



Arabian Institute For Training

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# Reducing Costs through Spares Optimisation and Rationalisation

## INTRODUCTION

- Many companies do a bad job of managing their inventory effectively; there are many reasons for this. But it usually starts with bad submission of SPIRs, cataloguing and selecting initial spares.
- This practical Reducing Costs through Spares Optimisation and Rationalisation training course covers aspects related to reducing inventory and costs of spare parts and is supported by case studies, software and practical exercises to aid understanding. There are very few courses conducted that deal with the practical issues of spares cataloguing and optimising spares.
- After this training course, delegates will leave the training with tools and techniques that they can immediately apply in their own companies and start to reduce costs.
- Excel Analysis worksheets containing all formulae will be provided to conduct your analysis.
- Two analysis techniques will be covered; first using probability and the second using simulation (modelling) techniques for high value spares with logistic issues.

## OBJECTIVES

- To highlight current problems with spares management
- To improve cataloguing of spares
- To show how determine when to order scientifically - the reorder point
- To show how many to order
- To discuss principles of rationalising spares

## ORGANISATIONAL IMPACT

- Reduce inventory carrying costs
- Reduce stock turn ratios
- Reduction in duplicate stock
- Decision support techniques for high value, long lead time spares
- Reduction in lead times

## PERSONAL IMPACT

- Understand the stock management process
  - Raise awareness of how to select inventory levels
  - How to catalogue consistently
  - How to reduce stock outs and lead times
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## WHO SHOULD ATTEND?

- Maintenance Managers
- Engineers
- CMMS Key Users
- Analysts
- Warehouse Managers and Supervisors
- Project Engineers
- Spares and Inventory Personnel

## Course Outline

### Introduction to Stock Management & Optimisation

- Common Problems with Stock Management
- Terms and Definitions
- Initial Spares and Replenishment Process
- Different Stocking Costs Associated with Stocking Spares
- Spares Types
- Spares Categories
- Estimating Lead Times
- Stock Replenishment Strategies
- Exercise Lead Time

### Effective SPIRS and Cataloguing

- Purpose of the SPIR
- Why they are submitted badly?
- Poor Examples / Case Studies
- Stock Item Coding and Naming Conventions
- Major Differences Maximo & SAP
- Should We Stock?
- Exercise Cataloguing

### Introduction to Failure Statistics & Setting ROPs, Safety Stock

- Definitions
  - Failures & Spares
  - How to Measure Reliability?
  - Weibull Analysis
  - Options for Determining Safety Stock
  - Poisson Distribution for Low, Medium and Fast Movers
  - Effect of Service Level
  - Determine ROPs & Safety Stock
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## How Many to Order & Optimising Spares

- Exploring Order Quantity Formula
- Effective of Ordering Too Many or Too Few
- How the Formula doesn't Work Every Time?
- Determine Initial Spares Parameters (using Excel Worksheet)
- Estimating Annual Issue Quantities
- Evaluating Current Stock Levels and Parameters
- KPIs for Spares
- Excel vs. MS Access
- Evaluate Insurance Spares
- Exercises using Excel Analysis Worksheet

## Spares Work Process & Auditing Work Processes

- Work Process for Spares and Purchasing Management
  - Audit Work Process
  - Planning the Audit
  - Conducting the Audit
  - Identifying Issues and Corrective Actions
  - KPI Reporting System
  - Exercise Auditing a Work Process
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