Spare Parts Management and MRO Materials Cataloguing: Criticality, Stocking and Data Cleansing

23 – 27 May 2027
Jeddah - Corniche four-star



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Ref: 612_17983 **Date:** 23 – 27 May 2027 **Location:** Jeddah - Corniche four-star **Fees:** 19500 SAR

Introduction:

Spare parts management fails in asset-intensive plants when critical spares are missing at breakdown while slow-moving items, duplicate part numbers and vague descriptions fill the stores and inflate stock value. Maintenance waits, procurement buys what is already held, and nobody can say which spares justify their holding cost. This Core Concept course gives materials, maintenance and procurement staff the methods to rank spares by criticality, set stocking levels for lumpy demand and build a clean MRO materials catalogue. Participants finish with a Spares Stocking Policy and Catalogue Cleansing Plan for a case plant.

Course Objectives:

- Rank MRO spares by equipment criticality, lead time and supply risk using a documented scoring matrix
- Decide whether to stock, pool or source on demand each spare, including insurance and capital spares, using a holding cost versus downtime cost comparison
- Set min-max levels and reorder points for slow-moving and intermittent-demand spares and explain the limits of EOQ for them
- Write material master records with noun-modifier descriptions, attribute templates and purchase specifications that suppliers and storekeepers read the same way
- Identify and merge duplicate material codes, and control obsolete and surplus spares through review and disposal routes
- Produce a Spares Stocking Policy and Catalogue Cleansing Plan with fill rate, stock value and turns targets for a case plant

Target Audience:

- Materials and inventory staff who set stocking levels and review MRO stock value
- Maintenance and reliability staff who specify spares, raise reservations and depend on parts availability at breakdown
- Stores and warehouse staff who receive, preserve and issue spares in plant stores
- Procurement staff who buy MRO items, write purchase specifications and manage supplier part numbers
- Master data and cataloguing staff who create, change and cleanse material codes

Course Outline:

Day 1: MRO Spares Landscape and Current-State Diagnosis

- MRO Inventory Profile: Many Items, Low Usage and Lumpy Demand
- Spare Part Types: Repairable, Consumable, Capital and Insurance Spares
- Maintenance Strategy Link: Preventive, Corrective and Condition-Based Spares Needs
- Holding Cost Versus Downtime Cost of a Stock-Out
- Current-State Spares Health Check: Dead Stock, Stock-Outs and Duplicates

Day 2: Criticality, Stocking Models and Catalogue Structure

- Spares Criticality Scoring Matrix: Equipment Impact, Lead Time and Supply Risk
- Stock or No-Stock Decision Tree for Slow-Moving Items
- Min-Max and Reorder Point Method with Lead Time Demand
- EOQ Assumptions and Why They Break for Intermittent Demand
- Noun-Modifier Naming Convention and Material Class Hierarchy

Day 3: Setting Levels and Writing Clean Material Records

- Intermittent Demand Forecasting Overview: Demand Size and Interval Methods
- Insurance and Capital Spares Justification with Expected Downtime Cost
- Pooled and Shared Spares Across Sites and Equipment Families
- Attribute Templates and Short and Long Description Rules
- Purchase Specification Writing: Performance, Dimensions, Materials and Acceptance Criteria

Day 4: Data Quality, Preservation and Stock Reduction

- Material Master Data Quality Rules: Completeness, Consistency and Ownership
- Duplicate Material Code Detection Using Attribute Matching and Supplier Part Numbers
- Spares Storage and Preservation: Shelf Life, Rotation of Shafts and Humidity Control
- Obsolete and Surplus Spares Review: Usage History and Beyond-Economic-Repair Decisions
- Disposal Routes: Return to Supplier, Transfer, Resale and Scrap

Day 5: Case Plant Practice and the Stocking Policy

- Case Plant Spares Register Analysis: Criticality Ranking and Stocking Levels
- Case Plant Catalogue Extract: Duplicate Merge and Description Rewrite
- Spares KPI Scorecard: Fill Rate, Stock Value and Inventory Turns
- Spares Stocking Policy and Catalogue Cleansing Plan Drafting
- Plan Presentation to a Maintenance and Supply Review Panel

Skills You Will Gain:

- Spares Criticality Assessment
- Stocking Level Calculation
- Intermittent Demand Analysis
- Material Master Governance
- Noun-Modifier Cataloguing
- Technical Specification Writing
- Surplus Stock Disposal
- MRO Inventory KPI Reporting

Why Attend This Course:

- Return with a Spares Stocking Policy and Catalogue Cleansing Plan built from a case plant spares register
- Defend the holding of insurance spares with a downtime cost argument instead of habit
- Stop buying parts the plant already holds under a different code or description
- Compare spares practice with peers from utilities, oil and gas, mining and manufacturing plants

Conclusion:

Spares availability and stock value are decided long before a breakdown, in how spares are ranked, described and stocked. The course moves from the MRO inventory profile and spare part types, through criticality scoring, min-max and reorder point methods and the noun-modifier catalogue structure, to intermittent demand, insurance spares and specification writing, then to data quality, duplicate cleansing, preservation and disposal. The final day applies these methods to a case plant and produces a Spares Stocking Policy and Catalogue Cleansing Plan ready for review with maintenance and supply leaders.