STANDARD OPERATING PROCEDURE

Preventive Maintenance SOP

Document no.	SOP-MNT-001
Revision	1.0
Owner	Maintenance Manager
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Review cycle	Every 12 months

1. Purpose

To make sure preventive maintenance is performed on schedule, to a consistent standard, so equipment failures are caught early and asset records stay accurate for planning future work.

2. Scope

Applies to scheduled preventive maintenance (PM) tasks on facility and production equipment managed through the computerized maintenance management system (CMMS). Reactive repairs are covered by the maintenance work order SOP.

Definitions

PM	Preventive maintenance. Scheduled inspection, cleaning, lubrication or adjustment performed on a set interval to prevent failure.
CMMS	Computerized maintenance management system, used to schedule PM tasks, track work orders and hold asset history.
Downtime window	The agreed period an asset can be taken out of service for maintenance without disrupting production or operations.
Asset history	The record of all maintenance performed on a piece of equipment, including PM tasks, repairs and part replacements.

3. Responsibilities

Maintenance Technician	Performs the PM tasks on the asset, records readings, and identifies follow-up repairs.
Maintenance Planner	Schedules PM work orders in the CMMS, coordinates downtime windows, and stages parts.
Equipment Operator	Coordinates downtime with the technician and confirms the equipment is safe and ready to run after the PM.
Maintenance Manager	Reviews PM completion and overdue rates, and approves changes to PM intervals or task lists.

RACI matrix

Activity	Maintenance Technician	Maintenance Planner	Equipment Operator	Maintenance Manager
Schedule the PM work order	I	R/A	C	I

Activity	Maintenance Technician	Maintenance Planner	Equipment Operator	Maintenance Manager
Coordinate the downtime window	C	R	A	I
Perform the PM tasks	R/A	I	I	-
Close the PM work order in the CMMS	R	A	-	I
Review PM compliance and adjust intervals	C	R	-	A

R = Responsible, A = Accountable, C = Consulted, I = Informed

4. Materials and PPE

Materials, tools and systems

- CMMS with the asset's PM task list
- PM checklist or procedure for the asset
- Lockout/tagout devices
- Lubricants and replacement consumables specified for the asset
- Calibrated test and measurement tools
- Asset history and last PM record

Personal protective equipment

- Safety glasses
- Gloves appropriate to the task
- Hearing protection in equipment rooms

5. Procedure

Step	Task	Owner	Done
5.1	**Review the PM schedule** Maintenance planner reviews the CMMS for PM work orders due that week and confirms the assigned technician and target completion date for each.	Maintenance Planner	☐
5.2	**Pull the task list and asset history** Technician opens the PM work order in the CMMS, reviews the standard task list for the asset, and checks the asset history for open issues from the last PM.	Maintenance Technician	☐
5.3	**Stage tools, parts and lockout devices** Technician gathers the tools, consumables and lockout/tagout devices listed on the PM procedure before approaching the equipment.	Maintenance Technician	☐
5.4	**Coordinate the downtime window with the operator** Technician confirms the agreed downtime window with the equipment operator and gets sign-off that the asset is ready to be taken out of service. **Checkpoint:** Operator confirms the asset is stopped and ready before the technician begins work.	Equipment Operator	☐

Step	Task	Owner	Done
5.5	**Isolate energy sources** Technician applies lockout/tagout to the equipment's energy sources per the site's lockout tagout procedure before opening any guard or panel. **Warning:** Do not begin PM tasks that require opening guards or panels before lockout/tagout is fully applied and verified.	Maintenance Technician	☐
5.6	**Perform the inspection and adjustment tasks** Technician works through the PM checklist in order, inspecting components, checking tolerances, and making adjustments called for in the procedure.	Maintenance Technician	☐
5.7	**Lubricate and service components** Technician lubricates, cleans or replaces filters and other consumable components as specified on the PM checklist for this interval.	Maintenance Technician	☐
5.8	**Replace worn components identified** Technician replaces any component found worn beyond the acceptable limit during the inspection, using the correct part from the asset's bill of materials.	Maintenance Technician	☐
5.9	**Remove lockout and test the equipment** Technician removes lockout/tagout devices in the correct sequence, then runs the equipment through a test cycle and checks readings against the specification. **Checkpoint:** Equipment runs through a full test cycle within normal parameters before being handed back to production.	Maintenance Technician	☐
5.10	**Record readings and findings** Technician records all readings, parts replaced and observations on the PM work order in the CMMS.	Maintenance Technician	☐
5.11	**Return the asset to service** Technician confirms with the operator that the equipment is running normally and hands it back for production use.	Equipment Operator	☐
5.12	**Close the work order and flag follow-up work** Maintenance planner closes the PM work order in the CMMS and opens a separate corrective work order for any follow-up repair identified during the PM.	Maintenance Planner	☐

6. Quality checks

- PM work orders are closed in the CMMS within the scheduled week at least 90 percent of the time.
- Every closed PM work order has recorded readings, not just a checked-off status.
- Lockout/tagout is verified as applied before any PM task requiring it begins.
- Follow-up corrective work orders are opened for every deficiency found during a PM.

7. Records

- Completed PM work order in the CMMS
- Asset history log
- Lockout/tagout verification record
- Follow-up corrective work order log

8. KPIs

- PM compliance rate (completed on schedule)

- Ratio of planned to reactive maintenance hours
- Follow-up repairs generated per PM
- Mean time between failures for PM-covered assets

9. Common mistakes

- Checking off PM tasks without actually taking or recording readings.
- Skipping lockout/tagout for a quick task expected to take only a minute.
- Not opening a follow-up work order for a worn part that still works today.
- Letting PM work orders slip past their due date without rescheduling.
- Using a substitute lubricant or part not specified for the asset.

10. Revision history

Revision	Date	Description	Reviewed by
1.0	September 15, 2026	Initial release	Ilia Pirozhenko

Approval

Prepared by	Approved by	Date

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