

# Machine Safety Guide for Maintenance Template

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## 1. Introduction

This guide outlines essential safety procedures and protocols for maintenance team members working with industrial machinery. Following these guidelines is mandatory for ensuring personal safety and maintaining equipment integrity.

## 2. General Safety Principles

### 2.1 Core Safety Rules

- Never bypass or disable safety devices
- Always assume machines could start unexpectedly
- Maintain clear communication with operators and supervisors
- Report all safety concerns immediately
- Never work alone on dangerous equipment
- Maintain awareness of surrounding activities

### 2.2 Risk Assessment

Before beginning any maintenance work:

- Identify potential hazards
- Assess risk levels
- Determine necessary safety measures
- Verify emergency procedures
- Review machine-specific safety documentation

## **3. Pre-Maintenance Safety Procedures**

### **3.1 Equipment Inspection**

- Review maintenance history and documentation
- Check for warning signs and safety alerts
- Inspect surrounding work area
- Verify availability of necessary safety equipment
- Ensure adequate lighting and ventilation

### **3.2 Communication Protocol**

- Notify relevant personnel of maintenance activities
- Establish clear communication channels
- Post appropriate warning signs
- Document start time and expected duration
- Confirm emergency contact information

## **4. Lock-Out/Tag-Out (LOTO) Procedures**

### **4.1 LOTO Steps**

1. Notify affected employees
2. Shut down equipment using normal procedures
3. Isolate all energy sources
4. Apply lockout devices and tags
5. Release or restrain stored energy
6. Verify equipment isolation
7. Record LOTO application

### **4.2 Multiple Point LOTO**

- Use multiple locks when necessary
- Maintain a group LOTO log
- Verify all energy sources are secured
- Document location of all LOTO points

## **5. Personal Protective Equipment (PPE)**

### **5.1 Required PPE**

- Safety glasses with side shields
- Steel-toed safety boots
- Hard hat when overhead hazards exist

- Cut-resistant gloves appropriate for task
- Hearing protection in high-noise areas
- Arc flash protection when working with electricity

## **5.2 PPE Maintenance**

- Inspect PPE before each use
- Clean and store PPE properly
- Replace damaged or worn PPE immediately
- Document PPE inspections and replacements

# **6. Tool Safety**

## **6.1 Tool Selection and Inspection**

- Use only appropriate tools for the task
- Inspect tools before each use
- Remove damaged tools from service
- Maintain tool calibration records
- Store tools properly after use

## **6.2 Specialized Tools**

- Verify training and certification for specialized tools
- Follow manufacturer guidelines
- Maintain inspection records
- Use proper storage and handling procedures

# **7. Emergency Procedures**

## **7.1 Emergency Response**

- Know location of emergency stops
- Maintain clear access to emergency equipment
- Know evacuation routes
- Understand fire suppression systems
- Keep first aid kits accessible

## **7.2 Incident Reporting**

- Report all incidents immediately
- Document near-misses
- Participate in incident investigations
- Follow up on corrective actions
- Maintain incident records

## **8. Documentation Requirements**

### **8.1 Required Documentation**

- Maintenance work orders
- Safety permits
- LOTO records
- Risk assessments
- Inspection checklists
- Training certificates
- Incident reports

### **8.2 Record Keeping**

- Complete all documentation accurately
- File documents in designated locations
- Maintain electronic and physical copies
- Update maintenance history
- Record all safety observations

## **9. Post-Maintenance Safety Checks**

### **9.1 Equipment Restoration**

- Remove all tools and materials
- Clean work area
- Replace all guards and safety devices
- Remove LOTO devices in correct sequence
- Verify proper machine operation

### **9.2 Final Inspection**

- Test safety systems
- Verify emergency stops
- Check guard alignments
- Ensure proper labeling
- Document completion and status

## **Appendix A: Safety Checklist Template**

### **Pre-Maintenance**

- Review work order and safety requirements
- Inspect PPE
- Verify LOTO equipment
- Check surrounding area
- Notify affected personnel

## **During Maintenance**

Follow LOTO procedures  Use appropriate PPE  Maintain clean work area  Document progress  Monitor for hazards

## **Post-Maintenance**

Remove all tools  Clean area  Remove LOTO  Test equipment  Complete documentation

## **Appendix B: Emergency Contact Information**

[Insert facility-specific emergency contacts and procedures]

## **Appendix C: Revision History**

Document Version: 1.0 Last Updated: [Insert Date] Next Review Date: [Insert Date + 1 year]