

REDUCING MAINTENANCE MRO INVENTORIES

“Optimizing Spare Parts and Maintenance Inventories to Improve Efficiency and Cut Costs”

Schedule

Date	Venue	Fees (Face-to-Face)
24 - 28 Aug 2026	London - UK	USD 3495 per delegate

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

Introduction

Maintenance, Repair, and Operations (MRO) inventories are critical for supporting plant reliability and operational continuity—but they also represent a significant investment and potential source of inefficiency. Organizations frequently struggle with overstocking, obsolete parts, and poor inventory turnover.

This 5-day training course provides participants with proven methodologies to analyze, optimize, and manage MRO inventories. It equips maintenance, supply chain, and asset management professionals with the tools needed to reduce inventory levels while maintaining service reliability and availability of critical spares.

Objectives

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

- Identify inefficiencies in MRO inventory management practices
- Apply data-driven methods to optimize stock levels and reduce holding costs
- Implement classification and criticality analyses for spare parts
- Balance inventory reduction with equipment reliability and maintenance needs
- Develop KPIs and performance metrics for ongoing inventory control

Why Attend

- Learn how to streamline and rationalize MRO inventories
- Improve parts availability without overstocking
- Minimize obsolescence, duplication, and inventory carrying costs
- Increase collaboration between maintenance and supply chain functions
- Use industry-leading tools and analytics to drive inventory decisions

Target Audience

This program is designed for:

- Inventory and warehouse managers
- Maintenance planners and engineers
- Procurement and supply chain professionals
- Reliability and asset management personnel
- Operations and plant managers involved in MRO decision-making

Individual Benefits

Key competencies that will be developed include:

- Strategic inventory classification and management
- Improved forecasting and demand planning for MRO items
- Data analysis skills using inventory performance metrics
- Knowledge of modern MRO inventory optimization tools
- Practical insights into inventory rationalization and standardization

Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Lower inventory carrying and procurement costs
- Improved stock accuracy and availability of critical items
- Enhanced alignment between supply chain, maintenance, and operations
- Reduced downtime through better spare parts planning
- A framework for continuous improvement in inventory performance

Instructional Methodology

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

- Strategy Briefings - Deep dive into MRO inventory optimization strategies and best practices
- Case Studies - Real-world examples of successful inventory reduction initiatives
- Workshops - Hands-on exercises to classify, analyze, and rationalize spare parts
- Peer Exchange - Group discussions on challenges in MRO inventory control
- Tools - Templates for ABC analysis, inventory criticality assessment, and performance tracking

MAWA EVENTS

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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 MRO Inventory Management

- Module 1: Understanding MRO Inventories (07:30 – 09:30)
 - Role of MRO inventories in operational reliability
 - Challenges and costs associated with spare parts inventories
 - Differences between MRO and production inventories
- Module 2: MRO Inventory Problems and Their Root Causes (09:45 – 11:15)
 - Overstocking, understocking, and obsolescence
 - Poor demand forecasting and inventory visibility
 - Organizational silos and data inconsistencies
- Module 3: Key Concepts in Inventory Management (11:30 – 01:00)
 - Inventory turnover, reorder points, EOQ, and lead times
 - Safety stock strategies and service level considerations
 - Inventory performance metrics
- Module 4: Workshop – Identifying Inventory Inefficiencies (02:00 – 03:30)
 - Group exercise to evaluate sample MRO data
 - Discuss common causes of inefficiencies
 - Develop action points for improvement

Day 2: Classification and Criticality Analysis

- Module 1: ABC and XYZ Analysis for MRO Inventory (07:30 – 09:30)
 - Applying ABC classification for value-based prioritization
 - XYZ analysis for demand variability
 - Using combined classification to drive stocking policies
- Module 2: Spare Parts Criticality Assessment (09:45 – 11:15)
 - Methods for determining criticality of spare parts
 - Linking criticality to equipment functions and risk
 - Developing stocking strategies based on risk levels
- Module 3: Managing Obsolete, Duplicate, and Non-moving Items (11:30 – 01:00)
 - Identifying and dealing with surplus and dead stock
 - Part rationalization and standardization
 - Data cleansing and catalog improvement
- Module 4: Workshop – Spare Part Classification Exercise (02:00 – 03:30)
 - Classify a sample list of parts by value and criticality
 - Determine actions based on classification outcomes
 - Discuss real-life challenges and success stories

Day 3: Demand Planning and Optimization Techniques

- Module 1: Demand Forecasting for Spare Parts (07:30 – 09:30)
 - Historical usage vs. predictive forecasting
 - Forecasting for intermittent and slow-moving items
 - Collaboration with maintenance for accurate demand
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Module 2: Inventory Policy Design (09:45 – 11:15)

- Determining reorder levels and quantities
- Choosing between make-to-stock and order-on-demand
- Balancing service levels with carrying costs
- **Module 3: Replenishment and Procurement Strategies (11:30 – 01:00)**
- Min/max, periodic review, and kanban systems
- Supplier collaboration and lead time reduction
- Framework agreements and reorder triggers
- **Module 4: Workshop – Forecasting and Replenishment (02:00 – 03:30)**
- Work through a demand planning case
- Set reorder parameters and review impact
- Discuss system integration and automation

Day 4: MRO Inventory Control and KPIs

- **Module 1: Inventory Auditing and Accuracy (07:30 – 09:30)**
- Cycle counting and physical inventory techniques
- Improving data accuracy in CMMS and ERP systems
- Dealing with phantom stock and stockouts
- **Module 2: Measuring Inventory Performance (09:45 – 11:15)**
- Key metrics: inventory turnover, service level, carrying cost
- Using dashboards and reporting tools
- Root cause analysis of KPI deviations
- **Module 3: Continuous Improvement Framework (11:30 – 01:00)**
- Lean principles in inventory management
- Kaizen for MRO process improvements
- Engaging teams for sustained results
- **Module 4: Workshop – Inventory KPI Dashboard (02:00 – 03:30)**
- Create a mock dashboard from sample data
- Analyze trends and propose improvement actions
- Peer feedback and facilitator insights

Day 5: Integration and Strategic Management

- **Module 1: Integrating Maintenance and Inventory Functions (07:30 – 09:30)**
- Aligning maintenance strategies with spare parts planning
- Cross-functional collaboration and shared KPIs
- CMMS and ERP integration for data visibility
- **Module 2: Case Studies in MRO Optimization (09:45 – 11:15)**
- Real examples of MRO inventory cost reduction
- Discussion of results, challenges, and success factors
- Best practices for global organizations
- **Module 3: Creating an MRO Inventory Optimization Roadmap (11:30 – 01:00)**
- Building an action plan tailored to organizational needs
- Stakeholder engagement and change management
- Monitoring progress and sustaining gains
- **Module 4: Final Review and Certification (02:00 – 03:30)**

Summary of key lessons learned

- Final group discussion and Q&A
- Awarding of certificates and program closure

Certification

Participants will receive a Certificate of Completion in MRO Inventory Optimization, validating their ability to strategically manage and reduce maintenance, repair, and operations inventories in line with best practices and operational goals.

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.

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