OSHA Lockout/Tagout Standard

To reduce the number of workplace fatalities and serious injuries caused by hazardous energy, the Occupational Safety and Health Administration (OSHA) has adopted the Lockout-Tagout Standard (1910.147). Highlights of the Standard include:

**Exposures**
- Failure to stop equipment.
- Failure to disconnect from the power source.
- Failure to dissipate residual energy.
- Accidental restarting of equipment.
- Failure to clean work area before reactivation.

**Energy in the Workplace**
- Electrical energy
- Hydraulic energy (fluid under pressure)
- Pneumatic energy (air under pressure)
- Pressurize liquids & gases

**Affected Employees**
Do not perform the service and maintenance, but may operate the machinery or equipment.
- Must understand why and when lockout/ tagout procedures are used.
- Comply with lockout/tagout procedures.

Under the law, employers are required to inspect and review their lockout/ tagout program to ensure all procedures are being performed correctly.

**Audits**
- A periodic inspection or audit must be done to make sure proper procedures are being followed.
- An audit must be done by an authorized employee who does not work with the equipment to be inspected.
- At a minimum, audits are to be done annually. Audits must also address the following questions.
Training

The standard required that the employers training program must cover the following three areas:

- Energy Control Program
- Elements of energy control procedures relevant to the employees duties
- The requirements of the standard

The employer must provide:

- Effective initial training
- Retraining as needed
- Certification of training (certification must contain name and date of training)

Electrical Lockout Devices

- Circuit breaker lockouts: Place a circuit breaker lockout over the turned-off breaker switch. Secure the device onto the breaker and verify that it won’t move. Then, attach lock through the hole.
- Fuse lockouts: First verify that the circuit is not under an electrical load, then remove the fuse with an approved fuse puller. Verify electrically the de-energized side of the fuse holder and attach tag. Use of locks is not recommended with this device since the lock itself could cause a short circuit.
- Plug locks: This type of lock has various sizes for industrial plug applications. Attach the device directly to the plug, clamp it shut and attach lock and tag. Or, use a plug hugger. Simply plug the cord into the hugger and remove the key.
- Wall switch lockout: First, remove the wall switch plate screws and replace them through the base plate and into the switch assembly with the device hinge up, place the switch in the off position and rotate the cover down into a closed position. Then, insert lock through the hole and verify that the switch cannot move.

Devices for Locking Out Hydraulic, Pneumatic, and Other Pressurized Systems

- Ball valve lockout: With the valve handle already in the off position, slip the device over the angled portion of the valve handle as far as possible. Place lock and tag in the hole that provides the tightest fit. Make sure the lower paddle is touching the pipe. Lastly, make sure the valve is secure and cannot be moved.
- Gate valve lockout: Slip over round gate valve handles and attach your lock and tag. Chains can be used to lock valves. Always obey caution labels which are fastened to machinery to remind authorized as well as affected employees of lockout procedures.
Group Lockout

When more than one employee services the same equipment and must lock out the same energy-isolating Device, this is called group lockout. Each employee is required to receive the same level of safety from group lockout as he or she would receive from individual lockout. Therefore, each worker must attach his or her own lock to a hasp so each person will be sure they are protected.

Larger jobs involving a number of workers – for example a whole crew or department – will require special lockout procedures that are supervised by a single authorized employee. The entire procedure must remain under this person’s authority and control. In such instances, a special lockbox may be used to keep all keys. Be sure to follow your employer’s established procedures concerning group lockout.