

GBI Insulation *SAFETY PROGRAM*

3.0 ENERGY CONTROL (LOCKOUT/TAGOUT)

3.1 Purpose

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before employees perform any servicing or maintenance where the unexpected energization or start-up of the machine or equipment or release of stored energy could cause injury. Lockout is the preferred method of isolating machines or equipment from energy sources. To assist employers in developing a procedure, which meets the requirements of the standard, however, the following simple procedure is provided for use in both lockout or tagout programs. This procedure may be used when there are limited numbers or types of machines or equipment or there is a single power source. For more complex systems, a more comprehensive procedure will need to be developed, documented, and utilized.

All employees are required to comply with the restrictions and, limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a machine or piece of equipment that is locked out to perform servicing or maintenance shall not attempt to start, energize or use that machine or equipment.

Appropriate employees shall be instructed in the safety significance of the lockout (or tagout) procedure (Name(s)/Job Title(s) of employees authorized to lockout or tagout). Each new or transferred affected employee and other employees whose work operations are or may be in the area shall be instructed in the purpose and use of the lockout or tagout procedure

NOTE: While working at most Industrial Plants, the Company will comply with the Client's lockout/tagout rules if they differ from ours.

3.2 Procedural Steps to Control Hazardous Energy

The Company Foreman will locate and identify all isolating devices to be certain which switch(s), valve(s) or other energy isolating devices apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical, or others) may be involved.

Generally the lead man or Foreman will communicate with proper plant personnel and discuss when, where, and why lockout/tagout is required and notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down prior to lockout to perform the servicing or maintenance.

Name(s)/Job Title(s) of affected employees and how to notify.

The authorized employee shall refer to the (Company) procedure to identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.

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Make a survey to locate and identify all isolating devices to be certain which switch(es), valve(s) or other energy isolating devices apply to the equipment to be locked or tagged out. More than one energy source (electrical, mechanical, or others) may be involved

Type(s) and magnitudes) of energy, its hazards and the methods to control the energy.

If the machine or equipment is operating, Request the affected operator shut it down by the normal stopping procedure (depress stop button, open switch, close valve, etc.).

Type(s) and location(s) of machine or equipment operating controls.

De-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).

Type(s) and location(s) of energy isolating devices

Stored or residual energy (such as that in capacitors, springs, elevated machine members, ~ rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.

Type(s) of stored energy methods to dissipate or restrain.

3.3 Procedural Steps to Perform Lockout/Tagout

1. Lock out the energy isolating device(s) with assigned individual lock(s), the design, purpose and use of which the employee shall have been trained on prior to use.
2. Lockout devices, where used, shall be affixed in a manner that will hold the energy isolating devices in a "safe" or "off" position.
3. Tagout devices, where used, shall be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited.
4. Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment shall be fastened at the same point at which the lock would have been attached.

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5. Where a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

Type(s) and design(s) of energy isolating devices (locks or tags) to be used on this piece of equipment.

3.4 Requirements for Testing Lockout/Tagout Effectiveness

1. Ensure that the equipment is disconnected from the energy sources) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.

Caution: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

Method of verifying the isolation of the equipment 2. The machine or equipment is now locked out, and servicing or maintenance may begin.

3.5 Restoring Equipment to Service (A recommended element of the energy control procedure)

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken.

1. Check the machine or equipment and the immediate area around the machine or equipment to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.

2. Check the work area to ensure that all employees have been safely positioned or removed from the area.

3. Verify that the controls are in neutral.

4. Remove the lockout devices (lock and tag) and reenergize the machine or equipment. *Note:* The removal of some forms of blocking may require re-energization of the machine before safe removal.

5. Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready to use.

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3.6 Employee Training and Retraining

GBI will provide for employee training and outline when retraining is needed and conducted. Retraining is required when there is a change in job assignments, in machines, a change in the energy control procedures, or a new hazard is introduced. All training and/or retraining is documented, signed & certified.

3.7 Handling Multiple groups of workers

GBI only has one group of workers and they are provided with a personal Lock Out Tag device. If there ever is multiple groups of workers on the program they will also be provided with personal Lock Out Tag Device.

3.8 An authorized employee has primary responsibility for a set number of employees working under the protection of a group lockout or tagout device

A GBI authorized employee should ascertain the exposure status of individual group members. Each employee shall attach a personal lockout or tagout device to the group's device while he/she is working & then removes it when finished. During shift change or personnel changes, there should be specific procedures to ensure the continuity of lockout or tagout procedures. Documentation should be specific.

3.9 GBI will conduct periodic inspections to be documented annually to ensure procedures & requirements are being followed. A supervisor will perform the inspection (it must be someone other than those actually using the lockout/tagout in progress). A certified review of the inspection including date, equipment, employees & the inspector will be documented.