



**Maintenance Planning, Process  
Engineering & Instrumentation**



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

Code	City	hotel	Start	End	price	Hours
571	Sharm ElShaikh (Egypt)	Hotel Meeting Room	2024-09-01	2024-09-05	3450 €	25

## 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 organisation.

- Maintenance best practice improves competitive position
- Initiatives such as Six Sigma & Lean depend on reliable equipment
- Technical and people aspects are fully covered
- Hard and soft copy of practical improvement tools are provided
- Important points are reinforced by workshop sessions

## Seminar Objectives

- 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 cycle of continuous improvement.
- Apply the theory of this session using practical case studies.
- Practice using improvement techniques

## Training Methodology

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.



## Organisational Impact

By sending your staff on this seminar you will achieve:

- Lower life cycle costs for equipment
- More reliable equipment
- Lower maintenance costs
- Better planning
- Improved team working between maintenance and production
- Increased equipment performance

## Personal Impact

- Strategies aligned to the business goals
- Introduction to the latest tools and techniques
- Exposure to best practices drawn from a range of different industries
- Methodology to enable successful permanent changes
- Application of the most appropriate reliability improvement technique
- Consideration of technical and human aspects of reliability improvement

## Who Should Attend?

It is highly recommended that all Maintenance, Reliability, Engineering and technical support staff including leadership and management attend this workshop.

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

## Programme Outline

### Day 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



## **Day 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

## **Day 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
- Optimising spares to support the maintenance program
- Maintenance program cost and risk based justification
- Practical Application and Open Discussion Sessions

## **Day 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
- Hypothesise root causes of failure and verify on the basis of evidence
- Reliability Analysis Case Study
- Discussion of software and templates to support analysis

## **Day 5 - Supporting Process that Lower Life-cycle costs**

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



**The Scandinavian Academy employs modern methods in training and skills development, enhancing the efficiency of human resource development. We follow these practices:**

- **Theoretical Lectures:**
  - We deliver knowledge through advanced presentations such as PowerPoint and visual materials, including videos and short films.
- **Scientific Assessment:**
  - We evaluate trainees skills before and after the course to ensure their progress.
- **Brainstorming and Interaction:**
  - We encourage active participation through brainstorming sessions and applying concepts through role play.
- **Practical Cases:**
  - We provide practical cases that align with the scientific content and the participants specific needs.
- **Examinations:**
  - Tests are conducted at the end of the program to assess knowledge retention.
- **Educational Materials:**
  - We provide both printed and digital scientific and practical materials to participants.
- **Attendance and Final Result Reports:**
  - We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.
- **Professionals and Experts:**
  - The programs scientific content is prepared by the best professors and trainers in various fields.
- **Professional Completion Certificate:**
  - Participants receive a professional completion certificate issued by the Scandinavian Academy for Training and Development in the Kingdom of Sweden, with the option for international authentication.
- **Program Timings:**
  - Training programs are held from 10:00 AM to 2:00 PM and include buffet sessions for light meals during lectures.