



IS SAFETY ONE OF YOUR PRODUCTS?

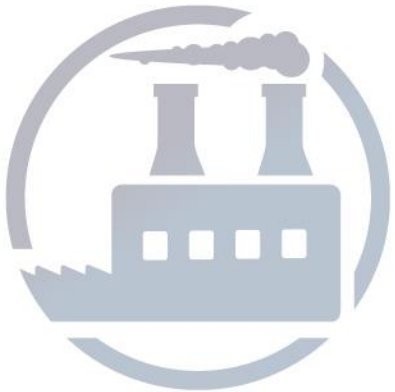
Better to Lockout/Tagout Than to Luck Out!

- OSHA's lockout/tagout standard
 - 29 CFR 1910.147



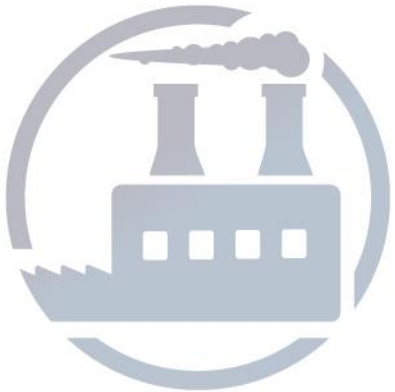
Objectives

- Define what lockout/tagout (LOTO) is and review the key definitions as they pertain to the standard.
- Examine the different types of LOTO devices.
- Discuss what employees can and should do.
- Review the steps involved in the LOTO process.



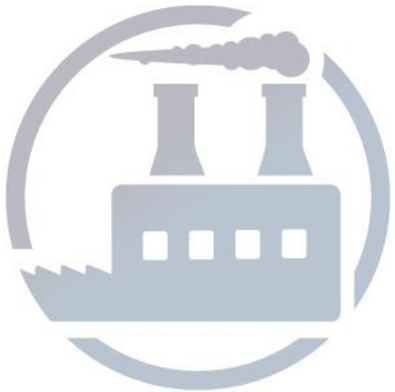
Definitions

- Lockout
 - The placement of a lock on an energy isolating device to ensure that the **equipment being controlled cannot be operated** until the lockout device is removed.



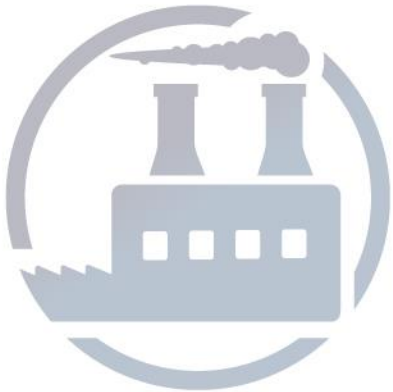
Provisions of the Standard

- Requires employers to:
 - Establish procedures for isolating machines or equipment from their source of energy.
 - Create specific steps for the placement, removal, and transfer of lockout devices and the responsibility for them.



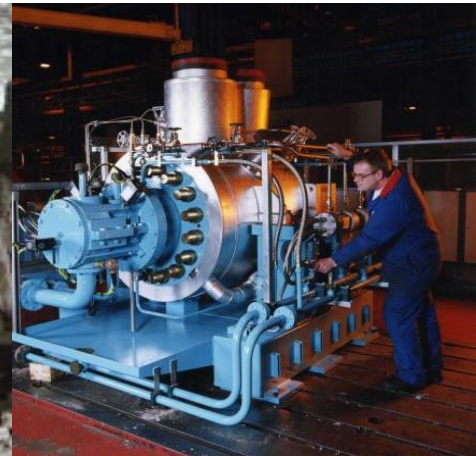
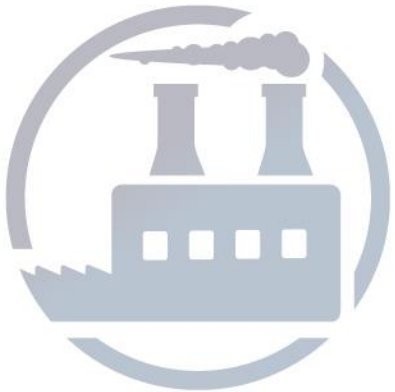
Lockout Requirements

- After January 1990, the following must be designed to accept a lockout device:
 - New machines or equipment are installed
 - Replacement of a machine
 - Major repair of a machine
 - Modification of a machine



