Overcoming the Most Common Group Lockout Problems





■ A Master Lock Whitepaper

Introduction

Group lockout is the process of controlling hazardous energy during the service and maintenance of machinery and equipment by two or more authorised workers. But without specific procedures and practices to safeguard them, workers can be exposed to the sudden startup or release of energy with disastrous results. Outlined below are eight of the most common group lockout problems and how to address them.

#1

Problem:

You may have a written lockout/tagout (LOTO) program that outlines your LOTO principals. But do you have a written LOTO procedure for each piece of equipment that requires lockout?

Solution:

A machine-specific lockout procedure is required for any equipment with:

- more than one energy source,
- unique energy source connections, and
- a particular sequence of steps required to shut down the equipment.

The procedure should include the rules, regulations, and various techniques and steps, such as:

- shutting down, isolating, blocking and securing machines or equipment to control hazardous energy,
- placement, removal and transfer of LOTO devices, and
- verifying the effectiveness of LOTO devices, and energy control measures.

Example: Five workers walk up to a complex machine. The machine requires 17 steps to reduce it to zero energy and a safe working environment. But if the procedure is not clear and comprehensive, and the workers miss a step, then there are five people adding their personal locks to a system that's not safe to start off with. Each worker is now exposed to a hazard and a potential accident could be triggered.

#2

Problem:

Once you have proper LOTO programs and procedures in place, how does that translate into employees understanding their role in group lockout?

Solution:

Executing a successful group lockout can only happen once the people involved have been properly trained to learn their role. Incorporate into your training program exercises that demonstrate how group lockout should be performed and insist that people practice group lockout skills.

Group Lockout Watch-out: You may encounter workers who have performed successful LOTO individually. It's important that they be included in any training for group lockout because they must learn to perform LOTO successfully with others.

#3

Problem:

Now your people have been properly trained in group lockout. Do you have the right LOTO equipment?

Solution:

Determine what group lockout equipment will be required at your facility to quickly and efficiently practice group lockout. This may include:

- personal locks
- lock boxes
- hasps
- machine locks

It is also important to determine the appropriate numbers for each device. Can a single lock box travel throughout your facility? In a larger facility, a single lock box would slow the pace of group lockout and, ultimately, productivity.

Example: A food processing company has sanitation line leaders lockout each piece of machinery ahead of the arrival of the cleaning crews, allowing the crew to lock into the box, test to zero, and complete their work safely. By the time they are finished, the line leader has locked out the next machine in line and has it waiting for them to clean. The line leader then releases lockout from the machine just completed and moves the lock box ahead to the next machine in line, resulting in a fast, uniform group lockout with continuous protection for all.

Problem:

Once you have the right LOTO padlocks and devices, issues can arise because there isn't a proper group lockout strategy for certain pieces of equipment—like a lock box for more complex equipment—which can result in workers being at risk.

Solution:

Create a group lockout strategy for each lock box, train workers and require their participation to be properly noted by their placing and removing of their personal locks directly or with a group hasp as they enter the job and then conclude their work.

Example: You have five people working on a group lockout job. The first three people place their locks on a lock box that accommodates more locks. The other two people feel the lock box is adequately secured so they do not place their locks on the box. Or, perhaps you have a lock box that accommodates six locks but there are eight people on the group lockout team. In both examples, you will have people working without the personal control of their safety padlock protecting them from a potentially dangerous environment.

#5

Problem:

A worker performing a simple task attaches their personal lock directly to energy isolation points. What happens when that worker needs an extra set of hands for a short period?

Solution:

Make it a requirement to place a group hasp in each isolation point being controlled. Then each worker places a personal lock to secure it. This allows a short-term authorised helper to add their lock immediately into the safety system, test the controls for zero movement, and go to work to assist with the task. When their assist time is over, they remove their lock from the hasp without the original worker's safety being compromised or distracting focus on the main task being completed.

Convenience Tip: Tether group hasps to common isolation points so they are always accessible. That way there is no question whether they will be brought to the task location, or applied preemptively in anticipation of authorised helpers joining in.

#6

Problem:

You're using group lockout techniques that are common to your industry but not specific to your facility. What happens if there's an incident?

Solution:

The host employer and the contractor must inform each other of their respective lockout procedures to:

- determine whose energy control program will be applied to the contracted work to be performed,
- provide the existing written LOTO procedure to contractors for the equipment they will be working on, and
- assure that new procedures are prepared for all undocumented equipment to be serviced or newly installed before workers are exposed to potentially hazardous conditions.

The host employer:

- must ensure their employees understand and comply with the restrictions and prohibitions of the contractor's energy control program if it is chosen as the applicable program for the work to be performed, and
- should be sufficiently aware of the contractor activities to recognize if procedures are being followed and precautions are adequate to prevent accidents.

Convenience Tip: Ask contractors to demonstrate what LOTO equipment they have for group lockout or provide the contractor a set of LOTO equipment which they will return at the end of the job.

Problem:

Each worker has placed their personal lock on a lock box but the work is not finished before shift change or end of day. What happens later when the work is completed but the worker's lock is still attached?

Solution:

Make it a job requirement that workers remove their locks when they conclude work at the end of their shift and the job is not complete. This will prevent needless delays resulting from trying to locate workers and/or destroying locks so that the machine can start-up again.

Guidelines should include:

- enabling the orderly transfer of LOTO device protection between outgoing and incoming employees, to minimize exposure to hazards from the unexpected energisation or start-up of the machine or equipment, or the release of stored energy,
- notifying incoming affected employees that lockout is in place, and
- re-testing of all operating controls to verify energy is truly neutralised.

Best Practice: Make it a requirement that personal locks must be removed at the end of each shift and replaced with locks from the incoming shift, or transfer locks placed by management.

#8

Problem:

You're using group lockout techniques that are common to your industry but not specific to your facility. What happens when OSHA comes to audit?

Solution:

It is crucial that you have a group lockout program that is specific to your facility. Should be an investigation after an incident an evaluation of your written program in comparison to what is actually in practice at your specific facility will be undertaken. Written procedures and actual performance must be in alignment or you could face significant questions. Therefore, if you manage multiple facilities, each one will need their own group lockout program.

Group Lockout Watch-out: Over time, unacceptable practices at your facility may become the common method. Periodic auditing of your personnel can determine if they are performing according to your plan. Once identified, corrective action is necessary to return to compliant practice.

Please email us at safesite@mayohardware.com.au for more information or with any questions.