

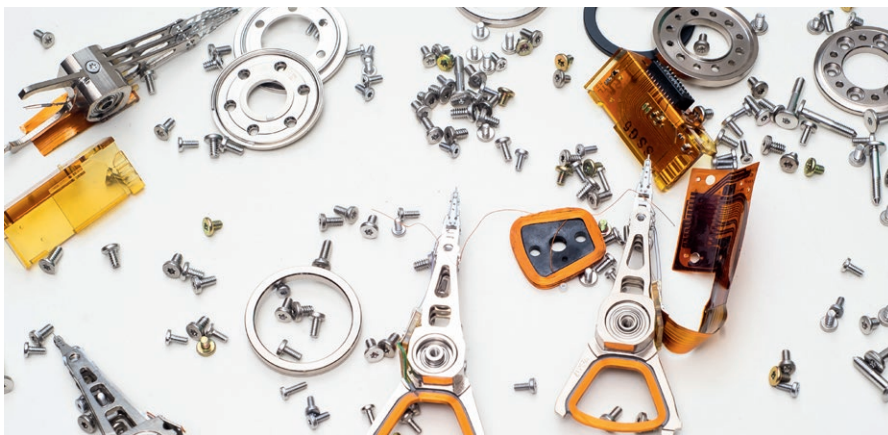
*OpusCapita*

HOW TO MANAGE MAINTENANCE SPEND AND  
**ACHIEVE EFFICIENT MRO PURCHASING**



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Up to  
**80%**  
of the line item volume  
addressed by the purchasing  
process in asset-intensive  
industries can represent  
maintenance requisitions.

## MRO KEEPS THE BUSINESS FROM COMING TO A STANDSTILL

The term MRO (Maintenance, Repair and Operations) stands for all the work that needs to be done to make sure that the assets – machines, vehicles, tools, equipment – that are critical to business operations continue to operate effectively and without interruptions. Especially in asset-intensive industries, such as construction, oil and gas production, transportation, shipping and airlines, MRO has a vital role preventing the machines and, thus the whole organization, from coming to a standstill.

It may be a regular change of oil or tires to a vehicle to keep it going. Or an ad hoc order for a spare part to fix equipment that has malfunctioned. MRO also covers the planned overhaul of assets, such as rebuilding an engine or another major component of a machine, to extend its life cycle. In procurement, MRO stands for the sourcing and ordering of all the supplies and services, spare parts and consumables needed in this maintenance work.

It sounds simple enough, but the reality we have seen is that most organizations struggle to achieve efficient MRO procurement processes. Procurement is focused on controlling maintenance spend, but, due to the complexity of the category, often lacks the means to truly support the process. Often MRO ends up being an overlooked element of procurement, which is a shame, considering that the impact of effective MRO procurement extends well beyond the availability of spare parts for maintenance work, quite possibly impacting both top and bottom line performance.

In this e-book, we will look at the key challenges related to MRO procurement and discuss how inefficient MRO procurement affects different functions in your organization. We will also explain how implementing an e-procurement and catalog management solution that can adjust to the special characteristics of MRO can help you to achieve operational improvements, contract compliance and savings in both time and money.



## THE MRO PROCUREMENT CHALLENGE: MANAGING COMPLEXITY

The purchasing environment for the products and services needed in the maintenance work is immensely complex. This complexity has three main sources.

### FIRSTLY,

the information needed to order a spare part, for instance, is dispersed in multiple systems that are managed by different stakeholders. The data in the different systems is typically not harmonized, so that the same spare part from the same supplier can be stored for example in different ERP systems under different Material Numbers. Maintenance work is usually planned in an Enterprise Asset Management (EAM) system (such as SAP Plant Maintenance), and when a spare part is needed, maintenance has to search for information from the inventory system, equipment manuals and supplier catalogs in both the maintenance and procurement systems, and even from traditional parts books in paper form.

### SECONDLY,

especially in asset-intensive industries, maintaining and repairing hundreds of different types of machines and equipment, with hundreds of different makes and models, requires up to a million different spare parts. A great deal of information is needed to identify the right part for the job at hand, especially if there are additional technical, regulatory or safety reasons for choosing a particular part in addition to the basic requirements of form, fit and function.

### THIRDLY,

the supplier base for MRO products and services is also highly fragmented. There are many sources for the spare part, from OEM (Original Equipment Manufacturer) suppliers to after-market providers, distributors and local dealers. The choice of supplier is affected, among other things, by whether the equipment is under or post warranty. To add to the challenge, time is always of the essence in MRO purchasing, so when maintenance is choosing the supplier, delivery time tends to weigh in more than price.

