

An LDI Training Course

# Modern Maintenance Management

## Total Productive Maintenance and Reliability Centered Maintenance

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This course is designed to give participants a comprehensive knowledge of maintenance management.

In this course, participants will learn practical skills that can be applied to the job right away, build a solid maintenance program, and increase your value to your organization.

**Here are the benefits of attending this course:**

Build and sustain a maintenance program

Select the optimum equipment maintenance strategy

Implement work management strategies

Improve asset availability and utilization

Increase maintenance personnel productivity

Build a problem-solving culture

Manage an effective maintenance budget

## **Course Outline**

### **Introduction of Modern Maintenance Management as a part of World Class Maintenance**

- What is Modern Maintenance Management
- What is World Class Maintenance
- Various concepts of World Class Maintenance

### **World Class Maintenance Organization**

- Directives (VISION, MISSION, Corporate Planning: Short-Long Term Planning)
- Maintenance Classification and Implementation
- Equipment Maintenance Sub-systems Relation
- Correlation Between Maintenance Functional Elements in Plant Maintenance
- Enterprise Asset Management System
- World Class Maintenance Organization Recommendation

### **Maintenance Strategies**

- Policies
- Organization / Human Resources
- Employee Empowerment
- Maintenance Tactics
- Reliability Analysis
- Performance Measure / Benchmarking
- Information Technology
- Planning and Scheduling
- Material Management
- Maintenance Process Reengineering

### **Maintenance Values**

#### **Maintenance Management Information System**

- Importance of Computerized Maintenance Management System (CMMS)
- Enterprise Asset Management System, advance development of CMMS
- Activity in EAMS:
  - Functional Location and Equipment Tree/Hierarchy
  - Work Flow and Work Order Management Flow Diagram
  - BM, PM, PdM, PaM
  - Maintenance Management Business Process Flow Diagram
  - Inventory Management, Purchasing and Supply Chains Philosophy
  - Document and Catalog Management
  - DCS and Condition Monitoring Integration
  - Labor
  - Report Writer
- Integrated Enterprise Asset Management System (IEAMS)
- Flow Diagram of EAMS
- Where & When in using IAMS

#### **Maintenance Planning & Scheduling**

- What is Maintenance Planning
- What is Maintenance Scheduling
- Maintenance & Scheduling Flow Process

The Criteria for Planner and Scheduler  
Planning & Scheduling of Shutdown and Turn Around Activities

**Proactive Maintenance**

**Introduction of Proactive Maintenance (PaM)**

What is Proactive Maintenance

Comparison of various maintenance methods: BM, PdM, PM, RACi

**Predictive Maintenance (Condition Based Maintenance) as a part of Proactive Maintenance**

Definition & principles of Condition Based Maintenance

The role of Condition Based Maintenance in the Maintenance System

Condition Based Maintenance: Methods & techniques

Dynamic Monitoring and Analysis/Vibration Analysis /Balancing / Alignment

Particle & Chemical Monitoring and Analysis/Oil &

Contamination Analysis

Physical Effects Monitoring and Analysis

Temperature and Electrical Effects Monitoring and Analysis/

Thermography

The benefits of Condition Based Maintenance

**Preventive Maintenance as a part of Proactive Maintenance**

Definition & Principles of Preventive Maintenance

The role of Preventive Maintenance in the maintenance system

Preventive Maintenance: Methods & Techniques

The benefits of Preventive Maintenance

**Root Cause Analysis and Failure Modes and Effects Analysis**

Importance of FMEA

Principles of FMEA

How and where we use FMEA

**Total Productive Maintenance**

**Introduction of Total Productive Maintenance (TPM)**

What is TPM

Pillars of TPM & Twelve Stages in Building TPM

Benefits of TPM

Overall Equipment Effectiveness

Organizational Learning; Culture Change / Autonomous Maintenance; Learning

Organization

Health Safety and Environment in Modern Maintenance Management

**Reliability Centered Maintenance (RCM)**

Definition & Principles of RCM

RCM Standard SAE JA1011

The role of RCM in the Maintenance System

Reliability Centered Maintenance Process Analysis and Techniques: Function, Functional Failure, Failure Modes, Effect and Consequences of Failure, Proactive and Default Actions

The Benefits of RCM

Continuous Improvement / Reliability Improvement

Concept of Zero Breakdown

## **Who Should Attend**

This course will greatly benefit engineers, supervisors, and managers involved in maintenance.

**For more information about the course, please visit [lditraining.com](http://lditraining.com) or contact LDI Training at [HYPERLINK "mailto:lditrain@indo.net.id" lditrain@indo.net.id](mailto:lditrain@indo.net.id)**