# **Maintenance Management**

#### INTRODUCTION

• This 10-day Maintenance Management training course initially looks at all of the core Maintenance Management disciplines that support effective work planning, scheduling and work control. The second week builds on the foundation knowledge introduced during the first week by introducing participants to Maintenance Auditing and Continuous Improvement. These key tools can be used to ensure the core disciplines are maintained, with considered enhancement to drive improvement, identify best practices, and assist with the formulation and development of strategies.

#### This training course will cover:

- Modern Maintenance Management Practices
- Maintenance Policies and Logistics Planning
- Failure Management Programme
- Work Planning, Scheduling and Control
- Performance Indicators, Management Reports and Analysis
- Maintenance Auditing & Benchmarking
- Performance Measurement
- Appropriate Lean / Six Sigma tools and techniques in formulating improvement recommendations from audit

#### PROGRAMME OBJECTIVES

- Identify planning and scheduling best practices and key elements for taking action on them
- Understand how world-class organizations solve common planning problems
- Evaluate your practices compared to those of others
- Improve the use of your information and communication tools
- Improve productivity through use of better, more timely information
- Create and preserve lead-time in work management and use it for planning and scheduling resources
- Improve consistency and reliability of asset information
- Achieve more productive turnarounds
- Optimize preventive and predictive maintenance strategies
- Audit your maintenance operations
- Use the results to establish and monitor an effective improvement strategy
- Establish Auditing as a key element of the maintenance management strategy
- Make a business case for improvement initiatives
- Use / reference benchmarking and a range of Lean Six Sigma tools and techniques to drive improvement initiatives

#### WHO SHOULD ATTEND?

- Professionals who are involved in the management and control of maintenance planning, scheduling and work control, including planners, schedulers and users of the CMMS
- Also, any stakeholders in the Work Planning function would benefit from attending this training course
- Internal auditors and those seeking to drive maintenance improvement through audit and benchmarking

#### TRAINING METHODOLOGY

- Facilitated by experienced maintenance specialists, this Maintenance Management training
  course will be conducted as a highly interactive work session, encouraging participants to share
  their own experiences and apply the training course material to real-life situations. Case studies
  from different industries will be investigated. training course size will be limited to 30 delegates
  in order to stimulate discussion and efficiency of subject coverage. Each delegate will receive an
  extensive reference manual, as well as case studies, while worked out solutions will be handed
  out to the delegates on conclusion of group discussions.
- To ensure the concepts introduced during this training course are understood, they will be reinforced through a mix of learning methods, including lecture style presentation, open discussion, case studies, simulations and group work.

#### PROGRAMME SUMMARY

- Week 1 of the Maintenance Management training course deals with essential maintenance management skills. Delegates will gain a clear understanding of their roles, work more effectively within a team environment acquire a practical understanding and knowledge of
- The essential principles of effective maintenance management
- Effective procedures for planning and controlling of the maintenance work flow
- Proven methodology for the development of an effective maintenance plan
- Effective scheduling of maintenance work
- Closing the management loop through effective measurement, reporting and analysis
- Week 2 of the Maintenance Management training course covers the use and application of a standardised maintenance management audit methodology, consistent with the recognised maintenance excellence framework, to assess the current state of maintenance management strategy implementation, and identify opportunities for improvement. Similarly, participants will learn how to use maintenance benchmarking and a range of Lean, Six Sigma tools and techniques to identify, recommend (through audit report) and drive improvement of their maintenance management systems.

#### **PROGRAM OUTLINE**

#### Modern Maintenance Management Practice in Perspective

- Maintenance in the Business Process
- What does it looks like
- What it could look like
- Evolution in Maintenance Management
- Reactive vs. Proactive Maintenance

#### Maintenance Policies and Logistics Planning

- Equipment Classification and Identification
- Document Identification and Classification
- Maintenance Management Policies
- Maintenance Work Prioritisation
- Maintenance Logistics Planning

# Failure Management Programme Development

- Failure Modes, Effects and Consequences (FMEA)
- Failure Management Policies
- Application of RCM in the Development of Failure Management Policies
- Implementing Failure Management Policies

#### Work Scheduling and Control

- Work Notification Process
- Development of Weekly Master Schedule
- Determine Resource Availability
- Determine Equipment Outage Requirement
- Management of the Forward Workload (Backlog)
- Weekly Master Schedule Implementation

#### Performance Measurement, Management Reporting and Analysis

- Information and Control
- Management Levels and Information
- Performance Indicators
- Workload Performance Indicators
- Planning Performance Indicators
- Effectiveness Performance Indicators
- Cost Performance Indicators
- Management Reports

#### Introduction and Foundation Concepts

- Introduction to Auditing
- Introduction to Benchmarking
- · Maintenance Management models for different operations
- International standards models
- Performance Measures

### Maintenance Auditing

- The Maintenance Auditing Process
- Maintenance Auditing Methodology
- Conducting a Maintenance Audit
- Maintenance Audit Simulation Case Study

## Maintenance Auditing and Benchmarking

- Maintenance Audit Simulation Case Study
- Using Maintenance Audit Results to Plan Improvement Strategies
- The Maintenance Benchmarking Process
- Maintenance Benchmarking Methodology
- Benchmarking Tools and Techniques

# Maintenance Benchmarking and Performance Measurement

- Maintenance Performance Measures and Metrics
- Key Performance Indicators
- Integrating Benchmarking resulting into improvement and objective setting processes
- Integrating Maintenance Auditing and Benchmarking into the Performance Measurement System to establish improvement objectives and strategies

# Auditing, Benchmarking and Maintenance Improvement

- Case study
- Identifying Improvement Opportunities
- Making the Business Case
- Standards and Lean 6S
- Programme Review and conclusion