This complexity makes it difficult for procurement to support the maintenance function using a traditional approach.

This is also why many organizations have been disappointed in the adoption of a procurement tool by the maintenance function. A simple keyword search in supplier catalogs is not sufficient to identify the correct spare part, and if maintenance cannot find what they need, the e-procurement solution is just one more system in the already complicated purchasing process.

Even if an organization has an e-procurement tool in place and it works well for optimizing the purchasing process for simple, indirect goods, the complex ordering of parts and services for the maintenance process is not a good fit.



## THE PAIN POINTS OF MAINTENANCE, PROCUREMENT AND FINANCE

The MRO process involves different stakeholders with conflicting agendas. Based on our experience, the lack of solid MRO procurement tends to lead to frustrations across functions, which are driven by different motivations.

### MAINTENANCE

- Plans and takes care of the MRO work and the requisitions for materials and services needed in that work.
- Focuses on maximizing equipment uptime and minimizing the maintenance technicians'no-wrench time.
- Needs to be able to identify the right products and confirm their availability quickly, and order them easily.
- If maintenance is not comfortable with the MRO purchasing process, they prefer keeping crucial parts to hand all the time, leading to extensive stock and possibly sunk costs.

### PROCUREMENT

- Oversees the sourcing and ordering of the required materials, parts and services.
- Focuses on supplier selection and contract negotiation.
- Needs to increase on-contract spend to be able to capture the efforts made in sourcing as realized savings on the bottom line.
- Also wants to reduce operational costs and effort associated with the purchasing process.
- The MRO process typically includes a lot of free text requisitions coming from maintenance. This generates a lot of manual work in procurement, which, in turn, conflicts with the need for speed in maintenance.

World-class procurement organizations have a quantifiable performance advantage:

**22% lower labor costs and  
29% fewer FTEs than average organizations.**

[Source: The Hackett Group. Raising the World-Class Bar in Procurement Through Digital Transformation. 2017.]

The business pressures that most impact how procurement and supply professionals carry out indirect purchases are the need to reduce operational budgets and to cut inventory costs.

[Source: RS CIPS whitepaper. Preparing for Change: the Evolution of MRO Procurement. 2017.]

## FINANCE AND ACCOUNTS PAYABLE

- Is keen to enable automation in the accounts payable (AP) process in order to process and pay supplier invoices with minimum effort.
- Focuses on reducing the number of invoices without corresponding purchase orders and ensuring the prices on the invoices match those on the purchase orders.
- For CFOs, the shortcomings in managing the maintenance spend may also appear as ineffective use of capital resources.

The AP department suffers the consequences of free text ordering as invoices without purchase orders cannot be automated (invoice to order matching).

Organizations with poor MRO purchasing tend to rely on large inventories, which in turn require larger operational budgets.

Many of these frustrations could be alleviated by focusing on the first steps of the process, when requisitioning the materials and services. Currently, procurement in many organizations is only able to support maintenance reactively.

## HARMONIZING MASTER DATA: SUPPORT FOR MRO PURCHASING THROUGH A SINGLE TOOL

OpusCapita's eProcurement and Catalog Management systems adjust to the special characteristics of MRO and can manage their complexity. By utilizing comprehensive catalogs, procurement can provide maintenance users with a single tool, where to easily find and order the correct equipment parts, maintenance consumables and services, while also ensuring stronger contract compliance and enabling automation.

## THE CRUCIAL ELEMENTS FOR BUILDING UP THE SUPPORT FOR MRO PROCESSES ARE:

- Managing, harmonizing and synchronizing master data across various systems
- Simplifying the searching for spare parts in a catalog for rapid, non-planned repairs
- Integrating with the replenishment process to support planned maintenance intervals
- Managing the delivery of products and services, for example with Service Entry sheets

**This solution combines** all the relevant information from the multiple data sources so that the right product or service for maintenance work can be conveniently identified and found through a single source – the catalog. Harmonization of master data requires effort, of course, but for most organizations the cost of inefficiency in MRO in monetary or reputational terms makes such effort worthwhile.

