

## Background

### What is a Lockout/Tagout?

Lockout/Tagout is a set of safety procedures designed to reduce the risk of injury due to the accidental activation of machinery or energizing of electrical systems during service or maintenance.

Lockout/Tagout is required to ensure that before any employee performs service or maintenance on a machine or equipment, it is isolated from the energy source and rendered inoperative. This prevents accidents from unexpected energizing or startup.

Machine and equipment changes cause changes to lockout/tagout procedure, so employers are required to always keep their authorized employees trained and retrained. Unfamiliarity with a system can lead to deadly consequences.



## Lockout/Tagout Procedure

### How LoTO keeps you safe

- **Preparation for shutdown** – Before the authorized or affected employee shuts down the machine or equipment, the authorized employee needs to know the type and amount of energy, the hazards of the energy, and the method and means to control it
- **Machine/equipment touchdown** – The machine will then be shut down according to the procedures required by the manufacturer
- **Machine/equipment isolation** – all energy utilized by the machine will be located and isolated
- **LoTO device application**
  - Lock to the energy isolation device
  - If lock is not possible, use a tag
    - Tag can only be used when employers can prove the tagout will provide protection equal to the lockout device
- **Stored Energy** – must be released, disconnected, restrained and rendered safe
- **Verification of isolation** – Before starting work on the machine that has been locked out or tagged out authorized employees must verify isolation, also called walking the protection

### Removing LoTO

- **Verify** that all tools have been removed from machine/equipment and that all components are operational
- Employees should be at a safe distance from the machine/equipment
- Lockout/Tagout devices should be removed by the authorized employee who applied the device. If the employee who applied the device is not present, the device can be removed under the direction of the employer.

According to OSHA Lockout/Tagout stops 22-50% of all accidental energizing injuries per year. Be sure to follow the six steps shown above, and **always** verify that the system was properly isolated before doing any work. **Never** put yourself in a situation that may endanger your life or another person's.