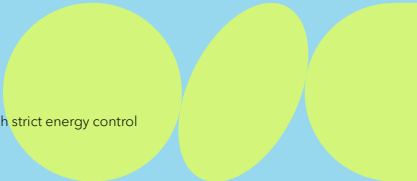


# Lockout / Tagout (LOTO): Strive for Perfection Every Time

Ensuring workplace safety through strict energy control  
Tim Krueger - April 15, 2026



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## Tim Krueger

 Warning: I am not a Classically Trained Safety professional!

 25+ years of Operations Experience in several Industries. Mostly Food Manufacturing.

 I am pleased I am going before lunch and not after.

High Tear Down  
High Maintenance  
High Sanitation  
High Lock Out

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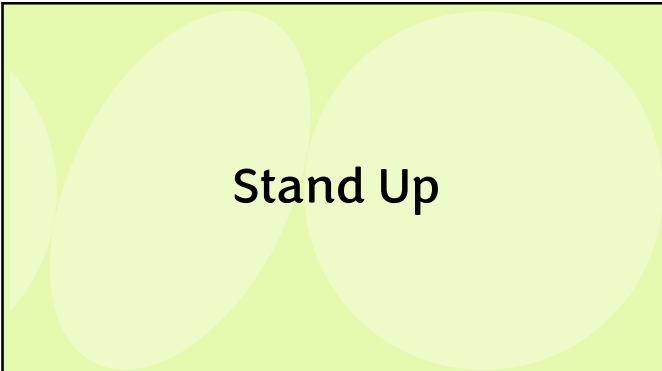
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# Stand Up



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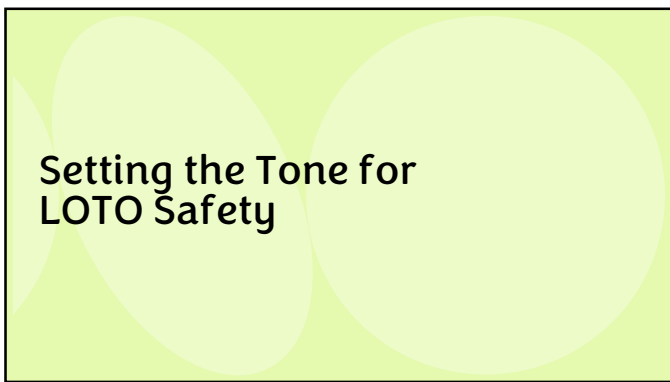
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**What LOTO Really Means**

**LOTO Purpose and Importance**  
LOTO is a life-preserving discipline essential for controlling hazardous energy during equipment work.

**Responsibility and Consistency**  
Every associate must follow LOTO procedures consistently without shortcuts, regardless of experience or role.

**Risk Awareness and Stop-Work Authority**  
Training highlights danger in routine tasks and encourages pausing work when uncertainty arises.

**Practical Training Approach**  
Use of clear visuals and structured principles translates LOTO policy into effective workplace behavior.

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### Why This Matters?

**Preventable Nature of Incidents**  
LOTO-related incidents are almost always preventable through proper isolation and verification procedures.

**Common Causes and Assumptions**  
Incidents often stem from overlooked stored energy, incomplete isolation, or reliance on switches and experience.

**Severe Consequences**  
Failure to follow LOTO procedures can lead to severe injuries, fatalities, and significant operational losses.

**Importance of Compliance**  
Proper LOTO programs prevent thousands of injuries annually and are essential even for routine tasks.

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Most serious injuries happen during 'quick' jobs

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OSHA estimates that implementing proper Lockout Tagout procedures prevents **120 fatalities** and **50,000 injuries** annually.

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### Why Shortcuts Are So Dangerous



#### Bypassing Safety Controls

Shortcuts bypass essential safety controls, increasing risk of unexpected energy release and accidents.

#### Normalization of Unsafe Practices

Repeated shortcuts cause unsafe behaviors to become accepted, raising danger levels for everyone nearby.

#### Hidden Secondary Energy Risks

Secondary energy sources like air pressure and gravity are often overlooked, causing unexpected machine movements.

#### Cultural Impact of Lockout Practices

Proper lockout practices promote safety culture and protect workers, reducing injury risks.

