Lockout… Tagout – Remember to Lockout and Tagout Meeting Kit



What's At Stake

Lockout/Tagout (LOTO) is a safety procedure used to ensure proper shut-off and prevent the inability to start up machines prior to completion of maintenance or repair work. These practices are required to protect everyone who works with and around potentially dangerous equipment.

LOCKOUT DEVICES

Lockout Devices hold energy-isolation devices in a safe or "off" position. They provide protection by preventing machines or equipment from becoming energized because they are positive restraints that no one can remove without a key or other unlocking mechanism, or through extraordinary means, such as bolt cutters.

TAGOUT DEVICES

Tagout Devices by contrast, are prominent warning devices that an authorized employee fastens to energy-isolating devices to warn employees not to reenergize the machine while he or she services or maintains it. Tagout devices are easier to remove and, by themselves, provide employees with less protection than do lockout devices.

WORKERS AFFECTED BY SAFETY PROCEDURES OF LOCKOUT / TAGOUT

Authorized person: Someone who is permitted due to knowledge of equipment or system to lock/tag the system in a safe and controlled manner, typically equipment operators.

Qualified person: Someone who is knowledgeable of the system enough to be able not only to lock/tag the system, but also troubleshoot, repair, or maintain the system again in a safe and controlled manner, typically technicians, electricians.

Affected person: Person who may be exposed to the hazards of energizing or de-energizing the equipment or system.

What's the Danger

HARMFUL EFFECTS OF HAZARDOUS ENERGY

Energy sources including electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other sources in machines and equipment can be hazardous to workers. During the servicing of machines and equipment, the unexpected start up or release of

stored energy could cause injury to employees.

Some of the causes of accidents:

- The machine or piece of equipment was not completely shut off before a maintenance or repair operation. Not only must the machine be turned off but also the power source that goes to it.
- The machine was turned on accidentally, either out of carelessness or because the person who turned it on did not realize that another worker was there and could get hurt.
- The machine was not working correctly but was not fixed, turned off, locked or tagged, and someone who did not know about the problem used it.
- Moving equipment was not blocked.
- Safety procedures were inadequate or had not been properly explained.

HOW TO PROTECT YOURSELF

WORKERS NEED TO KNOW

Under the lockout/tagout regulations, only authorized employees—who possess the appropriate level of knowledge and training—are allowed to perform maintenance on the equipment. Those that operate the equipment, affected employees, may not perform maintenance but are allowed to shut the machine down and place a tag on it to warn coworkers that the equipment should not be used.

WORKERS NEED TO DO

Workers serve as extra sets of eyes and ears at the workplace. They can listen for strange sounds that might indicate a machine is not working properly. They can also inspect the equipment throughout the day looking for frayed cords, jams, or any other physical signs that could lead to trouble.

LOCKOUT/TAGOUT PREVENTION

Before anyone attempts to repair or adjust a machine, it must be shut down and isolated from energy sources so it cannot accidentally start up. That’s where lockout procedures come in. A lockout isolates the machine from energy sources which could cause it to operate or to move.

These sources include electrical, compressed air, hydraulic, fuel and others. Lockouts are also used to prevent the worker from being struck by materials moving through the machine or even through pipes or other conduits.

- Develop, implement and enforce an energy-control plan.
- Use lockout/tagout devices for equipment that can be locked out. Tagout devices may be used in place of a lockout device only if the tagout program provides employee protection equivalent to that provided through a lockout program.
- Ensure that the new or overhauled equipment is capable of being locked out.
- Develop, implement and ensure an effective tagout program if machinery or equipment are not capable of being locked out.
- Use only lockout/tagout devices authorized for the particular equipment or machinery and ensure that they are durable, standardized and substantial.
- Ensure that the lockout/tagout devices identify the individual users.
- Establish a policy that permits only the employee who applied a lockout/tagout device to remove it.
- Provide effective training for all employees covered by the standard and offer periodic refresher training.
- Comply with the additional energy control provisions under OSHA standards when machines or equipment must be tested or repositioned when outside contractors work at the site, in group lockout situations, and during shift or personnel changes.

- Develop written procedures explaining how a lockout is done.
- Use engineering and administrative controls as much as possible to eliminate the need for lockout.
- Perform regular maintenance to prevent malfunctioning equipment.

FINAL WORD

The test for lockout – tagout procedures is to control hazardous energy while servicing or performing maintenance or machinery or other equipment. Types of hazardous energy included electrical, hydraulic, mechanical, pneumatic, gravitational, chemical and thermal.