



Global Leaders In Maintenance & Reliability

Preventive Maintenance Optimization (PMO) Workshop

Big Goals Deserve Big Results.

Make It Happen With Marshall Institute.

Your PM program may be costing you too much with too little benefit. The goal of PMO is to counteract this by ensuring the RIGHT strategy has produced the RIGHT procedures that are being performed by the RIGHT person at the RIGHT frequency. Effective and efficient PM's can drastically reduce costly reactive maintenance and substantially increase equipment uptime and capacity.

Many maintenance departments struggle because their PM programs are not effective nor efficient. Common deficiencies include:

- Inadequate task descriptions that are too short, poorly worded or incomplete
- PM tasks performed too often, incurring unnecessary equipment downtime
- PM tasks performed too late, allowing failures to occur
- PM tasks adding no value and unnecessarily utilizing valuable maintenance resources
- PM's not addressing the true failure mode of the component being inspected
- Alternative diagnostic tools and technologies not being considered or not being used
- Low PM completion/schedule compliance leading to low PM priority
- No accountability for quality PM execution: no follow-up, no audit, no analysis



Did you know?

Up to 30% of PM's performed may not be adding value

Many companies in the US spend less than 10% of their maintenance time on PM/PdM activity, while World Class companies spend greater than 40%

The average "wrench time" of a predominantly reactive maintenance environment is ~25%

Moving from 25% wrench time to 40% (with a crew of 20 maintenance employees working 40 hours per week) adds 120 hours of value added maintenance time per week with no additional cost

Reactive maintenance is up to 5 times more costly than proactive maintenance



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To improve the Maintenance and Reliability performance of your organization, contact **Marshall Institute** at (919) 834-3722.
EMAIL: info@marshallinstitute.com
WEB: marshallinstitute.com
ADDRESS: 1800 Tillery Pl, Suite I
 Raleigh, NC 27604

Results/Case Studies:

It's difficult to find a quick-win that offers a more consistent and more immediate "bang for the buck."

	Old PM	New PM	Savings	Comment
PM Hours (total)	570	320	250	
Hours of Production Loss	570	233	337	87 hours of PM's done safely while machine is running (320 - 233 = 87)
PM Cost (Operations & Maintenance Cost)	\$477,426	\$268,028	\$209,398	Maintenance labor & Machine downtime cost

\$10,000
plus expenses

PMO Workshop

4 days with 1 consultant
1 day offsite prep

Improve the effectiveness and efficiency of your preventive/predictive process by allowing Marshall Institute to help you develop maintenance strategies to increase uptime and reduce downtime.

4-Day PMO Workshop

Marshall Institute's PM Optimization process provides a proven, structured, RCM-based tool that is used to eliminate or reduce the consequence of failure by:

- Rationalizing and improving existing PM's
- Creating PM strategies to mitigate known failures currently not addressed by PM

During this 4-day workshop typically targeting a critical asset or bad actor, Marshall Institute will lead your maintenance team through the execution of the PMO process. We will:

- Review equipment, drawings, manuals, system P&ID, photos, etc.
- Group and review selected PM tasks
- Analyze known or probable failure modes
- Evaluate consequences of each failure mode
- Determine technically feasible and economical maintenance strategies (Condition Based, Time Based Replacement, or Run-To-Failure)
- Approve and implement new PM/PdM tasks

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