The spare part can be located using a part number, similar to a search in supplier or manufacturer part books and catalogs. The benefit for maintenance is that all the other information, from technical information to illustrations and equipment special requirements, is also available. If the part number is not immediately known, maintenance can just as easily use other information, such as the OEM part number, the Asset ID or the stock code to locate the part. With pricing, parts availability and leadtime information from the suppliers also visible in the same system, it is easy for the maintenance team to make a fact-based and cost-sensitive decision with visibility

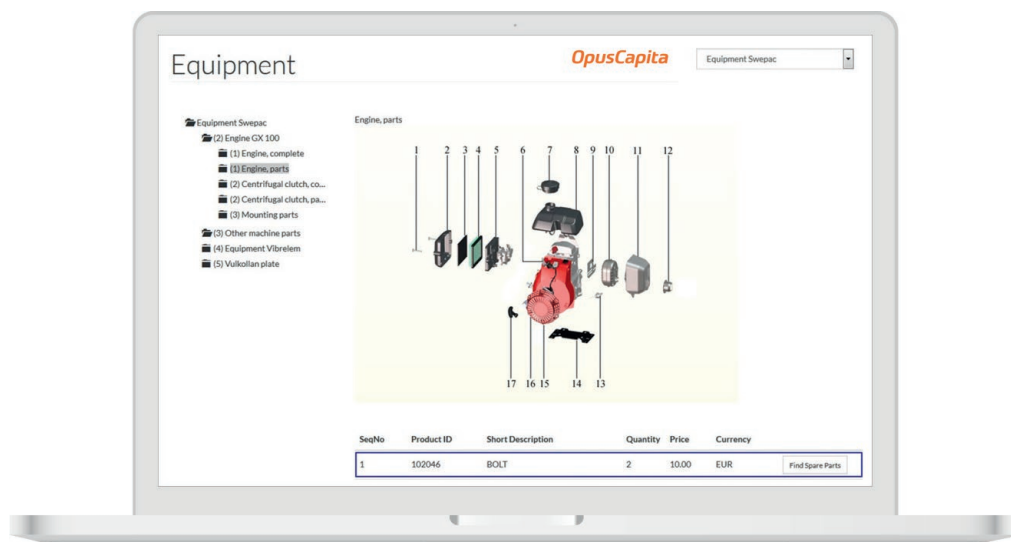
over the optimum source of supply – from the selection of suppliers preferred and preapproved by procurement.

Integration in the Enterprise Asset Management system makes requisition of the materials and services in the catalog a seamless part of the maintenance planning process. And in keeping with the true nature of maintenance work, the catalog is also accessible via smartphones and tablets.

Requisitions that include on-contract items with pre-approved pricing are automatically turned into purchase orders, which will support further automation downstream in the accounts payable department. If the requested item is part of the on-hand stock in the inventory, it will be reserved for the work in question and dispatched accordingly. Integration between the inventory system and the e-procurement system also allows the replenishment of certain inventory items to be automated, thereby ensuring that the most critical parts are always available for repairs.

On the other hand, the need for large on-stock quantities can also be reduced when the spare parts procurement process is efficient. Maintenance does not have to be afraid that the order process takes too long, and more items can be sourced on demand. This brings additional benefits from inventory management. Large inventories absorb a lot of cash, and optimizing the inventory will help reduce operational costs further and release working capital to be used more effectively.

**The key to success** is ensuring that the procurement solution meets the actual needs of the maintenance user and makes their job easier. With less time spent on identifying and ordering the spare parts, maintenance work becomes more efficient and ultimately, the uptime of the machinery is improved. And when procurement is involved right from the early stages of MRO purchasing, they can reduce maverick spend and focus on improving on-contract spend with a solution that maintenance will readily take on board.



**FIGURE 1**

When a simple keyword search is not sufficient to find the right spare part, the search features can include parts book exploded-view drawings, where maintenance can drill down to the machine in need of repairing and easily identify the correct part.

## 3 KEY BENEFITS FROM HARMONIZED MRO MASTER DATA

### FOR MAINTENANCE:

- Support for the maintenance process
- Less time spent searching for the correct spare parts
- Easy to order the required part from the best supplier at the contracted price

### FOR PROCUREMENT:

- Contracts can be sourced and established
- Improved on-contract spend and reduced maverick spend
- Less capital tied up in inventory, leading to lower operational spend

### FOR FINANCE AND ACCOUNTS PAYABLE:

- Fewer invoices without a purchase order or with incorrect pricing
- Increased efficiency of accounts payable processes
- Support for working capital optimization through reduction of inventory volumes





## USE CASE 1: FINDING THE RIGHT PART

The rear wheel in a forklift wears out and needs to be replaced.

