

# € TRAINING

Rotating Equipment Optimization with  
Continuous Reliability Improvement CRI





# Rotating Equipment Optimization with Continuous Reliability Improvement CRI

## 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 program, 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.