WEEKLY SAFETY MEETING
All Euramax Subsidiaries

LOCKOUT / TAGOUT

Safety Meeting Contents

- Meeting Notice
- Leaders Guide
- Employee Handout
- Employee Quiz
- Meeting Sign-In Sheet
- Employee Puzzle

PRIOR TO THE WEEKLY MEETING:

- Post the meeting notice by the timeclock
- Read through the Leaders Guide and Employee Handout to familiarize yourself with the topic for the week
- Make copies of the employee handout (one for each employee)
- Make copies of the employee quiz (one for each employee)
- Make copies of the weekly puzzle (one for each employee)

AT THE SAFETY MEETING:

- Pass around the meeting sign-in sheet – ensure all employees present at the meeting print and sign their names
- Pass out the employee hand-out
- Pass out the employee quiz
- Pass out the weekly puzzle
- Keep the meeting simple
- Encourage discussion and questions
WEEKLY SAFETY MEETING NOTICE

THIS WEEK, OUR SAFETY MEETING WILL COVER
LOCKOUT / TAGOUT

TIME: ____________________________________________

DATE: ____________________________________________

PLACE: ____________________________________________
LOCKOUT / TAGOUT

Leaders Guide

**EURAMAX PROCEDURE REFERENCE:**
C-1.0: Lockout / Tagout Program

**MEETING OBJECTIVE:**
OSHA requires each Euramax facility to have an energy control program, designed to prevent unexpected start-up of machinery and equipment, or the unintentional release of stored energy. The purpose of this meeting is to review your energy control program with your employees and to make sure they are fully aware of all the safety rules concerning lockout/tagout of machinery and equipment.

**MEETING PREPARATION:**
Read the Euramax procedure, understand the contents, and ensure compliance.

Gather the locks and tags used in the procedure and review their proper use. Prepare tags to show the correct way to fill them out. Make sure locks and lockout devices are in working order.

An actual demonstration of lockout/tagout procedures on a piece of equipment would be the most effective way to teach the procedures. If you decide to do this, be sure to make the necessary arrangements well ahead of time in the area where the equipment is located.

Review the employee handout to see if there are any other materials you wish to bring to the meeting.

Use a flip chart during the discussion to write key points and employee responses. This technique visually reinforces your instruction.

**MATERIALS CHECKLIST:**
Samples of lockout / tagout devices
Flip chart and marking pens

**MEETING INTRODUCTION**
Today we are going to talk about our Energy Control Program, also known as lockout / tagout. The goal of this safety program is to prevent the unexpected start-up of machinery and equipment, or the unintentional release of stored energy. Either one could kill or severely injure someone when the equipment is being repaired, serviced, or maintained. We’ll cover the basic information you need to know to protect yourself and your co-workers from this type of accident. What you learn here today could save a life tomorrow.
LOCKOUT / TAGOUT

Leaders Guide

OSHA estimates that following lockout / tagout procedures saves 28,400 lost workday injuries and 31,900 non-lost-workday injuries each year. That’s why all employees – whether they’re authorized to repair and service equipment, work on equipment, or just work in an area with equipment – need to be familiar with the basics of lockout / tagout and the energy control process.

**Question:** What is the purpose of lockout / tagout procedures?

**Answer:** To prevent the unexpected start-up of moving parts or release of stored energy that could cause injury or even death.

**Question:** OSHA’s lockout / tagout standard is actually called the “Control of Hazardous Energy Standard.” How would you define “hazardous energy”?

**Answer:** “Hazardous energy” is stored energy that could cause injury to employees while they are repairing, servicing, or maintaining equipment.

**Question:** What kinds of energy can be hazardous?

**Answer:** All types of energy can be hazardous if they aren’t controlled. For example…

- Electrical energy
- Mechanical energy
- Chemical energy (e.g., a gas or liquid chemical)
- Hydraulic energy (i.e., pressurized fluid)
- Pneumatic energy (e.g., compresses air)
- Thermal energy (e.g., steam)

**Question:** An employee who services or maintains machinery and equipment must know what all of the energy sources are for that piece of equipment. Why does having this knowledge play an essential role in ensuring proper lockout / tagout?

