

FAST Guide to Lockout/Tagout

The Control of Hazardous Energy

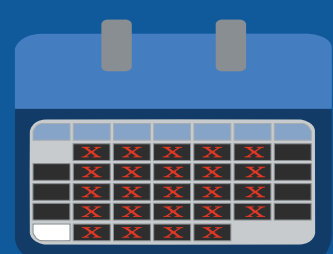
Employees can be seriously injured or killed if the machinery they service or maintain unexpectedly energizes, starts up, or releases stored energy. OSHA's standard on the Control of Hazardous Energy (Lockout/Tagout), found in Title 29 of the Code of Federal Regulations Part 1910.147, defines the steps employers must take to prevent accidents associated with hazardous energy.

Lockout equipment holds energy-isolation devices in a safe or "off" position to prevent the equipment from being energized. Take a look at this guide to understand basic procedures you must develop and maintain to keep your employees safe from injury or death by hazardous energy.



22%

of workplace injuries are caused by contact with equipment or other objects



24

days of work on average are missed after an injury caused by the release of hazardous energy



120

fatalities per year can be prevented by compliant lockout/tagout procedures



Written Lockout/Tagout Procedures

OSHA requires employers to prepare and implement written lockout/tagout procedures for their specific workplace. The written program does not need to be lengthy or complicated but is required to help ensure that compliance with the standard is done in a systematic way and all elements are coordinated.

What do I need to include?



- ✓ Procedures for *preparation for shutdown, actual shut down, and equipment isolation*
- ✓ Steps for *applying and removing lockout/tagout* devices
- ✓ Requirements for *testing hazardous energy* has indeed been isolated
- ✓ Procedures for *notification of employees*
- ✓ A plan for *training, audits* and at least annual *reevaluation* of the program

Lockout/Tagout Procedures

Lockout/tagout procedures vary based on the conditions in each specific workplace, however OSHA requires a compliant lockout/tagout program to have a plan for all of the elements below. Be sure to keep these nine steps in mind when creating a compliant lockout/tagout program to keep your employees safe on the job.

1

Notify All Employees

It is important to notify all employees of maintenance on a machine before the work begins. This includes those employees that work with the machine, in the vicinity, or those that may just walk by during service.



Shut Down Equipment

Use the normal stopping procedure to shut down the equipment before you begin.

2

3

Isolate Energy Sources

Locate and isolate any possible energy sources to be sure the machine cannot be used during maintenance. This could consist of electric, hydraulic, pneumatic, chemical, thermal, or any other force that sends energy to the machine.



Release Stored Energy

Take steps to release any energy that may be left in the machine. This could consist of electric, hydraulic, pneumatic, chemical, thermal, or any other forms of energy depending on the type of machine.

4

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Lockout All Controls

Use assigned locks and tags to lockout the machine controls to prevent accidental use during the servicing of your machine. The employees responsible for each lock or tag need to be present during this stage of the process.



Test Start-up of Equipment

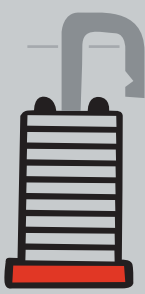
Try to start the machine normally before performing maintenance to be sure the energy has been released and the locks are functioning properly.

6

7

Service the Machine

It is now safe to perform the service or maintenance of your machine. Always remain cautious of other safety factors such as falling tools or equipment even though the energy sources to the machine have been safely removed.



Remove Lockout/Tagout Devices

All employees can now remove their locks and tags from the machine and restore all energy sources. When starting the machine, use normal start-up or warm-up procedures.

8

9

Notify All Employees

Notify your employees that the service or maintenance is complete and the machine has been placed back into service.



Employee Information and Training

OSHA requires that all employees must be trained on the lockout/tagout procedures in or around their work area. Employees should understand the importance of a lockout/tagout program, the procedures involved and what role they play in the event of a machine maintenance or service.

Who needs to be trained?

- ✓ **Authorized employees** who do the maintenance and servicing work
- ✓ **Affected employees** who might be in the vicinity of a locked-out machine
- ✓ **Other employees** who might be walking through a part of the workplace where a machine is locked out



Don't Forget to Evaluate Your Procedures Regularly!

Remember to review your procedures **at least once a year** to make sure they are still working and meeting your objectives. You must also revise your procedures as appropriate to address changes in your specific workplace.



Fastenal Safety Specialists

Looking for help to make sure your lockout/tagout program is compliant? Contact our safety specialists for help today by emailing safetyquestions@fastenal.com.

Extensive Safety Product Knowledge

Lock Out/ Tag Out Training

Cost Savings Ideas

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Sources:

<http://www.bls.gov/iif/>

<https://www.osha.gov/SLTC/controlhazardousenergy/index.html>

http://ehstoday.com/news/ehs_imp_32826

https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9805