

[Organization logo]

[Organization name]

Commented [45A1]: All fields in this document marked by square brackets [] must be filled in.

GOOD PRACTICE FOR MAINTENANCE OF TOOLS AND MACHINERY

Code:	
Version:	0.1
Created by:	
Approved by:	
Date of version:	
Signature:	

Commented [45A2]: Adapt to the existing practice in organization.

Distribution list

Copy No.	Distributed to	Date	Signature	Returned	
				Date	Signature

Commented [45A3]: This is only necessary if document is in paper form; otherwise, this table should be deleted.

Change history

Date	Version	Created by	Description of change
	0.1	45001Academy	Basic document outline

Table of contents

1. PURPOSE, SCOPE AND USERS	3
2. REFERENCE DOCUMENTS	3
3. LOCK OUT/TAG OUT OPERATIONS.....	3
3.1. BASIC RULES FOR LOCK OUT AND TAG OUT	4
3.2. PREPARATION TO SHUT DOWN	4
3.3. APPLICATION OF LOCK OUT/TAG OUT.....	4
3.4. PREPARATION FOR RE-ENERGIZATION	4
3.5. REMOVAL OF LOCK OUT/TAG OUT	5
3.6. TEMPORARY REMOVAL OF LOCK OUT/TAG OUT	5
3.7. TRAINING.....	5

1. Purpose, scope and users

The purpose of this document is to define proper methods for maintenance of tools and machinery in order to prevent the unexpected energization, start up, or release of stored energy that could cause injury to employees working on equipment.

This document applies to all work activities in [organization name] where power and other tools that can cause injuries are used.

Users of this document are all employees of [organization name] who either service or maintain equipment and machines that could unexpectedly start up, or who work in areas where the possibility of the release of stored energy could cause injury. This includes authorized employees who perform repair, service, and maintenance operations and affected employees who work with the equipment to be locked or tagged out. It also applies to all contractors working on [organization name] premises.

This document does not apply in the following situations:

- Servicing or maintaining of cord and plug connected to electrical equipment. Cords should remain unplugged and under the supervision of the employee throughout the operation.
- During hot tap operations that involve transmission and distribution systems for gas, steam, or water when they are performed on pressurized pipelines.
- When employees are provided with an alternative type of protection that is equally effective.

Commented [45A4]: E.g., personal protective equipment such as safety gloves, helmets, face shields, etc.

2. Reference documents

- ISO 45001:2018 standard, clause 8.1
- OH&S Manual
- OH&S Policy
- OH&S Objectives
- Procedure for Addressing Risks and Opportunities and OH&S Hazards
- Procedure for Operational Control
- Procedures for Preparedness and Emergency Response
- List of Legal and Other Requirements
- Procedure for Incident Investigation

3. Lock out/tag out operations

WARNING: The placement of a lock or tag on an energy-isolating device, which prevents the device from being operated, is a critical safety step.

Commented [45A5]: E.g., placement of a lock or tag on an energy-isolating device, indicating that the energy-isolating device is not to be operated until removal of the lock or tag.

Tag out – The placement of a warning/identification tag on an energy-isolating device to indicate that the equipment must not be operated and identification of the person who applied the lock/tag.

Commented [45A6]: E.g. placement of label saying "DANGER – DO NOT OPERATE".

3.1. Basic rules for lock out and tag out

Lock out/tag out devices must be used to ensure that all machinery and equipment are locked out or tagged out to prevent anyone from starting or readjusting operation when such operation could cause injury to personnel.

Do not attempt to operate any switch, valve, or other energy-isolating device when it is locked or tagged out.

Only the person who applied the lock out and/or tag out device may remove such device.

In cases where the person who applied lock out/tag out is not available to remove devices, they will only be removed by the **Supervisor**, who will inform the person who applied lock out/tag out immediately upon their return to the worksite.

Commented [45A7]: E.g., Supervisor

When a tag is attached to an energy-isolating device, it is not to be removed without authorization of the person responsible for it. It is never to be bypassed, ignored, or otherwise defeated.

3.2. Preparation to shut down

The following activities must be performed, in this order, when shutting down the equipment:

1. Obtain the lock out/tag out devices and tags.
2. Obtain permission and be notified by supervisor or an authorized employee of the application and removal of the lock out devices or tag out devices. Notification shall be given before the controls are applied, and after they are removed from the machine or equipment.
3. Read and understand the equipment specific standard operating procedure.
4. Lock out energy control point on the equipment.
5. Remove from the equipment.
6. Isolate the equipment from all hazardous energy sources.

3.3. Application of lock out/tag out

The following activities must be performed, in this order, during lock out/tag out of the equipment:

1. Apply the lock out/tag out device so that it locks the energy-isolating device in the SAFE position. Affix the tag directly to each lock.
2. Remove, valve, or switch, which may result in residual energy in the system after lock out.
3. Verify that all sources of hazardous energies have been isolated. This should be done by measuring the energy with a meter or gauge and by trying to start the equipment. This is using the normal design, control or functioning property. Do not rely on any of activities in the O&M procedure after testing.

3.4. Preparation for re-energization

The following activities must be performed, in this order, during re-energization of the equipment:

1. Inspect the work area to ensure that all nonessential items, tools, etc., have been removed from the danger zone.
2. Verify that all the guarding and safety controls have been properly replaced.
3. Notify affected employees and ensure that all personnel are in a safe location before re-energizing.

3.5. Removal of lock out/tag out

[Job title] ensures that the following actions are performed during removal of lock out/tag out:

- Remove the lock out/tag out tools and tags.
- Re-energize the equipment according to start-up instructions provided by manufacturer.

3.6. Temporary removal of lock out/tag out

In case of temporary removal of lock out/tag out, [job title] ensures that the following actions are taken:

- Clear equipment of tools and materials.
- Remove affected employees from equipment area.
- Remove lock out/tag out devices.
- Energize and proceed with testing or servicing.
- Re-energize all systems and replace energy control measures in accordance with procedures.

3.7. Training

[Job title] ensures that education and training are provided for all employees and external personnel affected by lock out/tag out activities. Training is required to apply lock out/tag out devices that have not been properly trained and is authorized to re-energize, used to apply lock out/tag out devices when necessary. All training will be documented in the Training Record.