

## SPARE PART REDUCTION & OPTIMIZATION

“Balancing Availability, Cost, and Risk to Optimize Spare Parts Inventory and Performance”

### Schedule

Date	Venue	Fees (Face-to-Face)
23 - 27 Nov 2026	Dubai - UAE	USD 3495 per delegate

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

### Introduction

Managing spare parts inventory is a critical yet often overlooked factor in ensuring equipment availability, minimizing downtime, and controlling operational costs. Excessive spare parts tie up capital, while shortages increase the risk of unplanned outages. Achieving the right balance requires a strategic, data-driven approach to spare part classification, forecasting, and stocking.

This intensive 5-day course equips maintenance, reliability, and supply chain professionals with the tools to optimize spare part inventory levels, reduce waste, and improve service levels. Participants will learn proven methods such as criticality analysis, ABC classification, demand forecasting, and lifecycle cost optimization to streamline spare parts management in asset-intensive industries.

### Objectives

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

- Analyze spare parts demand patterns and stock criticality
- Apply best-practice methods to optimize spare parts inventory levels
- Use forecasting, lead time, and consumption data to rationalize stock
- Reduce obsolescence, overstocking, and emergency orders
- Develop sustainable strategies for spare parts reduction and performance monitoring

## Why Attend

- Free up working capital locked in excessive inventory
- Enhance equipment reliability and availability through better part planning
- Build coordination between maintenance, procurement, and warehouse teams
- Develop evidence-based stocking decisions to reduce risk and cost
- Align spare parts management with asset lifecycle strategies

## Target Audience

This program is designed for:

- Maintenance & Reliability Engineers
- Spare Parts & Inventory Controllers
- Plant Engineers and Maintenance Planners
- Supply Chain and Materials Managers
- Anyone involved in warehouse management or procurement for MRO items

## Individual Benefits

Key competencies that will be developed include:

- Spare parts categorization and criticality analysis
- Demand-based inventory optimization techniques
- Root cause analysis of stock-outs and overstocking
- Planning for long lead-time and insurance spares
- Use of KPIs to improve inventory turnover and service level

## Organizational Benefits

Upon completing the training course, participants will demonstrate:

- Reduced spare parts inventory costs without impacting reliability
- Faster identification and disposal of obsolete or redundant parts
- Improved coordination between engineering, stores, and procurement
- Stronger data integrity and decision-making for spare part planning
- Enhanced equipment uptime through smarter stocking practices

## Instructional Methodology

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

- Strategy Briefings - Inventory control principles, asset criticality, and stock policies
- Case Studies - Success stories in reducing spare parts cost and improving uptime
- Workshops - Stock analysis, classification exercises, and optimization planning
- Peer Exchange - Group discussions on inventory pain points and solutions
- Tools - Templates for inventory review, criticality scoring, and reorder planning

## Course Outline

### DETAILED 5-DAY COURSE OUTLINE

**Training Hours:** 07:30 AM – 03:30 PM **Daily Format:** 3–4 Learning Modules | Coffee breaks: 09:30 & 11:15 | Lunch Buffet: 01:00 – 02:00

#### Day 1: Fundamentals of Spare Parts and Inventory Strategy

- Module 1: Introduction to Spare Parts Management (07:30 – 09:30) • Key challenges, cost impact, and cross-functional coordination
- Module 2: Spare Parts Classification and ABC Analysis (09:45 – 11:15) • ABC/XYZ, FSN, VED models for spare parts prioritization
- Module 3: Criticality Analysis for Spares (11:30 – 01:00) • Failure consequence, lead time, and impact-based ranking
- Module 4: Workshop – ABC and Criticality Matrix (02:00 – 03:30) • Participants classify actual parts using a provided dataset

#### Day 2: Demand Forecasting and Stock Optimization

- Module 5: Understanding Spare Parts Demand Patterns (07:30 – 09:30) • Slow movers, seasonal demand, and stochastic consumption
- Module 6: Forecasting Methods for Spares (09:45 – 11:15) • Simple average, moving average, weighted forecasting models
- Module 7: Economic Order Quantity (EOQ) and Reorder Point (ROP) (11:30 – 01:00) • Calculating optimal stock levels and order quantities
- Module 8: Workshop – Forecasting and EOQ Simulation (02:00 – 03:30) • Participants apply EOQ and ROP to case scenarios

#### Day 3: Spare Parts Risk Management and Obsolescence Control

- Module 9: Managing Critical and Insurance Spares (07:30 – 09:30) • Long-lead items, single-source parts, and rare failures
- Module 10: Controlling Obsolescence and Redundancy (09:45 – 11:15) • Strategies for write-off, reclassification, or salvage
- Module 11: Root Causes of Stock-Outs and Overstocking (11:30 – 01:00) • Gap analysis in planning, data, and execution
- Module 12: Workshop – Spare Part Disposal and Risk Planning (02:00 – 03:30) • Team exercise to assess risks and obsolescence triggers

#### Day 4: Process Integration and System Support

- Module 13: Integrating Maintenance, Procurement, and Inventory (07:30 – 09:30) • Master data, BOM accuracy, and workflow standardization
- Module 14: Spare Parts KPIs and Performance Dashboards (09:45 – 11:15) • Turnover ratio, stockout rate, service level, and fill rate
- Module 15: Technology Tools and CMMS Integration (11:30 – 01:00) • Using SAP, Maximo, or Oracle to manage spare parts lifecycle
- Module 16: Workshop – Spare Parts KPI Design (02:00 – 03:30) • Participants create and present a spare parts dashboard

#### Day 5: Continuous Improvement and Optimization Plans

- Module 17: Lean Spare Parts Management (07:30 – 09:30) • 5S, visual control, kanban, and min-max strategy
- Module 18: Inventory Optimization Projects (09:45 – 11:15) • Redeployment, vendor-managed inventory, and consignment
- Module 19: Final Case Study – Inventory Optimization Plan (11:30 – 01:00) • Group work on spare part strategy for a sample facility
- Module 20: Review, Feedback & Action Planning (02:00 – 03:30) • Participants define site-specific implementation steps

## Certification

Participants will receive a Certificate of Completion in Spare Part Reduction & Optimization, validating their ability to analyze, rationalize, and improve spare parts inventory practices in asset-intensive operations.

## 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>
--	---	---

© Material published by MAWA Events shown here is copyrighted. All rights reserved. Any unauthorized copying, distribution, use, dissemination, downloading, storing (in any medium), transmission, reproduction or reliance in whole or any part of this course outline is prohibited and will constitute an infringement of copyright.