

Machine Lubrication SOP

Document no.	SOP-MNT-006
Revision	1.0
Owner	Maintenance Manager
Effective date	September 15, 2026
Review cycle	Every 12 months

1. Purpose

To make sure every lubrication point on covered equipment receives the correct lubricant, in the correct quantity, on schedule, to reduce wear and prevent lubrication-related failures.

2. Scope

Applies to scheduled lubrication routes on production and facility equipment, including grease points, oil reservoirs and gearboxes. One-time lubrication performed during a repair or PM task on other equipment is covered by those SOPs.

Definitions

Lube route	A defined sequence of lubrication points visited on a schedule, often grouped by area or frequency.
Lube chart	The reference showing the correct lubricant type and grade for each point on a piece of equipment.
Oil analysis	Laboratory testing of a lubricant sample to check for contamination, wear metals and remaining useful life.
Re-lubrication interval	The recommended time or run-hours between applications of grease or oil to a given point.

3. Responsibilities

Lubrication Technician	Follows the lube route, applies the correct lubricant and quantity, and records completion and any abnormal findings.
Maintenance Planner	Maintains the lube chart and route schedule in the CMMS and orders lubricants.
Maintenance Supervisor	Reviews route completion and oil analysis results, and follows up on flagged issues.
Equipment Operator	Reports leaks, low oil sight glass levels or unusual noise between scheduled lube visits.

RACI matrix

Activity	Lubrication Technician	Maintenance Planner	Maintenance Supervisor	Equipment Operator
Maintain the lube chart and route schedule	C	R/A	I	-
Perform the scheduled lube route	R/A	I	I	I

Activity	Lubrication Technician	Maintenance Planner	Maintenance Supervisor	Equipment Operator
Sample and review oil analysis results	R	C	A	-
Report and follow up on abnormal findings	R	I	A	C

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

4. Materials and PPE

Materials, tools and systems

- Lube chart for each asset
- CMMS with the lube route schedule
- Grease guns and oil transfer containers labeled by lubricant type
- Lubricants specified for each point (grease, gear oil, hydraulic oil)
- Oil sampling kit
- Clean rags and drip pans

Personal protective equipment

- Safety glasses
- Chemical-resistant gloves
- Coveralls or apron
- Hearing protection near running equipment

5. Procedure

Step	Task	Owner	Done
5.1	Review the lube route for the day Technician pulls the day's lube route from the CMMS, noting which points are due and any special instructions from the lube chart.	Lubrication Technician	☐
5.2	Verify the correct lubricant grade Technician checks the lube chart for each asset to confirm the correct lubricant type and grade before drawing it from storage, since mixing incompatible lubricants can damage equipment. Warning: Never mix incompatible lubricant types or substitute a grade not listed on the lube chart.	Lubrication Technician	☐
5.3	Inspect lubricant condition and level Technician checks oil sight glasses, reservoir levels and grease fitting condition before servicing, noting any sign of contamination, discoloration or leaking.	Lubrication Technician	☐
5.4	Clean fittings before applying lubricant Technician wipes dirt and old grease from each fitting or fill point before connecting the grease gun or opening a reservoir, to avoid introducing contamination.	Lubrication Technician	☐
5.5	Apply grease or oil per specification Technician applies the specified lubricant in the quantity and re-lubrication interval called for on the lube chart, avoiding over-greasing bearings. Checkpoint: Quantity applied matches the lube chart specification for each point, not a generic amount.	Lubrication Technician	☐

Step	Task	Owner	Done
5.6	Top up oil reservoirs and check filters Technician tops up gearbox and hydraulic reservoirs to the correct level and replaces oil filters that are due per the schedule.	Lubrication Technician	☐
5.7	Pull an oil sample where required Technician draws an oil sample from designated points on the schedule using a clean sampling kit and labels it for laboratory analysis.	Lubrication Technician	☐
5.8	Clean up spills and dispose of used lubricant Technician wipes up any spilled lubricant, places used oil and rags in the designated waste containers, and disposes of them per the site's environmental procedure.	Lubrication Technician	☐
5.9	Inspect for leaks and seal wear Technician checks each serviced point for leaks, worn seals or damaged fittings while completing the route, and notes anything needing follow-up repair.	Lubrication Technician	☐
5.10	Record the completed route Technician records completion, quantities applied and any abnormal findings for each point on the lube route in the CMMS.	Lubrication Technician	☐
5.11	Review oil analysis results Maintenance supervisor reviews returned oil analysis reports for contamination or wear trends and assigns follow-up action if results are outside normal range. Checkpoint: Oil analysis results outside normal range trigger a follow-up work order before the next scheduled sample.	Maintenance Supervisor	☐
5.12	Update the route and lube chart as needed Maintenance planner updates the lube route or chart when equipment changes, a lubricant is substituted by the manufacturer, or a repeated leak is found.	Maintenance Planner	☐

6. Quality checks

- Lube routes are completed on schedule at least 95 percent of the time.
- Quantities applied match the lube chart, with no generic 'grease until full' shortcuts.
- Oil analysis results outside normal range are followed up within the same week.
- No lubricant is applied without first checking the lube chart for that point.

7. Records

- Completed lube route log in the CMMS
- Lube chart per asset
- Oil analysis reports
- Follow-up work orders from abnormal findings

8. KPIs

- Lube route completion rate
- Oil analysis samples returned outside normal range
- Bearing and gearbox failures linked to lubrication
- Lubricant consumption against baseline

9. Common mistakes

- Over-greasing a bearing, which can cause seal failure and overheating.
- Using whatever lubricant is closest instead of checking the lube chart.
- Skipping the leak and seal check because the route is running behind schedule.
- Not following up on an abnormal oil analysis result.
- Leaving fittings dirty before connecting the grease gun, pushing contamination into the bearing.

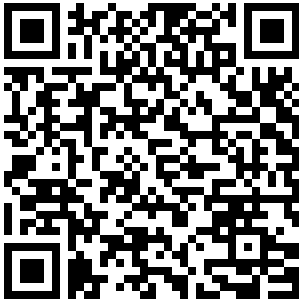
10. Revision history

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

Approval

Prepared by	Approved by	Date

This is a template. Adapt it to your organization, equipment and local regulations before use.



Scan for the latest version

Opens this template online, where you can download it again in Word, PDF, Excel or CSV — free, no sign-up.

Or **add it to Perfect Wiki** so your team can find it and ask questions about it in Microsoft Teams, Slack, kChat or Mattermost.