Standard Operating Procedure (SOP)

Detailed Cleaning and Lubrication Guidelines

This SOP provides **detailed cleaning and lubrication guidelines** essential for maintaining machinery and equipment efficiency. It covers proper cleaning techniques, recommended cleaning agents, lubrication types and intervals, safety precautions during maintenance, and documentation procedures to ensure prolonged equipment lifespan and prevent operational downtime.

1. Purpose

To establish a standardized process for cleaning and lubricating equipment to ensure optimal performance, safety, and equipment longevity.

2. Scope

This procedure applies to all maintenance personnel responsible for cleaning and lubricating machinery and equipment within the facility.

3. Responsibilities

- **Maintenance Staff:** Execute cleaning and lubrication tasks as per this SOP.
- **Supervisors:** Ensure adherence to guidelines and maintain records.
- **HSE Officer:** Oversee compliance with safety precautions.

4. Required Materials and Equipment

- Approved cleaning agents and degreasers
- Cleaning brushes, rags, and lint-free wipes
- Personal protective equipment (PPE): gloves, safety glasses, masks
- Lubricants (oil, grease) as specified by manufacturer
- Lubrication tools: grease guns, oilers
- Maintenance logbook or digital maintenance system

5. Procedure

5.1 Cleaning

1. **Preparation**
    - Turn off and lock out/tag out equipment before beginning maintenance.
    - Wear appropriate PPE.
2. **Surface Cleaning**
    - Remove dust/debris using brushes or compressed air as appropriate.
    - Apply recommended cleaning agent to soiled areas.
    - Wipe with lint-free cloth; repeat as necessary until surfaces are clean.
    - Check for residue or build-up in hard-to-reach areas.
3. **Deep Cleaning**
    - Disassemble parts if specified in the maintenance manual.
    - Soak parts in appropriate cleaning solvent if required.
    - Dry thoroughly before reassembly.

5.2 Lubrication

1. **Lubricant Selection**
    - Use lubricants as specified by manufacturer or technical guidelines.
    - Refer to the equipment lubrication chart (see below).
2. **Application**
    - Clean lubricating points to remove old grease/oil.
    - Apply the correct amount of lubricant using the designated tool.
    - Wipe off excess to prevent contamination and attract less dirt.
3. **Verification**
    - Operate the machinery briefly (if safe) to distribute lubricant.

- Inspect for leaks or improper application.

5.3 Lubrication Schedule Example

Equipment	Lubricant Type	Lubrication Point	Interval
Conveyor Bearings	Multipurpose Grease	Bearing Housings	Monthly
Gearbox	Gear Oil (ISO VG 220)	Oil Fill Plug	Quarterly
Hydraulic Pump	Hydraulic Oil	Reservoir	Every 600 Hours

6. Safety Precautions

- Always follow proper lockout/tagout procedures before starting maintenance.
- Use PPE including gloves, goggles, and masks as required.
- Ensure adequate ventilation when using volatile cleaning agents.
- Dispose of cleaning materials and used lubricants as per environmental regulations.
- Be aware of hot surfaces and sharp components.

7. Documentation

1. Record all cleaning and lubrication activities in the maintenance logbook with the following details:
   - Date and time
   - Equipment name and ID
   - Type of maintenance performed
   - Lubricants/cleaners used
   - Personnel involved
   - Observations or issues found
2. Supervisor must review and sign off all entries.

8. References

- OEM Operation & Maintenance Manuals
- Facility Lubrication Schedule
- MSDS (Material Safety Data Sheets) for chemicals used

Prepared by: _____ Date: _____

Reviewed by: _____ Date: _____

Approved by: _____ Date: _____