

**Predictive Maintenance** 





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REF: O1328 DATE: 15 - 19 September 2024 Venue: Dubai (UAE) - Fee: 5830 Euro

#### Introduction:

The maintenance of physical assets can no longer be treated as an 'engineering problem'. The competitive environment in which a business operates requires an approach that integrates the operational objectives of the business and the life-cycle objectives of the physical assets.

Leading industrial organizations are evolving away from reactive "fix-it-when-it-breaks" management into predictive, productive management "anticipating, planning, and fix-it-before-it-breaks". This evolution requires well-planned and executed actions on several fronts.

Our highly interactive program is designed to provide the workforce with essential physical asset management skills, gain a clear understanding of their role, and work more effectively within a team environment. "Maintenance is not only part of the production process, it must be planned into the production process."

## Course Objectives:

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

- Identify planning 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 the 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

#### Targeted Audience:

- Maintenance Managers
- Maintenance Engineers
- Maintenance Supervisors
- Planning Engineers
- Operations Professionals
- · Engineering and Purchasing Staff
- · Materials Divisions

#### Course Outlines:

#### Unit 1: Modern Maintenance Management Practice in Perspective:

- Maintenance Practice in Perspective
  - Maintenance in the Business Process
  - Evolution in Maintenance Management
  - The Contribution of Maintenance to the achievement of the Business Objectives
  - Business, Operations and Maintenance Key Performance Area
  - Roles and Accountability



### Unit 2: Maintenance Policies and Logistics Planning:

- Equipment Classification and Identification
  - Functional Location
  - Equipment Type Classification
  - Equipment Identification
  - Part Number and Bill of Material
  - Documentation Structures
  - Document Identification and Classification
- Maintenance Management Policies
- · Equipment Criticality Grading
- Job Record Policy
- Job Information Requirements
- Principles of Work Order Design
- Maintenance Work Prioritisation
- Logistic Support Analysis
- Maintenance Task Detail Planning
- Maintenance Work Estimating
- Maintenance Levels
- Support Documentation
- Support Equipment
- Personnel and Organisation
- Maintenance Logistics Planning

#### Unit 3: Failure Management Programme Development:

- Failure Modes, Effects and Consequences
  - · Equipment Functions and Performance Standards
  - Functional Failures
  - Failure Modes
  - Failure Effects
  - Consequences of Failure
- Failure Management Policies
- Age-Related Failure Patterns
- Random Failure Patterns
- Routine Restoration and Discard Tasks
- Routine Condition-based Tasks
- Failure-finding Tasks
- The application of RCM in the Development of Failure Management Policies
- Proposed Routine Maintenance Tasks
- · Categorizing and structuring Routine Maintenance Tasks
- Corrective Maintenance Planning
- Logistic Requirements Planning
- Implementing Failure Management Policies

#### Unit 4: Work Planning, Scheduling, and Control

- · Definition of Notifications, Defects, Deviations
- · Notification Process, Roles, and Principles
- Prioritizing Notifications
- · Weekly Master Schedule
  - Master Schedule Objectives



- Categorize the Outstanding Workload
- Determine Resource Availability
- Determine Equipment Non-utilisation Profile
- Develop Draft Master Schedule
- Conduct Master Schedule Review Meeting
- Final Master Schedule and Implementation
- Backlog Management

## Unit 5: Information and Performance Management:

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