**Answer:** A single piece of machinery or equipment may be powered by more than one type of energy. There can be both direct and hidden sources of energy. Proper lockout / tagout requires…

Controlling and isolating all of the equipment’s sources of energy
Releasing any stored energy so that the machine is at zero state of energy
LOCKOUT / TAGOUT

Leaders Guide

Question: Lockout / tagout procedures apply during the routine service and maintenance of machinery and equipment (and during production if any servicing activity takes place then). What work tasks are considered servicing or maintenance activities?

Answer: Installation, set-up, adjustment, repairs, inspections, modifications, cleaning, lubrication, unjamming and changing tools.

Question: What are the basic purposes of locks and tags?

Answer: Locks are used to block the flow of energy from a power source to the machinery or equipment.

Tags are warnings to anyone passing through the work area not to turn the power on.

Question: Where is a lock usually placed?

Answer: Locks and lockout devices are typically placed on an energy-isolating device, such as a circuit breaker, shut-off switch, or valve. This physically prevents the unexpected start-up of machinery or the release of stored energy while the machine is being serviced or maintained.

Show samples of the types of locks and lockout devices used by your facility and discuss their proper placement.

Question: What is “tagout” and what is its purpose?

Answer: “Tagout” means putting a label or tag on the energy-isolating device to warn other employees that the equipment or machine must not be operated.

Show one of your facility’s tags.

Question: What are examples of the types of warnings that might be included on tags.

Answer: Do not open. Do not start. Do not energize. Do not operate.
LOCKOUT / TAGOUT

Leaders Guide

Question: Is it ever appropriate to use tags by themselves?
Answer: The best means of protection is to use both locks and tags. However, because it may be physically impossible to lock out certain pieces of equipment, a tag may be used by itself in such situations. But remember that although tags can notify other employees about possible dangers they are not as effective as lockout devices.

Question: According to OSHA’s lockout / tagout standard, workers are either “authorized employees” or “affected employees.” How does the standard define “authorized employees” – and what are their responsibilities?
Answer: Authorized employees are those who service or maintain machines and equipment and are actually authorized to use locks and tags. They need to know when lockout / tagout must performed, the exact procedures for conducting lockout / tagout, and the proper steps for safely restarting equipment and machinery after service or maintenance has been completed.

Tell employees that they should never attempt to repair, service, or maintain equipment on machinery unless they have been authorized and trained.

Designate which employees in the department are authorized and trained to repair, service, or maintain equipment.

Question: How does the standard define “affected employee”?
Answer: Affected employees are workers who operate or use equipment that may be locked and tagged out. Workers whose job requires them to work in areas that contain machinery or equipment that may be locked and tagged out are also considered affected employees.

Question: Since affected employees don’t actually have to perform lockout / tagout procedures, why do they have to understand all steps?
Answer: If affected employees aren’t aware of the company’s lockout / tagout procedures they might mistakenly restore energy to equipment, unaware that it’s being maintained or serviced. The result could be a serious accident or injury.
LOCKOUT / TAGOUT

Leaders Guide

Review the basic steps of lockout / tagout. If you have planned to do an actual demonstration of the steps, get your group in place and review the steps as you perform them. If you are not performing a demonstration, write each step on your flip chart as you discuss it.

<table>
<thead>
<tr>
<th>Basic Lockout / Tagout Procedure</th>
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<tbody>
<tr>
<td>Step 1: Prepare for shutdown by notifying affected employees that lockout / tagout is about to occur and which equipment will be involved.</td>
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<tr>
<td>Step 2: Shut down the machine by using the normal stopping or run-down procedures for that piece of equipment.</td>
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<td>Step 3: Isolate the machine or equipment from all its energy sources.</td>
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<td>Step 4: Apply appropriate lockout / tagout devices to the machine’s or equipment’s energy-isolating device.</td>
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<td>Step 5: Safely release all potentially hazardous stored or residual energy (ensuring that the machine or equipment is in a zero state of energy).</td>
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<td>Step 6: Verify that the equipment cannot be turned on before starting necessary service, maintenance, or repairs.</td>
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SUMMARY:
Thank you for your interest and participation today. Always remember OSHA’s six basic steps to lockout / tagout. Our specific energy control procedures, and the essential role you all play in ensuring compliance with these very important safety rules. If you have any questions about the procedure, please speak to any supervisor right away. Your safety and the safety of your co-workers is very important to me and to Euramax.

