€TRAINING

Predictive Maintenance

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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