



FIVE STEPS TO AN EFFICIENT ELECTRICAL STOREROOM

This paper reviews five key areas of storeroom operations necessary for a successful maintenance program. In EECO's experience organizing hundreds of storerooms, very few are fully optimized, presenting significant opportunity for rapid improvement.





Organization is critical to an efficient, well-run storeroom. With an optimization plan in place, storerooms can eliminate stock-outs, expensive overnight air freight and costly equipment downtime. On the other hand, poorly organized and operated storerooms can drag down the bottom line, resulting in unnecessary expenses associated with downtime and procurement.

Whether operating a well-optimized vendor-managed inventory or just starting a plan to control MRO expenses, follow the five steps below to achieve a fully optimized storeroom:

1. CHANGE HOW YOU VIEW MRO EXPENSES

If you do not know what you are spending on maintenance, repair and operations (MRO), now is a great time to find out! Businesses frequently overlook the importance of understanding MRO costs and consequently, many MRO storerooms resemble a disorganized garage instead of a significant plant operation where critical, expensive parts are stored.

Calculating total spend on MRO components must include annual cost of parts, expedited freight charges, labor overtime and transaction costs, including the cost of writing purchase orders (POs) and receiving orders. Issuing multitudes of POs and tracking of receiving orders can amount to a significant annual expense. An understanding of the magnitude of expense as well as segmentation (MRO, critical spares and emergency parts) helps identify goals for improvement and opportunities for cost reduction.

2. GET ORGANIZED

If your storeroom isn't clean and organized, start the process with a thorough housecleaning. Customers often compare organizing a storeroom to cleaning out the garage – it feels so good when it's done and you usually find things you didn't know you had. Have a cleaning party and get the place in order.

The next step is to find a competent partner with experience managing electrical components to review storeroom inventory. Often, the electrical distributor partner helps with the housecleaning and expertly stages parts for identification, relabeling and storage.

Our advice is to get “rid of dead wood” - disposing of obsolete parts in particular. Old parts are not only a source of potential confusion, but also carry increased risk of dangerous malfunction, such as out-of-date fuses. In addition, be sure to review parts without proper identification or labeling to assess whether they can be identified and used, or if they should be removed.

3. OBSERVE AND ASSESS, THEN ACT

Efficient storeroom operations require balancing centralized control and ease of access, specifically when dividing inventory between a central location and the point of use, such as vending machines or remote parts storage. There are significant costs associated with maintenance technicians searching for parts and traveling from the job site to the storeroom.

On average, maintenance technicians spend 18 percent of their time looking for parts and an additional 24-26 percent of their time walking to and from the job site.¹ This amounts to 42-44 percent of time spent on non-productive activities, totaling 840-880 man-hours a year per maintenance technician.



¹ Andy Geiger, “MRO Storeroom Best Practices – Are You Kitting Me”, Plant Engineering July 27, 2011.

According to Indeed.com, the average salary of a maintenance technician in the U.S. is \$43,000 a year, or \$21.50 per hour based on a 2,000 hour year. This translates to a real cost of \$19,000 per year for each tech in non-productive labor. One study found that trips to the storeroom cost more than \$75,000 per year for AA batteries alone!

If remote parts storage is needed, consider vending machines for items such as abrasives, nuisance masks, and electrical tape – generally consumable items.

If maintenance teams perform the same tasks repeatedly, a kiting approach might make sense. Careful observation of inventory items that leave the storeroom door at the same will tell you which items may be candidates for a kiting program. Generally, these are parts used for regularly scheduled maintenance activities. Kiting programs are very popular among our OEM machine builder customers who perform the same manufacturing tasks on a regular basis.

4. DEVELOP A PLAN FROM START TO FINISH

In the words of a wise man, don't try to drain the ocean. Instead, focus on the most important, oft-used parts first. Developing a storeroom optimization plan offers a necessary guide to keep your efforts on track. Identify 200 or 300 fastest-moving stock keeping units (SKUs) for service by a Vendor Managed Inventory (VMI) system, such as fuses, wiring devices, wire and cable, batteries and lamps. VMI data typically updates every week, so within a month or two you'll have confirmation of fast-moving items.

STREAMLINING MCCRAY ELECTRIC

McCray Electric approached us with a problem. Their process for sourcing maintenance components was plagued by inefficiency, using 47 different vendors and issuing 10-20 POs per week. Based on industry cost standards, the extra vendor relationships accumulated unnecessary costs to the tune of \$150 to \$250 per purchase order.

McCray issued a call for help and EECO arrived with an optimization program to streamline McCray's storeroom operations. This reduced the amount of vendors to seven and resulted in a single PO each week for \$75,000 in annual savings.





Consider a parts grouping strategy with less-used parts placed in a second tier. Generally, less-frequently used items pose an extra challenge to assess appropriate inventory levels. If a storeroom contains slow moving items such as motors, you may only need one or two, but keeping those components in the system is essential to keep operations moving.

We advise customers to tackle complex parts last. Often, these are classified

as critical spares available from a vendor program or on consignment. Usage levels are typically very low, with less than one turn per year, but without these components a manufacturing operation risks downtime and expensive rush charges.

For a large, multi-site corporation, critical spares may already exist within your own network. If so, determining where those critical spares are located, how to access them in an emergency and how long it takes to get them onsite can save valuable production time.

Equally valuable, a parts management agreement (PMA) that sources currently-available parts – new and remanufactured – from major OEM suppliers. Those parts are often stored at a nearby facility for rapid delivery when needed.

For legacy systems, a part-for-part conversion plan may be a smart choice that assures the availability of replacement parts and components for critical systems.

