# **Spare Parts Optimisation**

Brought to you by Pragma in partnership with Gordian

#### What is it all about?

Creating the perfect balance between spare parts availability, working capital, and operational costs is a challenge in any maintenance environment. On this course you will be encouraged to control your maintenance and asset management spend by streamlining your spare parts processes and practices. This course uses state of the art, but simple illustrations, combined with practical methods and concepts to empower you in the workplace.

Spare parts management is a critical key performance area within asset management. The availability of spare parts for maintenance and repairs is crucial for the uptime and effectiveness of assets, but high spare parts availability comes at a cost. The challenge is to effectively balance spare parts availability, working capital and operational costs.

Classification of your spare parts is an important concept and in this course we investigate the most commonly used inventory control techniques. We will look at the importance of your spare parts management strategy and the shop floor processes required to control the store such as re-order levels and re-order quantities.

Classroom discussions, case studies and practical illustrations will be used to convey concepts that might otherwise seem complex. Expert facilitators demystify the theory for application, by learners, in their own environment.

### Who should attend?

- Procurement officers
- Stores managers
- Tactical planners
- · Inventory controllers
- Logistics engineers

### Take home tools

Concepts and classification techniques to:

- strike a balance between spare parts availability, working capital and operational costs
- · prioritise your work and create focus
- determine inventory control parameters (min-max levels).

#### **Format**

- Public training scheduled at all major cities across Southern Africa
- On-site training

### What makes it different?

At the end of the course learners will be able to:

- classify spare parts according to criticality
- define inventory control techniques per classification
- interpret and forecast demand patterns
- choose appropriate spare parts control mechanisms
- calculate spare parts control parameters
- use the technique of management by exception
- apply basic analysis techniques, such as a Pareto analysis.

### **About Gordian**

- Netherlands based spare parts management consultancy and services company.
- Client testimonies demonstrating double digit improvement metrics due to our approach.
- A wealth of experience, in the rail, high tech, FMCG, mining and maritime industries.
- · Proven integrated change management approach.
- www.gordian.nl/en







## **Course outline**

Subjects covered in this three day intervention

# Understanding the spare parts environment

Learners are provided with an overview of the contemporary spare parts management environment. Subjects covered are:

- spare parts logistics vs other industries
- industry specific challenges (interactive)
- common practices for inventory management of spare parts
- conflicting roles and responsibilities in typical organisations
- · the key challenge / optimisation criteria
- · the impact of organisational maturity levels.

# Classifying spare parts according to criticality

This module focuses on optimising spare part inventory levels based on their classification. Learners investigate:

- optimisation criteria
- categorisation techniques
- classification techniques
- different approaches to spare parts planning (wholesale, lean, clean and just in case).

# Define inventory control techniques per classification

How do we structure and calculate inventory parameters? How do we make smart stock decisions? In this module learners review:

- statistical stock control
- · material resource planning
- · service level differentiation
- consumables vs rotables
- the concept of exception management.

### Interpret and forecast demand patterns

In this module we consider how to interpret the stochastic dynamics in demand patterns and how to manage them. We also learn which demand forecasting techniques we use in specific situations. We look at how to compare and use the results having considered the following:

- calculation of statistical parameters (eg mean and standard deviation)
- typical interpretation tools of the parameters
- · necessity of cleaning demand data
- the logic of frequency distributions
- mathematical demand distributions (eg normal distribution, Poisson distribution).

# Choosing spare part control mechanisms and calculating the control parameters

Which demand forecasting techniques do we use in what situation? How do we compare and use the results? Learners gain insight into:

- calculation of statistical parameters (eg mean and standard deviation)
- forecasting methods for fast and medium movers (eg moving average, smoothing methods)
- · forecasting methods for slow movers
- · selection of an optimal forecasting method
- coefficient of variation
- calculation of reorder points and reorder quantities.

## Use of the principle management by exception

In this module we review how to focus on the key issues in the spare parts supply chain and how to use our limited time effectively with:

- · smart problem solving using Pareto analysis
- · exception analysis
- · data cleansing.

#### **Assessment**

Open book assessment.

### For more information



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## **Pragma Academy | Learner Registration**

Send completed registration form to fax 011 805 0085 or email pragma.academy@pragmaworld.net | Enquiries +27 11 848 6940

Course name					Course	date				Venue			
Learner details	Learner 1				Learner 2				Learner 3				
Name and surname													
Job title													
ID number													
Email address													
Mobile number													
Race													
Gender													
Dietary requirement	Halaal		Vegetarian		Halaal			Vegetarian		Halaal		Vegetarian	
	Other				Other					Other		-	
Approving manager	Learner 1				Learner 2				Learner 3				
Name and surname													
Email address													
Mobile number													
Company name and p	ayment deta	ils											
Company name					VAT number								
Telephone number					Purchase order number								
Main contact person					Finance contact person								
Email address					Email address								
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#### Terms and conditions of registration and use

All registrations received are regarded as confirmed and subject to the following:

- All prices quoted exclude value added tax.
- Payment must be made before the course start date or within 30 days of invoice date, whichever occurs first. Once payment has been made, please send proof thereof via email to: pragma.academy@pragmaworld.net.
- Refunds and/or substitutions are not applicable if a learner has: enrolled for a course and accessed it via the Pragma Academy Learning Management System; or attended a classroom session.
- Refunds and/or substitutions **are** applicable: if a cancellation is received in writing at least fifteen (15) working days before the scheduled start date of the course; if a learner who enrolled in a course due to take place in less than fifteen (15) working days, sends a substitution learner subject to the substitution learner meeting the minimum prerequisite qualification requirements.
- It is the learner's responsibility to ensure that they meet the prerequisite requirements for a course in which they are enrolling. Proof of suitable prerequisite qualifications will be required.
- · Pragma reserves that right to cancel any advertised course due to insufficient enrolments or conditions beyond our control.