

Basic Lockout Guidelines

When it comes to lockout procedures, a shortcut in the process can literally mean the difference between life and death. Long considered an important part of an industrial safety program, lockout procedures protect not only the employees working on a piece of equipment, but also co-workers and others on the premises.

Lockout refers to the specific steps taken to safeguard employees from the unexpected startup of machinery and equipment, or the release of hazardous energy, during setup, service, or repair. To lock out equipment, a lock is placed on the energy source, control, or isolating device.

Although specific lockout procedures vary by industry, type of equipment used, and procedures and assigned responsibilities within your plant, there are some basic common guidelines of which employees should be aware.

The following are the critical elements of an effective lockout policy:

- **Clearly define when a lockout needs to occur.** It's important that there is a clear distinction between normal production operations and instances when a lockout is needed.
 - **Identify all potential energy sources.** A simple disconnect of the main power switches is not sufficient, as other types of energy may exist, such as hydraulic, electric, thermal, radioactive, pneumatic, gravity, and chemical energy. It's also important to drain, release, or block any stored energy.
 - **Correctly locate energy isolating devices.** To achieve proper equipment isolation, an energy isolating device – such as a circuit breaker, disconnect switch, or gate valve – must be found, tagged, and locked out in the closed position.
 - **Inform all machine operators of the lockout.** A sudden loss of power could be dangerous if workers are not aware of the situation and are still working on the machinery.
- **Attach locks along with a warning tag indicating the date, purpose, and length of the lockout and who installed the lock.** If there are several employees working on a job, each worker should attach his or her own lock to a multiple-locking device.
 - **Use uniquely keyed locks that come with only one key to ensure that employees cannot remove each others' locks.**
 - **After the lockout procedures have been performed, test the operation of the machinery to ensure that all energy sources have been secured.**
 - **Return locked-out equipment to service only after all start-up procedures established by the organization have been followed.** Special attention should be given to make sure all obstructions have been cleared, machine safeguards have been replaced, locks have been removed (in the correct order), and all workers have been notified and are free of the area.
 - **Train employees.** Provide technical training to employees authorized to apply locks and tags to equipment and awareness training to those affected by the equipment such as: machine operators, workers in close proximity, and management contacts.
 - **Conduct an annual review of the lockout program to verify effectiveness.**