LOTO Use

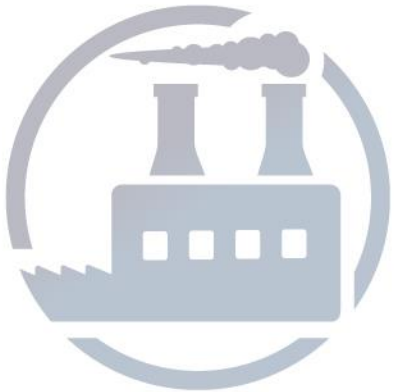
- LOTO shall be used when employees are:
 - Required to remove or bypass a safety device
 - Required to place any part of their body in harm's way
 - Exposed to hazardous energy



Group Lockout Devices

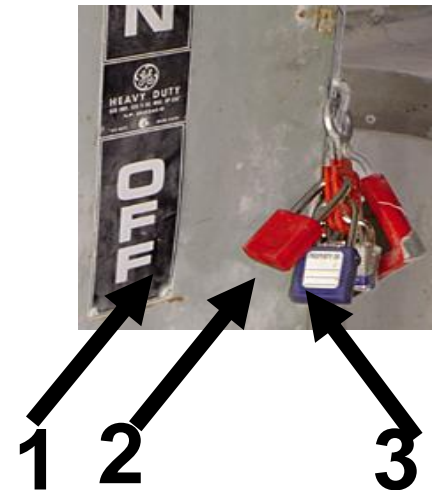
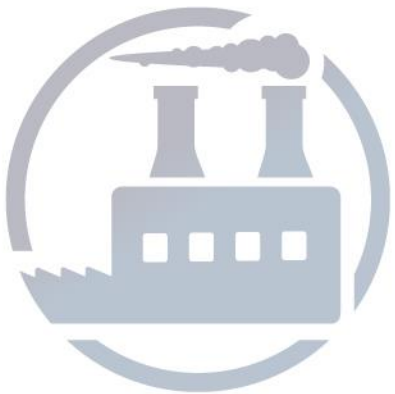


- Used when more than one person is doing maintenance or repair on the same machine or equipment.
- Machinery or equipment can't be started up until all locks are removed.
- Each person places and removes their own lock.



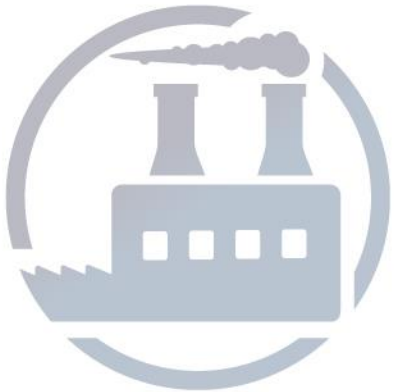
Device Requirements

- Durable
 - Lockout and tagout devices must withstand the environment to which they are exposed for the maximum duration.
- Standardized
 - Lockout and tagout devices must be standardized according to either color, shape, or size.



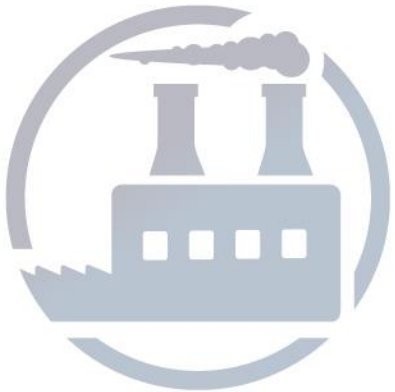
Lockout/Tagout Requirements

- If an energy isolating device is **not** capable of being locked out, the employer's energy control program shall utilize a tagout system.
- Tagout
 - The placement of a tagout device on an energy isolating device to indicate the equipment being controlled may not be operated until the tagout device is removed.



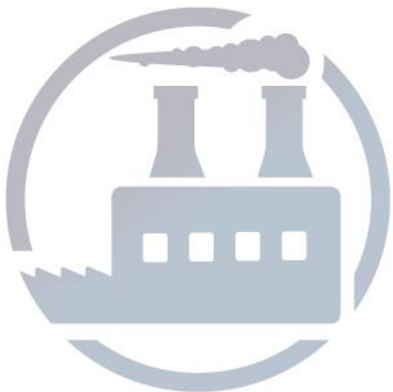
Tag Requirements

- Tags must also include a legend such as:
 - Do not start.
 - Do not open.
 - Do not close.
 - Do not energize.
 - Do not operate.



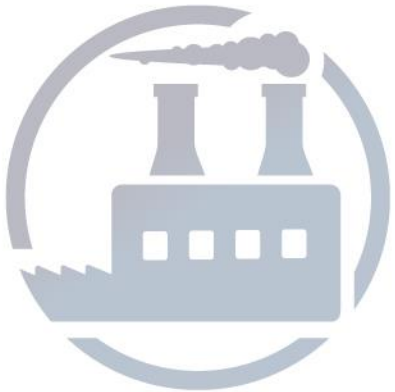
What is Tagout?

