Maintenance Management Best Practices

Course general description:

Maintenance Management provides all the delegates great opportunities to optimise the performance of their systems and equipment to achieve maximum return on investment (ROI). By reducing costs and downtime, while achieving high levels of safety and quality. However, with the rapid pace of change in maintenance, and the emergence of many new concepts, methods and technologies, it is often difficult for managers with maintenance responsibilities to judge which of these new technologies are most appropriate to their specific needs, and which will provide them with the greatest benefits in practice. This seminar provides an overview of a number of Modern Maintenance Technologies associated with equipment, systems, people and management. It describes both the background to each technology, and its practical application to achieve the best bottom-line results. The seminar looks at which areas of the maintenance manager's responsibilities will benefit from individual technologies. It also shows how they can be integrated to support each other, how to choose an appropriate selection of technologies, and how to develop an action plan for their implementation.

Audience:

This course is designed for:

1. Supervisors
2. Team Leaders and Managers in Maintenance
3. Engineering and Production
4. Anyone who wishes to update his/her knowledge about modern maintenance technologies, judge the suitability of these technologies for the needs, and learn how to implement them for the benefit of their organizations.

Course objectives:

The delegates will learn how:

- To provide a step-by-step guide to maintenance management best practices starting with foundations and building up to best practices that will deliver maximum business benefits
- To explain maintenance management optimization best practice techniques
- To provide opportunities to discuss the application of these best practices
- To provide an opportunity to learn these concepts through practical exercises
- To achieve the best results in practicing these technologies
- To develop an action plan to utilize these technologies in their own areas of responsibility, fitting them into the overall maintenance strategy, and measuring benefits.

Course duration:

5 days

Course location:

Dubai

Course contents:

Day-1

- Introduction & Overview: challenging the traditional approaches to maintenance.
- Basic Reliability Engineering Analysis
- Maintenance Management Fundamentals
- The road to Asset Management
- Asset Management Standardization
- Asset Management Cycle
- PAS-55-1:2008 & PAS-55-2:2008
- ISO-55000 & 55001 & 55002
- Key elements of Asset Management System
- Overview on CMMS (Maximo) & ERP (SAP)
- What Should CMMS & ERP do
- CMMS & ERP benefits
- Overview on work management
- Developing preventive maintenance work instructions (Case study Pump, motor, …etc.)
- Controlling Maintenance Work (Understand backlog & root cause)
- How to utilize CMMS or ERP in Asset Management & Work Management & Planning/scheduling
- Asset Criticality Assessment (Case Study)
- Understanding of failure code hierarchy

Day-2

- Advanced Maintenance Management Process
- Concepts & Principles
- Organization & People
- Maintenance Polices (PM & PdM & CM)
- Simulation of moving from reactive maintenance to proactive maintenance (case study RTF & PM)
- PdM different techniques
- Advanced Maintenance Polices (RCM, RBSH, RBM, RBI)
- Understanding risk
- The seven steps of Risk Based Maintenance (RBM)
- Failure Mode Effect & Criticality Analysis (FMECA)
- The level of Reliability Excellence
- Maintenance Planning & Scheduling
- Inventory Management
- Reliability Cantered Spares

Day-3

- Applying Risk Based Maintenance & Root Cause Analysis (RCA)
- Failure patterns and the different between RCA & RCFA
- Failure Mode and Effect Analysis (FMEA)
- The role of operators: Autonomous Maintenance

- Finding root causes to improve maintenance.
- Useful tools for Determining Root Cause
- Root Cause Analysis (RCA) case studies

Day-4

- Maintenance Assessments & Benchmarking
- Process audits
- Where are we now – benchmarking & assessments?
- What to improve – goal setting
- Action plan
- Developing an improvement action plan and fitting in modern maintenance Technologies
- Monitoring (KPI's) and communicating results
- Case Studies

Day-5

- Performance Management & Implementation aspects
- Continuous improvement
- Performance management: behavior of people
- Implementation aspects

Methodology:

- 50% lectures & concepts
- 10% Videos
- 10% Case studies
- 10% Exercises
- 10% Discussions
- 10% Software (if applicable or examples)

Course code: (TEME017)