EMPLOYEE HANDOUT
A. Employee Handout
B. Lockout / Tagout Quiz
C. Lockout / Tagout Puzzle
LOCKOUT / TAGOUT

Leaders Guide

QUIZ ANSWERS:
1. Order: 3, 6, 5, 2, 1, 4
2. T
3. T
4. F
5. T
6. T
7. T
8. F
9. E
10. D
11. F
12. D
13. G
14. C

PUZZLE ANSWERS:
John was a member of the maintenance department. He was called to perform a repair on a machine in Unit 3. John simply turned the machine off, got his tools, removed the necessary guards, and started to work. The job was on the back side of the machinery away from the control panel. John was doing an outstanding job of repairing the machine, but he forgot the most important component of this job - Lockout/Tagout/Tryout.

Meanwhile, Bill, the operator - returned from his break. He did not see John and there was no indication that the machine was under repair. Assuming his machine was ready to run, Bill started it. He had no idea that John was inside!

In an instant John was seriously injured and his painful screams have been forever etched into Bill's mind. Could this accident have been prevented? The answer is "Yes"! Here's how.

Lockout/Tagout/Tryout is a three-part procedure that is designed to protect you from accidental or unexpected start-up of equipment. This procedure serves four important purposes:

1. To protect the person working on the equipment.
2. To protect other workers in the area.
3. To protect the equipment.
4. To serve as a communication device for the above three. This is usually done in conjunction with a safe work permit.

The "Lockout" involves the use of a specific lock or locks to isolate equipment from all energy sources. These sources may include air, water, electricity or hydraulic power. Once the shut-off devices have been identified, personal locks are attached to each device.

The "Tagout" requires a specific lockout tag to be completed and attached with each lock that is placed on an isolation device. The completed tag will usually have your lock number, name, department, equipment identification, and reason why the equipment is down.

The "Tryout" requires that you physically attempt to turn on all power switches and devices once the equipment has been locked out. This is your final check and assurance that the equipment has been isolated from all power sources.

Once the equipment has been isolated and locked out by following the proper steps, no one should be able to start the equipment. They would not be able to do so until you have completed the necessary work and removed your personal locks from each power switch or device.

Lockout/Tagout/Tryout is a simple procedure that is designed to prevent an accident such as John's. This simple procedure is the Key To Your Safety when working on equipment.

Lockout/Tagout/Tryout requirements will always vary from one facility to the next. If you are unsure about any specific requirements, you should always ask for more information.
LOCKOUT / TAGOUT

Employee Quiz

Answer the following questions to see what you know about lockout / tagout.

1. Place numbers from 1 to 6 in the blanks indicating the correct order of steps to be taken in lockout / tagout.
   - ___ Isolate Equipment
   - ___ Verify isolation
   - ___ Control store energy
   - ___ Shut down equipment
   - ___ Prepare for shutdown
   - ___ Apply lockout / tagout devices

2. Lockout / tagout is a system used to ensure that equipment you’ve isolated and de-energized to work on remains shut down.
   True or False

3. In a tagout, a tag is placed on all primary and secondary energy sources.
   True or False

4. You know the equipment is safe when the power has been shut down.
   True or False

5. It’s a good idea to have a pre-job briefing with your co-workers before a lockout operation.
   True or False

6. Locks should be removed only by the person who installed them.
   True or False

7. Kinetic energy is energy an object has when it is in motion.
   True or False

8. In preparing for a shutdown, gravity is not a concern.
   True or False
9. Which of the following must an employee know before starting to work on a piece of equipment?
   a. types of energy to be controlled d. method and means to control the energy
   b. magnitude of energy to be controlled e. all of the above
   c. hazards of energy to be controlled