5. DETERMINE WHAT TO MEASURE AND HOW OFTEN

When deciding on how to gauge performance using collected data, ask the following question: “What will be meaningful to the organization?” Before setting up or modifying dashboard measurements, understand who needs what information and how often. Measure what matters first before adding more metrics as the program matures.

We have found that purchasing departments and senior management tend to pay special attention to controlling and reducing costs in terms of both financial savings and reduced labor hours.

If you don’t have a formal inventory management program in place now, getting started is most important. If you already have a program that has been in place for a while, determine which group of products are candidates for evaluation. We see usage levels change often depending on seasonal activities, large maintenance projects currently in process and other factors.

Industrial Manufacturing
2130451-001
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Account	VMI	Vendor	Prodlid	Qty	UOM	ProdDesc	PCAT DESCRIPTION	PRICE
Industrial Manufacturing	VMI	3M	MM1700	41	E		INSULATING MATERIALS	\$35
Industrial Manufacturing	VMI	3M	MM23	1	E		INSULATING MATERIALS	\$14
Industrial Manufacturing	VMI	ALLIED TUBE & CONDUIT	CO112GA	50	E		CONDUIT	\$61
Industrial Manufacturing	VMI	ALLIED TUBE & CONDUIT	CO112GA	20	E		CONDUIT	\$59
Industrial Manufacturing	VMI	ALLIED TUBE & CONDUIT	CO1GA	120	E		CONDUIT	\$232
Industrial Manufacturing	VMI	ALLIED TUBE & CONDUIT	CO34GA	100	F		CONDUIT	\$126
Industrial Manufacturing	VMI	ALLIED TUBE & CONDUIT	CO34GA	280	E		CONDUIT	\$351
Industrial Manufacturing	VMI	ALLIED WIRE & CABLE	CC3STRMTWBLK500	500	F		CONTROL CABLE	\$2,401
Industrial Manufacturing	VMI	ALLIED WIRE & CABLE	CC6STR266MTWBLK500	1,025	F		MISC CABLE	\$3,035
Industrial Manufacturing	VMI	ALLIED WIRE & CABLE	W116STRTRFFNBLUWHT25	7,500	F		BUILDING WIRE	\$1,006
Industrial Manufacturing	VMI	ALLIED WIRE & CABLE	W118STRTRFFNDRKBLU250I	77,500	F		BUILDING WIRE	\$6,297
Industrial Manufacturing	VMI	ALLIED WIRE & CABLE	W118STRTRFFNDRKBLUWI	12,200	F		BUILDING WIRE	\$1,360
Industrial Manufacturing	VMI	AMERICAN PACKING & GASKET CO	GSK9GASK1942	240	E		CONDUIT BODIES	\$382
Industrial Manufacturing	VMI	AMERICAN PACKING & GASKET CO	GSK9GASK1943	210	E		CONDUIT BODIES	\$380
Industrial Manufacturing	VMI	AMERICAN PACKING & GASKET CO	GSK9GASK1945	50	E		CONDUIT BODIES	\$141
Industrial Manufacturing	VMI	AMERICAN PACKING & GASKET CO	GSK9GASK573	20	E		CONDUIT BODIES	\$32
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO112UA100	500	F		CONDUIT	\$517
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO112UA100	1,000	E		CONDUIT	\$1,019
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO112UA500	500	F		CONDUIT	\$498
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO112UA500	250	F		CONDUIT	\$849
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO112UA100	300	F		CONDUIT	\$735
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO112UA100	600	E		CONDUIT	\$1,498
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO112UA400	400	F		CONDUIT	\$903
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO2UA50	50	F		CONDUIT	\$226
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO34UA100	200	F		CONDUIT	\$277
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO34UA100	1,500	E		CONDUIT	\$2,081
Industrial Manufacturing	VMI	ANAMET ELECTRICAL INC.	CO34UA500	500	F		CONDUIT	\$680
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRK047	7	E		CONTROL CABLE	\$291
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRK057	4	E		CONTROL CABLE	\$207
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRKF412140.5M	52	E		CONTROL CABLE	\$963
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRKMV422510M	10	E		CONTROL CABLE	\$95
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRKT422510M	20	E		CONTROL CABLE	\$577
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRKT43310M	1,415	E		CONTROL CABLE	\$13,004
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRKW1463310M	456	E		CONTROL CABLE	\$4,191
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRSC47	260	E		CONTROL CABLE	\$1,955
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRSC4DUO	156	E		CONTROL CABLE	\$2,554
Industrial Manufacturing	VMI	BELDEN WIRE & CABLE COMPANY	LGRSC57	16	E		CONTROL CABLE	\$601
Industrial Manufacturing	VMI	RRATY WCR1 FWIDF. INC.	RRR26R4300	4	F		WIRE MARKFRTRFIS/DTLCT	\$721

TYPICAL STOREROOM MEASUREMENTS INCLUDE:

- Annual inventory turns
- Monthly MRO inventory value
- Cycle count accuracy, [with a target of 95 percent inventory accuracy](#)²
- Receipt and issuance of transaction records
- Weekly or monthly cost of managing transaction records
- Stock-outs
- Minimum and maximum level changes
- Late ships
- Invoice variance for vendor managed inventory.

CONCLUSION:

The most important step in optimizing your storeroom is to take action. The exact requirements of storeroom maintenance vary based on operational needs, as usage levels change due to seasonal activities or large maintenance projects, and other factors such as obsolescence. Improving storeroom operations benefits all areas of the business by ensuring readily available parts in the best possible operating condition. This yields quick, economical repairs that help preserve profitability by focusing on an under-utilized source of savings and productivity improvements – the storeroom.

**WANT TO START A CONVERSATION ABOUT STOREROOMS?
CONTACT US AT ISTEAM@EECO-NET.COM**

²Wally Wilson, "How do You Manage a MRO Storeroom Effectively?" Rx Today, September 2012