



## **Hazardous Energy Control Program-LOTO**

LOTO stands for lockout/tagout. "Lockout/tagout" refers to specific practices and procedures to safeguard employees from the unexpected energization or startup of machinery and equipment, or the release of hazardous energy during service or maintenance activities. This requires, in part, that a designated individual turns off and disconnects the machinery or equipment from its energy source(s) before performing service or maintenance and that the authorized employee(s) either lock or tag the energy-isolating device(s) to prevent the release of hazardous energy and take steps to verify that the energy has been isolated effectively.

## **Types of Hazardous Energy:**

This could include energy of the following type:

- Chemical
- Electrical
- Hydraulic
- Mechanical
- Pneumatic
- Thermal
- Other sources of energy



#### **LOTO Procedures**

A lockout/tagout procedure should include the following seven steps:

- 1. Prepare for shutdown.
- Notify all affected employees of the activities and equipment involved.
- 3. Shut down the equipment.
- 4. Isolate the equipment from the hazardous energy source.
- 5. Dissipate residual energy.
- 6. Apply applicable lockout or tagout devices.
- 7. Verify that the equipment is properly isolated.

### Other Equipment's for lock-out.

- Scissors: whenever more than one person has to work on locked out equipment, a multiple locking device (sometimes referred to as scissors) must be used so each worker can secure their own safety
- Tags: extra protection and provide vital information; NEVER to substitute for lock-out
- Blanks: for piping
- Covers: for connectors and valves
- Chains: for valve handles





Covers





**Scissors** 

#### Placement of tagout device

- on an energy isolating device,
- in accordance with an established procedure,
- to indicate that energy isolating device and equipment being controlled may not be operated until tagout device is removed

OPERATE

# **DISCONNECT BEFORE YOU CORRECT - YOU ARE THE KEY TO SAFETY!!!**

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