The right parts at the right time
How to develop a comprehensive storeroom management process

Yet, in many MRO storeroom operations, customers complain that the right part is never in stock when needed, or there aren’t enough parts, or that original parts were replaced with cheaper parts due to a price reduction effort. Having to fly a missing part in is very costly, and production suffers while the part is in transit.

The right parts

Who determines what “the right part” should be? The process of determining the right parts begins at the engineering design stage where all equipment and component parts are identified. Equipment selection and approval decisions are typically made by production, maintenance and engineering personnel; and are based on experience with similar equipment, operating parameters and engineering specifications. During the later phases of a project, the detailed equipment and component information is transferred to equipment records in the site’s CMMS (Computerized Maintenance Management System). This information is available to those who work with or support the equipment.

The establishment of a sound MRO storeroom operation is one of the key requirements of an effective equipment reliability program.

The main reason for the existence of a storeroom is to supply a maintenance team with the parts and materials necessary for them to ensure that plant assets continue to operate at maximum design capacity.

In fact, Material, Repair and Operations (MRO) storeroom personnel’s main deliverable is “to provide the right part at the right time at a cost-effective price.”
A typical Maintenance, Repair and Operations (MRO) plant storeroom.

Ensuring the right parts are available at the right time requires a proactive response in which a system or process is in place to properly identify spare part needs along with a scheduled date for future use.

To be cost-effective does not mean purchasing cheaper parts: it means having a lower total cost of ownership during operational life.

One possible reason for equipment failure is the price of spare parts. Spare parts play a critical role in ensuring reliability. Service engineers provide the specifications for equipment and associated parts used in the manufacturing area. These engineering specifications account for operating conditions and ensure safe, environmentally sound and reliable performance. Deviations from the engineering specifications can potentially do more harm than good.

Vendors and parts manufacturers may claim their parts are just as good, but this must be verified against the originally defined specifications for the equipment. Less expensive parts sound like a bargain, but the consequences of using them may yield very negative results, including environmental breach, serious injury, or both. To be cost effective does not mean purchasing cheaper parts: it means reducing the total cost of ownership during operational life. In other words, a cost-effective price is what matters, not the cheapest price.

At the right time

What is the right time? If the right time means anytime, then this implies a reactive mode of operation in the field because it is not known when the spare part will be needed since it could be any time. What is needed for “the right time” to materialize is an organized or scheduled time. A scheduled time implies that the need for a spare part was predetermined, and ideally this would have been identified with enough time to communicate this need to the MRO storeroom personnel. Therefore, a proactive rather than a reactive response requires that a system or process be in place to properly identify spare part needs together with a scheduled date for future use. A well-established work management process will provide the necessary information along with a scheduled need date for the equipment spare parts.
Cost-effective ownership encompasses a number of areas. Spare part performance can be verified if the historical performance data is utilized to determine that the manufacturer employs proven quality manufacturing techniques along with performance tracking of the product. In short, product verification can only be assessed by involving the engineering, maintenance and production functions.

Another area related to cost effectiveness is the service provider for the equipment. Service providers can offer technical assistance as needed, introduce higher quality, more reliable parts and offer stable pricing for extended periods of time. In this area, the purchasing function takes the lead role in building long-term relationships with vendors and manufacturers to ensure consistent product performance with stable pricing. Purchasing must include the engineering and maintenance teams to qualify vendors as preferred providers of products and services. Additionally, a goal for purchasing would be to establish long-term itemized priced contracts for all stocked parts. Service agreements could be utilized to minimize the costs associated with order placement. Having these processes in place will help the parts being stocked were purchased at a cost-effective price.

Who can help?

A reliable service provider can help companies develop a comprehensive storeroom management process that includes all of the elements of storeroom deliverables — “the right parts at the right time at a cost-effective price.” Additionally, service providers can help develop and implement a robust work management process by working side by side with company representatives to train, coach and mentor company employees involved in the processes described above.

For more information on Spares and Consumables:

- **Parts Repair Service**
  Repairs that meet original equipment specifications

- **Spare Parts Service**
  New spare parts shipped within a day

- **Emergency Parts Service**
  Emergency delivery of Part Services 24/7

- **Parts Fingerprint**
  Reduce risk of production loss and increase purchasing power

- **Business Online**
  Register to receive a free user account and access to web-based parts