

## INVENTORY & MAINTENANCE OPTIMISATION

*"Achieving operational excellence by aligning inventory control with maintenance strategies."*

### Schedule

Date	Venue	Fees (Face-to-Face)
06 - 10 Jul 2026	Istanbul, Turkey	USD 3,495 per delegate

► **Available delivery methods:** Face-to-Face & Online Training

### Introduction

Balancing inventory levels with maintenance demands is crucial for operational efficiency, cost control, and asset reliability. Organizations often face the challenge of either stockouts that disrupt maintenance or excessive inventory that ties up capital. Optimizing the relationship between inventory and maintenance planning is a strategic necessity for asset-intensive industries. This 5-day comprehensive course equips participants with best practices, analytical tools, and integrated planning techniques to ensure optimal inventory availability for maintenance while minimizing costs. Real-world scenarios, case studies, and hands-on simulations will enhance participants' ability to build synergy between supply chain and maintenance functions.

### Objectives

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

- Understand the interdependencies between inventory management and maintenance operations
- Classify maintenance spares and define criticality
- Develop inventory control policies based on maintenance strategies
- Apply forecasting, EOQ, and ROP techniques for spare parts
- Improve asset uptime through optimized inventory availability
- Align procurement, warehousing, and maintenance planning

## Why Attend

- Reduce inventory costs without compromising maintenance reliability
- Prevent unplanned downtime by ensuring part availability
- Improve coordination between supply chain and maintenance departments
- Learn modern planning, forecasting, and analysis tools
- Benchmark your practices against global standards in maintenance and inventory control

## Target Audience

This program is designed for:

- Maintenance and reliability engineers
- Inventory and supply chain professionals
- Plant managers and asset management teams
- Procurement and warehouse supervisors
- CMMS/EAM analysts and planners
- Anyone involved in spare parts management or maintenance optimization

## Individual Benefits

Key competencies that will be developed include:

- Inventory classification and stock control
- Forecasting and safety stock calculation
- Maintenance planning and material synchronization
- Spare parts risk analysis and criticality assessment
- Integration of maintenance and supply chain systems

## Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Reduced stockouts and overstocking issues
- Enhanced equipment availability and reliability
- Lower total cost of ownership (TCO) of assets
- Improved data-driven decision-making
- Stronger alignment between operational departments

## Instructional Methodology

The course follows a blended learning approach combining theory with practice:

- Strategy Briefings – Maintenance philosophies, inventory strategies, and risk-based spares planning
- Case Studies – Industry examples of inventory failures and optimization wins
- Workshops – Practical exercises in stock level calculation, reorder policies, and criticality ranking
- Peer Exchange – Maintenance and inventory coordination scenarios
- Tools – Templates for ABC/XYZ analysis, criticality matrix, EOQ/ROP calculators

## MAWA EVENTS

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## Course Outline

### Detailed 5-Day Course Outline

**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: Foundations of Maintenance & Inventory Planning

- Module 1: Maintenance Strategies Overview (07:30 – 09:30)
  - Corrective, preventive, predictive, and RCM
  - Impact of strategy on inventory needs
- Module 2: Spare Parts Classification
  - ABC/XYZ and criticality analysis
  - Fast-moving vs slow-moving inventory
- Module 3: Linking CMMS with Inventory Systems
  - Data standards and item master management
  - Integrated maintenance-material workflows

#### Day 2: Forecasting & Replenishment Strategies

- Module 1: Demand Forecasting for Spare Parts
  - Historical usage, lead time, and seasonal adjustments
- Module 2: EOQ and Reorder Point (ROP) Models
  - Calculating optimal order quantities and trigger levels
- Module 3: Safety Stock and Service Levels
  - Stockout risk mitigation
  - Multi-echelon stocking policies

#### Day 3: Cost and Risk-Based Optimization

- Module 1: Inventory Cost Elements
  - Carrying, ordering, and shortage costs
- Module 2: Maintenance Risk vs Inventory Investment
  - Balancing reliability with working capital efficiency
- Module 3: Spare Parts Standardization and Substitution
  - Obsolescence management
  - Interchangeability and SKU rationalization

#### Day 4: Warehouse and Supply Chain Integration

- Module 1: Warehousing for Maintenance Efficiency
  - Layout, labeling, binning, and preservation practices
- Module 2: Supplier Reliability and Lead Time Management
  - Vendor-managed inventory (VMI), contracts, and SLAs
- Module 3: Emergency Parts and Shutdown Planning
  - Kitting, staging, and critical spares strategy

#### Day 5: KPIs, Reporting & Continuous Improvement

- Module 1: Performance Metrics for Inventory & Maintenance
  - Stockout rate, fill rate, mean time to repair (MTTR)
- Module 2: Audit and Continuous Improvement Tools
  - Inventory accuracy, cycle counting, 5S and root cause review
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Module 3: Final Simulation and Action Planning

- Optimization scenario: integrate data to improve stock levels and reliability
- Develop a tailored inventory-maintenance improvement plan

**Certification**

Participants will receive a Certificate of Completion in Inventory & Maintenance Optimisation, certifying their skills in aligning spare parts inventory with maintenance strategies to maximize asset availability and minimize operational cost.

**Why Choose MAWA Events**

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation's unique goals.

<p><b>In-House / Customized Training</b></p> <p>Interested in running this course for your team?</p> <p>Please contact us:</p>	<p>TEL:</p> <p><b>+601116373203</b></p>	<p>EMAIL:</p> <p><b>info@mawaevents.net</b></p>
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