### THEN

Maintenance ascertains the make and model of the machine, identifies the wheel, and searches for the corresponding part number in a catalog. Finding the right part to order is time-consuming and cumbersome, as the requisite information is located in multiple systems and even in paper catalogs. Once this has been done, maintenance makes a free text order with all the information they have gathered, and procurement then has to find the right supplier and identify the right supplier part number to place the order, or they find the part in inventory.

### NOW

The e-procurement system that supports effective MRO links all the relevant data points in one interface and makes it easy for maintenance to find and requisition the right parts quickly. The parts can be searched for instance by the OEM part numbers, technical attributes or internal part numbers. Inventory is also ascertained for parts currently on stock. With pricing information also available, lower cost options can be favored. Procurement has fewer free text orders to process and more time for sourcing, contract negotiations and risk management.

## USE CASE 2: ALIGNING MAINTENANCE AND PROCUREMENT

A main water pump of a container ship is scheduled for replacement.

### THEN

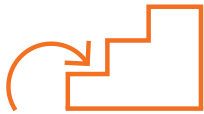
Container ships are always on the move and need constant maintenance and repair to maintain their full productivity potential. Procurement has put a lot of work into the sourcing process, evaluating and selecting suppliers for MRO, and has negotiated contracts with them. Their focus is on contract compliance, to capture the negotiated benefits when parts or services for maintenance are ordered. The primary focus of maintenance is keeping the ship and its equipment running, making sure everything continues to operate efficiently. When making a requisition for a water pump, they may lack visibility over pricing and are in addition unaware what contract compliance entails. This lack of alignment will typically lead to free text ordering or possibly off-contract spend.

### NOW

The e-procurement system that supports MRO purchasing helps to align the objectives of the two departments. On-ship maintenance identifies the correct part in the e-procurement system, checks the up-to-date information on which of the preferred suppliers in the system have it in stock, selects a supplier closest to the next port and makes the requisition. The buyer creates the order, complete with pre-negotiated pricing and after-sales service levels. The right part will be available in the right place at the right time with a qualified technician to install it. Maintenance is able to minimize the water pump's downtime thanks to this efficient process, and procurement can increase on-contract spend to support cost savings and build tighter buyer-supplier relationships.

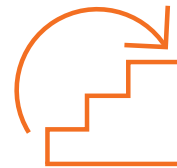


## ACHIEVING THE NEXT LEVEL IN MRO PROCUREMENT



### FIRST STEP APPROACH:

Use the OpusCapita catalog management platform together with your suppliers to publish spare parts for maintenance. Create product relationships between your assets and the spare parts available for each asset and their associated Bill of Materials. This will allow your maintenance users to find all the related spare parts easily from the catalog when searching by asset or using category or keyword searches. Merging internal part numbers from the Enterprise Asset Management system, buyer part numbers from the ERP system and other data, such as functional location, supplier part IDs and supplier pricing makes it easier to find and select the right spare parts.



### A LEAP FORWARD:

Enable efficient and compliant purchasing of materials and services needed in maintenance by introducing OpusCapita eProcurement and Catalog Management systems that support MRO and by implementing catalogs to integrate all the data sources. You can opt for innovative search features, such as parts books exploded-view drawings, to make the maintenance technicians' job even easier. Make sure that the most critical spare parts are always available by automating on-hand stock information and inventory updates. Continue further in the process and utilize purchase orders from the procurement system to also automate the accounts payable and invoicing functions, even for service orders with associated service entries.

Watch our [demo video](#) to see how efficient MRO purchasing looks in practice.

Contact us to discuss your organization's situation. With our maturity analysis tool, you can identify the key development areas and decide on the next best step for your organization.

[www.opuscapita.com/contact-sales](http://www.opuscapita.com/contact-sales)

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Dirk has over 20 years experience building and delivering enterprise solutions. With hundreds of opportunities to work directly with organizations, Dirk understands the key challenges faced by many companies and is uniquely positioned to deliver insight in the form of best practices and lessons learned.

Learn more about OpusCapita's eProcurement solution at  
<https://www.opuscapita.com/solutions/source-to-pay/eprocurement>

OpusCapita enables organizations to sell, buy and pay quickly and securely, with a real-time view of their business. Over 3000 customers in over 100 countries use our source-to-pay, cash management and product information management solutions to connect, transact and grow. OpusCapita processes over 220 million electronic transactions annually on its Business Network, which includes almost 1 million organizations and over 11,000 financial institutions worldwide. OpusCapita is headquartered in Helsinki, Finland. Visit us at [www.opuscapita.com](http://www.opuscapita.com)