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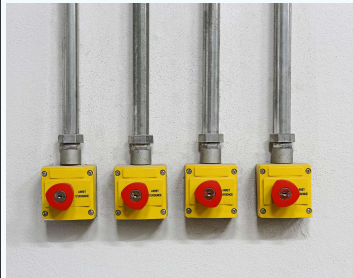
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### Energy-Isolating Device



- A mechanical device that physically prevents the transmission or release of energy. Including but not limited to:
  - Valves
  - Breakers
  - Restraining devices to prevent movement of parts
  - Manual circuit breakers
  - Disconnect switches
  - Line valves
  - Blocks

**NOTE: Push buttons, selector switches, and other control circuit-type devices are NOT energy-isolating devices.**

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### Energy Isolation

- 🚧 Labeling of Device-Asset Number, Engineering Number, LOTO Procedure Number
- 📄 QR Code on Label-Procedure
- 🔧 Easy to Access Energy Isolation, Close Together, and Organized
- 🔍 Plentiful LOTO Equipment-Audit
- 🚚 Auto Reorder System in Storeroom for Equipment

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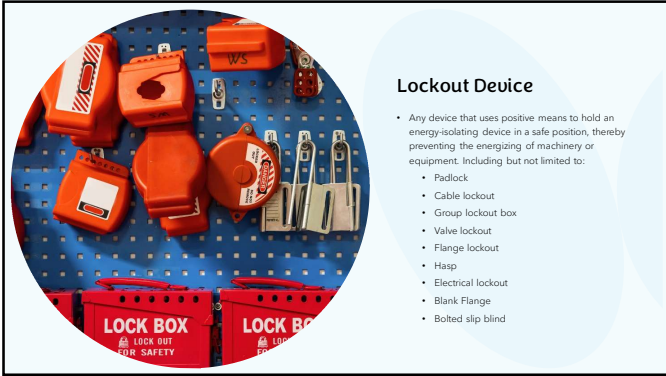
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**Lockout Device**

- Any device that uses positive means to hold an energy-isolating device in a safe position, thereby preventing the energizing of machinery or equipment. Including but not limited to:
  - Padlock
  - Cable lockout
  - Group lockout box
  - Valve lockout
  - Flange lockout
  - Hasp
  - Electrical lockout
  - Blank Flange
  - Bolted slip blind

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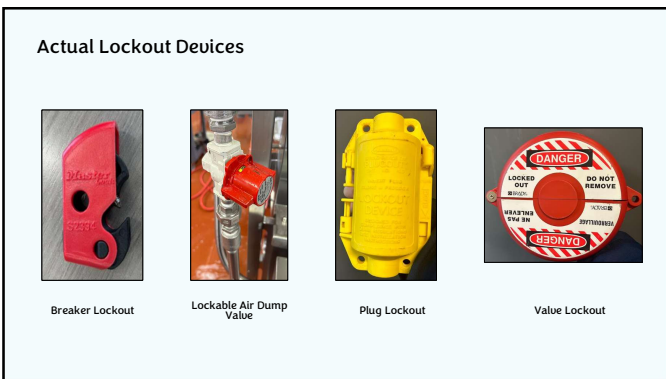
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**Actual Lockout Devices**



