nature of failure and how this affects the performance of rotating equipment.
- Make the right maintenance choices for strategic equipment.
- Reduce the impact of plant downtime.
- Unlock the true potential of all of their people.

## **Targeted Audience:**

- The operation, Technical Production & Service Professionals.
- Technical Professionals responsible for maintenance and repair of equipment.
- · Professionals involved in inspection and reliability.
- Technical Professionals dealing with risk assessment and integrity analysis.
- Technicians dealing with regulating and metering and other measurements.

## **Program Outlines:**

#### Unit 1:

## Understanding The Link Between Reliability and Competitive Advantage:

- · Definition of Reliability.
- · Reliability metrics.



- Strategic Importance of Reliability.
- Assessing current performance.
- Making the right strategic choices.

#### Unit 2:

#### Using Reliability Modeling to Establish Inherent Reliability:

- Basic modeling building blocks.
- Deterministic models.
- · Probabilistic models.
- · Markov chains.
- · Monte Carlo models.

#### Unit 3:

## Understanding The Nature of Failures to Make The Best Response:

- Origins of failure and its types.
- Six common patterns.
- Analyzing failure patterns.
- · Weibull analysis.
- Maintenance tasks.

#### Unit 4:

#### Optimising Your Failure Management to Ensure That Maintenance is Cost-Effective:

- · Risk assessment & criticality.
- Equipment functions.
- Functional failures.
- Failure modes and effects analysis and consequences.
- · Maintenance task selection.
- Producing a practical maintenance plan.



#### Unit 5:

## Setting Up a Continuous Reliability Improvement Process to Improve Performance:

- Assessing the improvement potential versus the costs.
- Obtaining senior management support.
- Establishing the project framework.
- Technical aspects.
- Human considerations.
- Likely results.