

# € TRAINING

Maintenance & Reliability Best Practices:  
Lowering Life Cycle Cost Equipment



8 - 12 December 2024  
Sharm El-Sheikh (Egypt)  
Sheraton Sharm Hotel,  
Resort,

# Maintenance & Reliability Best Practices: Lowering Life Cycle Cost Equipment

REF: O1333 DATE: 8 - 12 December 2024 Venue: Sharm El-Sheikh (Egypt) - Sheraton Sharm Hotel, Resort, Fee: 4465 Euro

## Introduction:

Maintenance & Reliability Best Practices are critical for every successful individual and company. This workshop delivers many practical and new Maintenance and Reliability Best Practices concepts and tools. You will discuss these concepts and practice using practical tools in case studies and discussion groups.

The costs associated with equipment downtime and reduced production can be significant. Learning how to effectively manage all aspects of your industrial facility is a must. This workshop is a combination of instructor lead topic areas and class discussions. Interactive discussions will allow you to hear and learn best in class applications relating to maintenance planning and cost management strategies. You will have the opportunity to ask lots of questions in order to consider how best to apply these tools and techniques in your organization.

## Course Objectives:

At the end of this course the participants will be able to:

- Evaluate and justify your maintenance programs using Value = Benefit - Cost.
- Apply Life Cycle cost and risk planning to your facility assets.
- Target Maintainability and/or Reliability in the development of your facility maintenance plans.
- Learn the PLAN, DO, REVIEW the cycle of continuous improvement.
- Apply the theory of this session using practical case studies.
- Practice using improvement techniques

## Targeted Audience:

- Planners
- Maintenance Supervisors
- Engineers
- Crafts and Tradesmen
- Reliability Engineers
- Operations Supervisors

## Course Outlines:

### Unit 1: Asset Cost Management Introduction:

- Definitions of reliability, maintenance & asset management
- The total cost of maintenance
- Best practice reliability and maintenance processes
- Elements of asset management best practice
- Auditing performance
- Overview of TPM, RCM, BCM, QCM, and other asset management buzzword
- Open discussion sessions

### Unit 2: Laying the Groundwork:

- Team-work maintenance, operations, stores
- The importance of standards such as PAS 55, JA1011
- Corporate asset management expectations
- Asset performance expectations
- The forms of asset failure and degradation
- The causes and nature of asset failure and degradation
- The effects, cost, and risks of asset degradation
- Practical Application and Open Discussion sessions

### Unit 3: Applying the Value-based Process:

- Breaking the cycle of failure and degradation
- Select PM tactics on the basis of costs and risks
- How to determine PM intervals
- Condition-based maintenance types and the PF-curve
- The four important reliability functions
- Implementing best practice maintenance programs
- Optimizing spares to support the maintenance program
- The maintenance program cost and risk-based justification
- Practical Application and Open Discussion Sessions

### Unit 4: Ensuring the Continuity of the Value-based Process:

- Complete the PLAN, DO, REVIEW Improvement cycle with FRACAS
- Failure Reporting, Analysis, and Corrective Action System requirements
- Structure and code data collection to support reliability analysis
- How to quantify chronic failures and losses
- Use Pareto analysis and stratification to focus the value-based analysis
- Quantify losses in life cycle terms
- Hypothesize root causes of failure and verify on the basis of evidence
- Reliability Analysis Case Study
- Discussion of software and templates to support analysis

### Unit 5: Supporting Process that Lower Life-cycle Costs:

- Planning and scheduling best practice
- Cost-effective manpower and skills deployment
- Performance indicators to drive continuous improvement
- Overall review of concepts learned