Breaker Lockout



Lockable Air Dump Valve



Plug Lockout



Value Lockout

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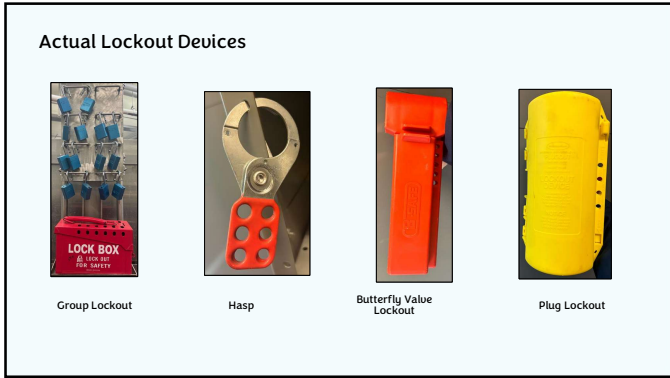
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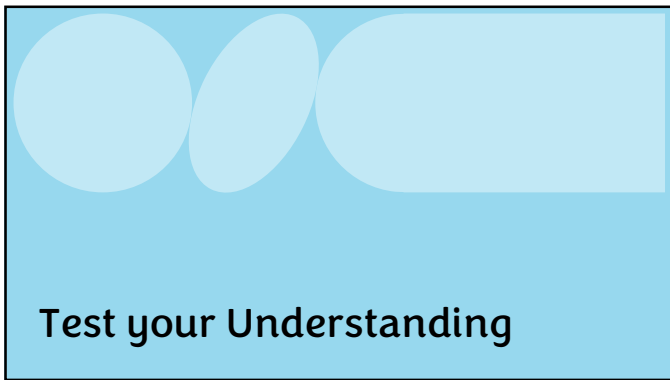
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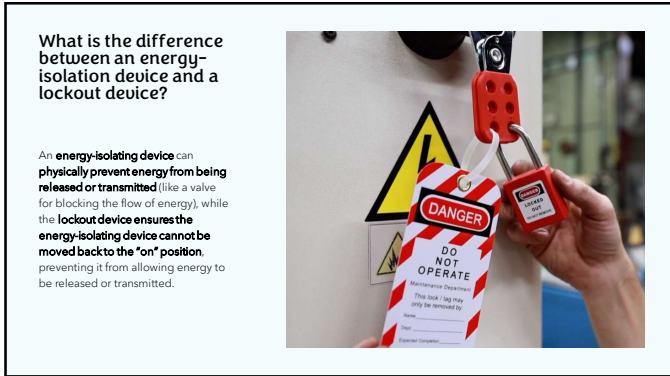
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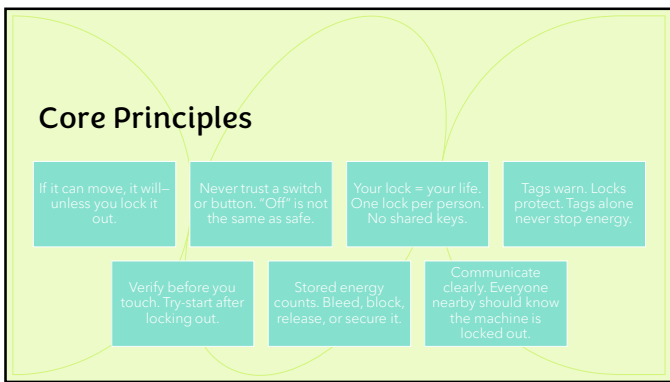
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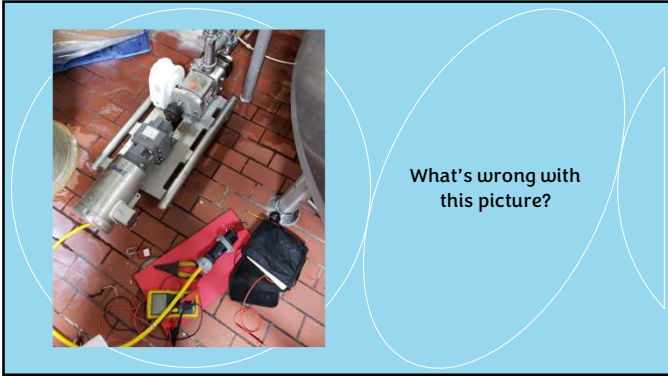
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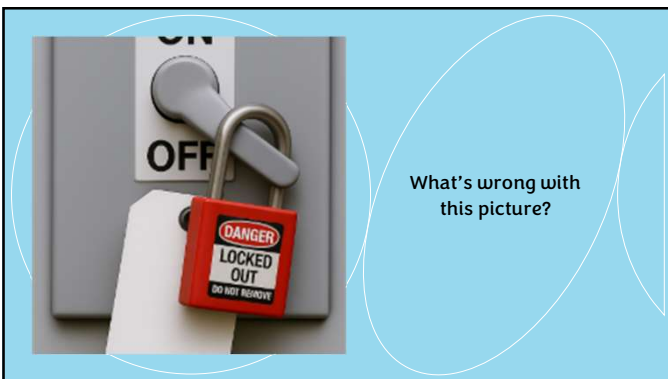
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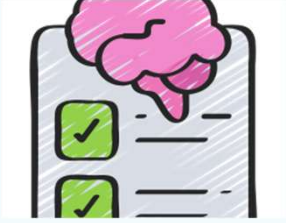
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### Quick Mental Checklist

**ASK YOURSELF BEFORE TOUCHING THE MACHINE:**

- Can this machine hurt me right now?
- Could it start unexpectedly?
- Have I locked out every energy source?
- Did I release stored energy?
- Did I verify zero energy?

**IF ANY ANSWER IS 'NO,' YOU'RE NOT SAFE YET!**



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### Evolution of LOTO Program

**Have a Program and Review it Often**  
Train, train, train



- Groups
- Classroom and hands on
- The more gaps you find the more training you do
- If it's bad, shut down the plant and retrain everyone
- Front line leaders need to know how to train
- Simplify
- Audit
- Behavior based

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### LOTO Training

- Classroom and Hands On
- Test for Understanding
- Multi-language
- Document and Save Training Sessions
- Where are the Procedures?
- Associates Needing Training:
  - Other Associates-Visitors, Contractors, Vendors, Consultants
  - Affected-Annual Training
  - Authorized-Most Training Required, Recommend Annual Training
- Periodic Inspections-More Training!
- Retrain