- Tags are warning devices only.
 - They don't provide the same level of protection as lockout devices.
 - They can only be removed by an authorized person.
 - They must be legible, securely attached, and resistant to degradation.



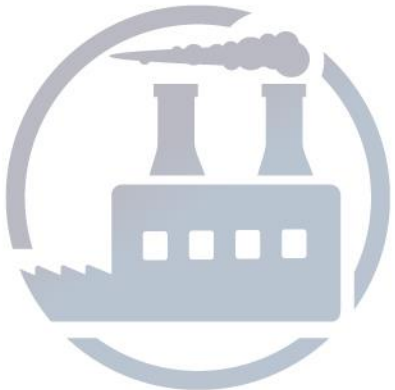
Definitions

- Authorized employee
 - An employee who performs servicing or maintenance on machines and equipment. Lockout or tagout is used by these employees for their own protection.
- Knowledge needed
 - Recognition of energy sources and means necessary for energy isolation and control



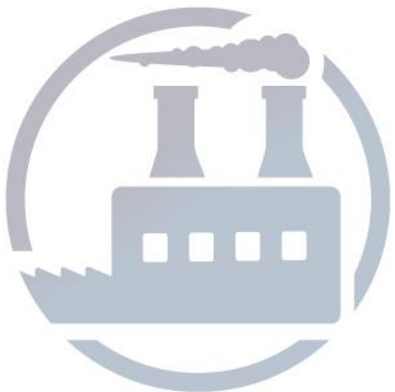
Definitions

- Affected employee
 - An employee who performs the duties of his or her job in an area in which the energy control procedure is implemented and servicing or maintenance operations are performed
- Knowledge needed
 - Purpose and use of the energy control procedure



Definitions

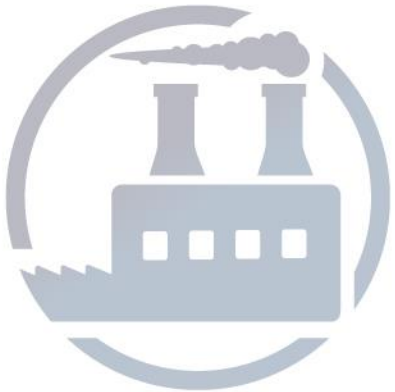
- All other employees
 - Employees who do not perform LOTO nor do they work in an area where LOTO is performed
- Knowledge needed
 - Prohibition relating to attempts to restart or reenergize machines or equipment that are locked out or tagged out



Authorized Employee Responsibilities

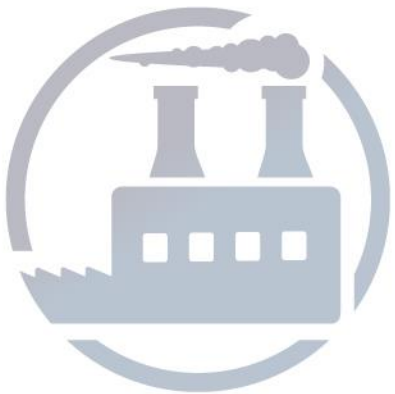


- Repair or service equipment as needed.
- Ensure that all energy sources are locked out.
- Test equipment to verify residual energy is dissipated.
- Place a “Danger—Do Not Operate” tag on equipment.
- Obtain assistance when necessary.
- Remove locks and/or tags following LOTO.
- Coordinate multi-shift repair.



Affected Employee Responsibilities

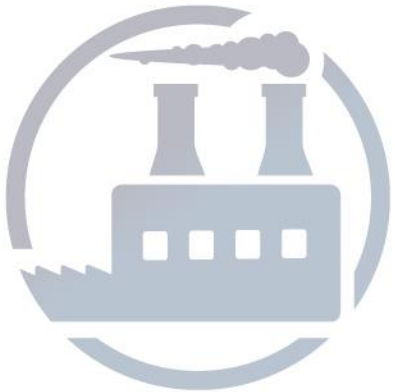
- Notify maintenance when equipment needs repair or adjustment.
- Leave all LOTO devices in place.
- Verify equipment is safe to operate following LOTO.
- Follow all safety rules while operating the equipment.



Summary



- Notify maintenance when equipment needs repair or adjustment.
- Leave the maintenance on equipment to authorized employees.
- Leave all LOTO devices in place.
- Follow all safety rules while operating equipment.
- Each and every employee who works on a piece of equipment must have his or her own individual lock on that piece of equipment prior to initiating work.





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