

MRO Inventory



MRO Inventory

Table of Contents:

- **What does MRO stand for?**
- **What is the MRO inventory?**
- **Why do we need MRO inventory?**
- **Types of industrial MRO maintenance**
- **Managing MRO materials**
- **Best practices for managing MRO inventory**

What does MRO stand for?

MRO is an acronym for maintenance, repair, and operations used by companies to create an end product.

What is the MRO Inventory?

Any item that is utilized in the production process but not ultimately seen in the end product themselves can be termed to be under the domain of MRO inventory. MRO items may include:

- Gloves
- Safety equipments
- Computers
- Industrial equipment (valves, compressors, pumps)
- Consumables (office supplies)
- Repair tools
- Janitorial Supplies

Why do we need MRO Inventory?

Research shows that up to 50% of manufacturing downtime is due to a lack of spare parts. Still, the movement of MRO inventory is as low as only 10% within the organization.

Types of Industrial MRO Maintenance

Now in any type of manufacturing/industrial environment, for the proper functioning, MRO maintenance is a crucial part that has often been neglected.

MRO maintenance can be subdivided into three categories, namely:

- 1. Preventive Maintenance:** Comprises of regular maintenance before issues arise in order to keep all the equipment and processes running smoothly.
- 2. Corrective maintenance:** this deals with maintenance after a problem has occurred. For example, dealing with wear and tear or a complete breakdown.
- 3. Predictive Maintenance:** This maintenance is done based on data provided by the monitoring systems that track company operations, allowing for reliable failure predictions.

Managing MRO materials

Managing MRO materials can be a challenging task. It's always a tug-of-war between understocking and overstocking. You need parts in case of breakdown, but at the same time, you can't afford to have huge amounts of your finances stuck in MRO inventory. Following are some guidelines that will help you better manage your MRO materials.

While replenishing your parts, one must ensure the quality of the part and look for a reasonable price. There are a few ways by which you can achieve this.

Brand Name vs. Generic

The cost of local parts is much lower than some brand's parts. The key for MRO parts is that the buyer needs to focus on specifications (speed, size, etc.) of the required materials rather than focusing on the brand based parts. This allows you to purchase the required materials with a tight budget.

Receive materials at Optimum time

If your inventory is well organized and you use reorder points to replenish your inventory, things will go smoothly. Unfortunately, for many companies, this is not the case.

Shipping

Many companies operate proactively, and often times, parts are rushed as they are needed. This rushing of materials can result in excessive costs that may go unnoticed.

Carrying Cost

It would seem logical to assume that the cost of a \$50 part is well, \$50. But, the reality is different. The truth is, once you purchase the part, it costs more. Because now, you need to store it someplace at your warehouse. Its shelf cost, labour cost, utilities, etc. Typical carrying costs are somewhat between 12 to 20 percent of the purchase price.

Best practices for managing MRO inventory

Central location for MRO Inventory

It is more effective to store MRO inventory in one centralized location rather than keeping them in separate isolated locations. Centralizing your MRO inventory offers you tons of benefits as follow:

- You can use computers to track and manage inventory.
- Categorizing inventory becomes easy, like assigning part numbers to parts located on shelves and identifying them with id.
- The new centralized stockroom could be staffed with experienced supply chain personnel to maintain inventory.

Supplier controlled consignment inventory

VMI or Vendor Managed Inventory approach involves the supplier's personnel being on-site to manage your inventory. This allows your existing staff to focus on core functions with a sigh of relief that your MRO inventory is successfully getting managed by a trusted partner.

Many organizations have used third parties to manage their MRO inventory. This technique is well proven in mainstream supply chain management.

A set of KPI

In any project or operation, key performance indicators are established in order to measure factors such as savings, costs, etc. Setting up KPIs for MRO management can not only benefit in optimizing the performance of the project, but we can actually see its quantified benefits on MRO inventory.

Such measures should be tracked and posted so that those who are responsible for MRO can see how they are performing and if needed improve the performance.

Educating MRO staff about supply chain management

Conducting seminars or series on inventory management will allow those involved in MRO to understand the best practices of inventory management and stick to it. Exposure to supply chain professionals' organizations such as APICS or ISM can be of great help; buyers, planners, and many other categories of supply chain professionals regularly benefit from ongoing education programs offered by such organizations and from the certification programs that they run.

Relevant Links:

<https://www.reliableplant.com/Read/30346/manage-mro-inventory>

https://www.scmr.com/article/the_case_for_managing_mro_inventory

<https://www.thebalancesmb.com/maintenance-repair-and-operating-supplies-mro-2221265>

<https://www.thomasnet.com/articles/procurement/what-is-mro/>

<https://bizfluent.com/facts-7628958-mro-mean-business.html>

<https://www.version1.com/analytics-mro-inventory-management-5-steps/>