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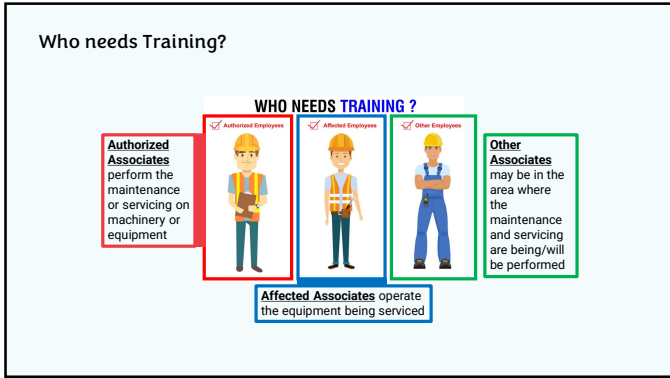
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Authorized Employees

**Authorized Associates**

**Authorized Associates must:**

1. Understand the type and magnitude of the applicable energy sources in the workplace
2. Understand the means by which to isolate and control applicable energy sources; including any possible stored or residual energy
3. Ensure the security of all locks and keys issued to them
4. Conduct periodic inspections as directed

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Authorized Employees

**Authorized Associates (cont'd)**

**Authorized Associates must:**

5. Immediately notify Managers, Team Leaders, and designee of any problems encountered when implementing an energy control procedure
6. Performs LOTO procedure for service and maintenance of equipment and machinery

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## Affected Associates

**Affected Associates must:**

1. Recognize when the energy control (lockout tagout) procedure is in use
2. NOT attempt to start up or use machines or equipment that have been locked or tagged out
3. NOT remove locks or tags
4. NOT assist or perform lockout tagout
5. NOT touch lockout tagout devices

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## Other Associates

**Other Associates must:**

1. Be instructed about the lockout tagout procedure and that they are prohibited from attempting to restart or reenergize machines or equipment which are locked and tagged out
2. Define Other: Contractors, Consultants, Visitors, Corporate Associates

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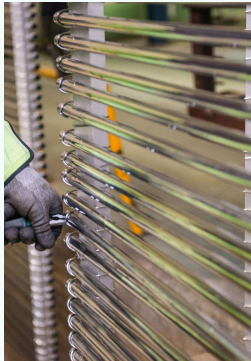
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## Energy Control Procedures

**Energy control procedures are instructions, specific to each piece of equipment or machinery, that clearly and specifically outline the scope, purpose, authorization, rules, and techniques to be utilized for the control of hazardous energy. At a minimum, each procedure must include:**

Specific steps for shutting down, isolating, blocking and securing equipment to control hazardous energy

Specific steps for the placement, removal, and transfer of lockout or tagout devices and the responsibility for them; and

Specific requirements for testing a machine or equipment to determine and verify the effectiveness of lockout devices and other energy control measures.

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### Verification of Energy Isolation Importance



**Must be in procedures**

- Prior to starting work on machines or equipment that have been locked out or tagged out, the authorized Associate must verify that isolation and de-energization of the machine or equipment have been accomplished.
- To do this, they will operate the controls to test the disconnects.
- Once verification that isolation and de-energization of the machine and/or equipment has been accomplished, return machine and/or equipment controls to the "off" position.

**Identification of the failure of energy control systems**

- Water in disconnect
- Broken disconnect
- Incorrectly wired disconnect
- Not all energy sources identified

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### Zero Energy State

If a "zero energy state" has not been achieved after energy-isolating devices have been operated and residual energies have been relieved, it is extremely important to report it immediately to your manager or the safety manager! Remember, you have stop work authority!

This condition indicates that there is a problem with either the written procedure or with the performance of an energy-isolating device.

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### The Simple 6-Step Method

1. Stop the machine using normal shutdown.
2. Isolate all energy sources (electric, air, hydraulic, mechanical, gravity).
3. Apply your lock and tag to each isolation point.
4. Release stored energy (bleed pressure, block movement, discharge).
5. Verify zero energy with a safe try-start.
6. Do the work safely and remove locks only when the area is clear.

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**Optimization of Procedures – 8 Elements**

- Documented procedures are not required for a particular machine or equipment when all the following 8 elements exist:
- Machine or equipment has no potential for stored/residual energy.
- Single energy source is readily identified.
- Isolation and LOTO will completely deenergize and deactivate equipment.
- Machine or equipment is isolated from energy source and locked out during servicing or maintenance.
- Single lockout device will achieve a locked-out condition.
- Lock out device is under exclusive control of authorized person (meaning that it stays in a secured LOTO condition)
- Service or maintenance does not create hazards.
- There have been no injuries or accidents on that piece of equipment.

