

LEAN TOTAL PLANT MAINTENANCE & RELIABILITY OPTIMIZATION

“Achieve World-Class Equipment Reliability and Operational Uptime Through Lean TPM Excellence.”

Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** In-House Training

Introduction

This advanced training program is designed to equip plant and maintenance professionals with the methodologies and tools necessary to drive asset reliability, optimize maintenance performance, and implement Lean-based Total Productive Maintenance (TPM) practices. By integrating reliability-centered maintenance (RCM), Lean principles, and best practices in asset care, the course empowers participants to reduce downtime, increase availability, and improve overall equipment effectiveness (OEE).

Objectives

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

- Understand the core principles of Lean TPM and reliability optimization
- Apply TPM pillars to build a proactive and engaged maintenance culture
- Use OEE and failure analysis to improve asset performance
- Design and implement preventive, predictive, and autonomous maintenance strategies
- Integrate RCM principles with lean thinking for sustainable asset excellence

Why Attend

This program provides the strategic framework and hands-on tools needed to build a high-performance maintenance system. It's ideal for professionals seeking to modernize asset care, reduce reactive maintenance, and lead TPM transformations in manufacturing, utilities, oil & gas, and related industries.

Target Audience

- Maintenance Managers and Engineers
- Reliability and Asset Management Professionals
- Plant Managers and Production Supervisors
- TPM Coordinators and Continuous Improvement Leaders
- Mechanical Technicians and Maintenance Planners

Individual Benefits

- Master Lean TPM principles to boost reliability and uptime
- Gain practical skills in maintenance analysis and strategy planning
- Improve cross-functional coordination with operations and engineering
- Enhance leadership and problem-solving capacity in plant optimization

Organizational Benefits

- Reduce unplanned downtime and maintenance costs
- Improve productivity, efficiency, and safety in plant operations
- Build a sustainable, reliability-centered culture across departments
- Drive OEE improvements and operational excellence initiatives

Instructional Methodology

- Instructor-led technical modules and visual-based training
- TPM simulation games and Lean maintenance workshops
- Hands-on tools: FMEA, RCA, OEE tracking, and audit templates
- Interactive discussions and team planning exercises
- Maintenance strategy mapping and implementation planning

Course Outline

DETAILED 5-DAY COURSE OUTLINE (CUSTOMIZABLE)

Training Hours: 7:30 AM – 3:30 PM **Daily Format:** 3–4 Learning Modules | Coffee Breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

Day 1: Lean TPM Fundamentals & Strategic Overview

- Module 1: Introduction to Lean TPM & Reliability Concepts (07:30 – 09:30)
- Module 2: TPM Pillars: Focused Improvement, Autonomous Maintenance, Planned Maintenance (09:45 – 11:15)
- Module 3: OEE Metrics – Availability, Performance, Quality (11:30 – 01:00)
- Module 4: TPM Maturity Assessment & Gap Analysis (02:00 – 03:30)

Day 2: Asset Strategy & Equipment Reliability

- Module 1: Reliability-Centered Maintenance (RCM) Basics (07:30 – 09:30)
- Module 2: Failure Modes and Effects Analysis (FMEA) (09:45 – 11:15)
- Module 3: Maintenance Strategy Development: PM, PdM, CBM (11:30 – 01:00)
- Module 4: Root Cause Analysis (RCA) & Pareto Applications (02:00 – 03:30)

Day 3: Autonomous Maintenance & Visual Management

- Module 1: Operator Care & 5S for Maintenance (07:30 – 09:30)
- Module 2: AM Implementation Roadmap & Checklists (09:45 – 11:15)
- Module 3: Visual Controls, Maintenance Boards, and Tags (11:30 – 01:00)
- Module 4: Training Needs, Skill Matrix & Operator Empowerment (02:00 – 03:30)

Day 4: Performance Tracking & Continuous Improvement

- Module 1: Maintenance KPIs, Dashboards & Benchmarking (07:30 – 09:30)
- Module 2: CMMS/EAM Integration for Maintenance Efficiency (09:45 – 11:15)
- Module 3: Lean Tools in Maintenance – Kaizen, SMED, Jidoka (11:30 – 01:00)
- Module 4: Cost Avoidance & Lifecycle Costing Techniques (02:00 – 03:30)

Day 5: Implementation Planning & Certification

- Module 1: TPM Audits, PM Optimization & Risk-Based Maintenance (07:30 – 09:30)
- Module 2: Cross-Functional TPM Teams and Kaizen Events (09:45 – 11:15)
- Module 3: TPM Action Plan, Roadmap & Roles Assignment (11:30 – 01:00)
- Module 4: Final Exam, Certification Wrap-Up & Continuous Improvement Charter (02:00 – 03:30)

Certification

Upon successful completion of the training and final assessment, participants will receive a Certificate of Completion – Lean Total Plant Maintenance & Reliability Optimization. This course aligns with global reliability and Lean TPM standards and supports professional growth in maintenance leadership roles.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
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- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

In-House / Customized Training

Interested in running this course for your team?

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