

SOP Template: Pre-changeover Equipment Shutdown and Isolation Procedures

This SOP details the **pre-changeover equipment shutdown and isolation procedures** to ensure safe and efficient transition between production runs. It covers step-by-step instructions for safely powering down equipment, isolating hazardous energy sources, verifying zero energy state, and securing machinery to prevent accidental startup. The procedure aims to protect personnel from injury, prevent equipment damage, and maintain compliance with safety regulations during changeover processes.

1. Purpose

To outline the systematic approach for shutting down and isolating equipment prior to production changeovers, ensuring the safety of personnel and equipment integrity.

2. Scope

This procedure applies to all equipment requiring shutdown and isolation before any scheduled production changeover in the facility.

3. Responsibilities

- **Operators:** Execute shutdown and isolation steps as detailed below.
- **Supervisors:** Confirm completion of all steps and sign off on the isolation checklist.
- **Maintenance:** Support in de-energizing and securing hazardous energy sources as needed.

4. Procedure

1. **Notification**
 - Inform affected personnel about the scheduled equipment shutdown and isolation.
2. **Preparation**
 - Review equipment manuals, isolation diagrams, and relevant risk assessments.
 - Assemble required lockout/tagout devices and PPE.
3. **Shutdown of Equipment**
 - Ensure all product materials are cleared from the equipment.
 - Follow manufacturer-specific shutdown procedures for each machine.
4. **Isolation of Hazardous Energy**
 - Switch off and physically isolate all energy sources (electrical, pneumatic, hydraulic, mechanical, thermal, etc.).
 - Apply lockout/tagout devices as per lockout procedures.
5. **Release of Stored Energy**
 - Discharge any residual or stored energy using bleeder valves, venting, or mechanical restraint when necessary.
6. **Verification**
 - Attempt a safe start-up to confirm zero energy state; check for any motion or activation.
 - Document and report verification results.
7. **Securing Machinery**
 - Post warning signs and secure access to the isolated equipment to prevent accidental startup.
8. **Completion**
 - Supervisor inspects and signs off the isolation checklist before authorizing changeover work.

5. Documentation

- Shutdown and Isolation Checklist
- Lockout/Tagout Log
- Supervisor Sign-off Sheet

6. Safety and Compliance

- Comply with OSHA, company, and equipment-specific safety standards.

- Report any deviations, incidents, or injuries encountered during the procedure.

7. Revision History

Date	Version	Description	Author
2024-06-15	1.0	Initial template release	SOP Team