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**Periodic Inspections**

- These Energy Control Procedures are required to be inspected at least annually by an authorized Associate who is NOT performing the lockout tagout procedure. The inspecting Associate will:
- Correct any deviations found
- Review Associate responsibilities with each authorized Associate for lockout and tagout
- Great opportunity for training and reinforcement
- Procedure Periodic - Great opportunity for a check

**Identify who owns it by Site and Audit**

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**Group Lock**

Group lock for efficiency



-  Train, Train, and Training again!
-  Audit
-  Validate Twice
-  Great for Sanitation and Group Work

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**Exclusive Control**

Exclusive control in Lockout/Tagout (LOTO) means an authorized employee has the sole authority and ability to prevent a machine from being re-energized during servicing or maintenance.

Also known as the "plug in pocket process." If the equipment has one energy source-electrical, only one Associate is working on it, and you are in constant control, you do not need to lock it out

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**Exclusive Control and OSHA**

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This process, while allowed by OSHA, creates confusion with our Associates because they do not always understand if they need to lock something out.

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It is ok to simplify this by doing more than what OSHA requires.

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We no longer utilize the process of exclusive control.

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Change management is needed to properly roll this out.

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### Exclusive Control with Equipment

-  This applies to equipment that stays in place and equipment that is mobile and can move a distance from the energy source.
-  You can no longer remove equipment from the energy source and work on it without LOTO.
-  Anytime guards are removed the equipment needs proper LOTO
-  Please remember to use "Stop Work Authority" if you are not sure. Ask for help from your manager or your Safety Manager.
-  When in doubt, lock it out.

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### Some examples...



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### Abandoned Device Removal

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**Lockout Tagout  
Abandoned Device  
Removal  
(5 Steps)**

*If a lockout or tagout device has been left in place by an authorized Associate who has left the facility, it shall be removed only in accordance with the following procedure:*

1. Ensure removal will not jeopardize the safety or health of any individual working at the facility and will not cause damage to the machine or equipment being re-energized.
2. Ensure that every effort has been made to contact the Associate who placed the lockout or tagout device(s).

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**Lockout Tagout  
Abandoned Device  
Removal  
(5 Steps)**

3. Contact the team leader or manager for assistance.
4. The lock or tag removal shall be conducted in accordance with the process established on the Lockout Removal Form.
5. A copy of the Abandoned Lock Removal Form shall be given to the Manager of the Associate whose lockout or tagout device was removed under this procedure. This Manager is responsible for notifying the Associate (prior to that Associate resuming work at the facility) that their lockout device was removed.

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**New Facilities and  
New Equipment**

Hand off from Original Equipment  
Manufacture and Engineering Critical

Local Disconnects Required-  
Packaging Machine Story

Pull Maintenance and Production in  
ASAP

Validation of Procedures critical

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**Engineering/Factory Acceptance Tests**

- 🔌 Located energy control devices right next to each other
- ⚠️ Visual cues for Energy Control: voltage and air
- 📄 Clear and easy to understand labels
- 👉 Equipment from outside the US—different devices and labels
- ✅ Prior to the start of the FAT share LOTO expectations

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**Shift Handoff**

Hasps are Wonderful!

Applies to end of Shift  
or Worker hand off

Revalidate Energy  
Isolation

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**Trust a Switch?**

- 👤 Age of Equipment
- 👤 Confusion on Category Level
- 📄 Risk Assessments
- 🔒 When in doubt lock it out

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**Top 10 Lockout Tagout Violations**

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**Strive for Perfection Every Time, all the Time!**

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**Final Message**

LOTO is Critical for any Safety Program

LOTO helps People go Home Safe

Every Shift

Every Day

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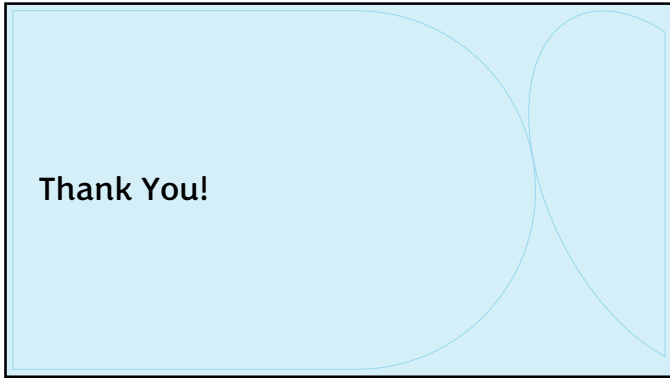
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