10. Which of the following must be notified prior to equipment shutdown for repair?
    a. plant manager c. safety person
    b. supervisor d. affected employee

11. Which of the following would be part of equipment isolation?
    a. closing valves e. releasing steam pressure
    b. locking out feeders f. blocking movement of parts
    c. turning off power g. all of the above
    d. releasing hydraulic pressure h. only A, B, C

12. Locks are located at each:
    a. electric panel
    b. switch
    c. water valve
    d. energy isolating device

13. Which of the following would be part of control of stored energy?
    a. closing valves e. releasing steam pressure
    b. locking out feeders f. blocking movement of parts
    c. turning off power g. releasing spring tension
    d. releasing hydraulic pressure h. all of the above
    i. only D, E, F, G

14. Verifying isolation involves:
    a. putting locks on the equipment
    b. putting a tag on the equipment
    c. attempting to turn the machine on
# LOCKOUT / TAGOUT
Meeting Sign In Sheet

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LOCATION __________________________

MEETING DATE ____________

MEETING CONDUCTED BY __________________________

CONTENTS OF MEETING
(Attach Handouts, etc.)

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(Additional lines for sign-in sheet)
LOCKOUT / TAGOUT

Employee Puzzle

Across
2. Essential warning device affixed to energy isolating devices, that does not provide the physical restraint on a device that is provided by a lock.
3. Type of energy source that could cause injury to personnel.
6. To unplug, disjoin or unfasten.
7. Before starting work on a machine or equipment, authorized employee will ______ that the machinery or equipment is isolated and de-energized.
8. Protective materials used for isolating, securing or blocking of machines or equipment from energy sources.
9. Training on proper procedures by all employees authorized to service or maintain equipment is ____________.
11. Two or three pinned objects inserted in a socket to make an electrical connection.
16. Lockout devices are used to secure ______ isolating devices unless the machinery or equipment is not capable of being locked out.
18. Written set sequence of steps used by all authorized employees.
20. (2 words) All employees must be notified in a _____ _____, of the application and removal of lockout or tagout devices.
23. (See 1 Down). Locks must have their own distinctive shape, _____, and size.
24. When work has been completed, check area for ______ and materials before performing any lockout/tagout procedures.
25. System used to isolating, securing, or de-energizing machinery to control hazardous energy.
27. Tags will clearly state that moving energy isolating devices from the ____ or off position is strictly prohibited.
28. All energy isolation sources must be properly ______ and adequately labeled.
29. To ensure employee ______, specific procedural steps for shutting down, isolating, and securing machines and equipment are used.

Down
1. Locks must have there own distinctive shape, color, and ______
2. Must be provided by employer to ensure all employees have the knowledge and skills required for the safe application, use, and removal of energy controls.
4. Properly trained and certified to implement lockout/tagout procedures as appropriate.
5. Locks and tags should be checked to ensure they are ______ affixed to each piece of equipment before beginning any work.
10. Another type of energy source that can cause injury to personnel.
12. Mechanism placed on equipment or machines by authorized employees to ensure complete isolation from all potential hazards.
13. Has overall responsibility and accountability for the use of safe lockout/tagout procedures by all employees under their supervision.
14. Another type of energy source that can cause harm or injury.
15. Tags are warning devices ONLY and do not provide a physical ______ that lockout devices provide.
17. A connection between an electrical device and the earth (which is a zero voltage).
19. Mechanical, electrical, or electronic devices for making or breaking or changing the connections in a circuit. (i.e., on and off)
21. ______ inspections of the energy control, or lockout/tagout procedures must be done at least annually.
22. System used only if an energy isolating device is not capable of being locked out.
26. You must verify that all machinery and equipment is turned ____, before beginning lockout/tagout.