



Lock-out procedures

Many workers have died as a result of being crushed in industrial equipment. If effective lock-out and tag-out practices had been in place and followed, these deaths could have been prevented.

Workplaces should have a written lock-out procedure for each machine, outlining:

- who locks out
- the training needed to perform the task safely
- when a lock-out is needed
- the steps for locking out



The purpose of a lock-out is to prevent injuries caused by a machine starting up or moving unexpectedly. These procedures must be followed every time a machine is going to be cleaned, maintained, adjusted or repaired.

Basic steps

You should follow these steps in the order they appear - performing only the steps that apply to the machine you are locking out.

Before the work is done

Step 1 Turn off the machine at the operator's control panel.

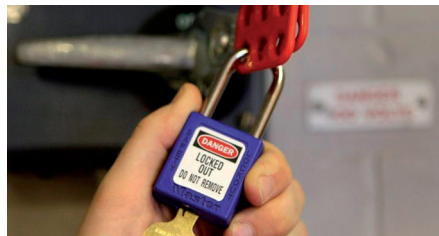


Step 2 Lock the panel and put the key in a safe place.



Step 3 Shut off the power at the main power isolator.

Step 4 Put your padlock on the main power isolator and keep the key to make sure no-one else can remove your lock and turn the power back on. There should only be one key in use for each lock.



Step 5 Place a tag on your lock that identifies you (by your name, picture or number), as well as the date and time you locked it out.





Step 6 Release stored energy from the system. Depending on the type of machine, there may still be several kinds of energy left after the power is turned off. The written lock-out procedure should have a complete list of all these secondary energy sources.



Secondary energy sources may be hydraulic (fluid under pressure), pneumatic (air under pressure), kinetic (force of moving parts) or potential (force contained in weights that have been raised).

The machine should now have no energy left in it

Step 7 Try to start the machine to make sure that the power is off. (Do not forget to push the stop button again.)



Bottom line: lock - tag - try!

After the work is done

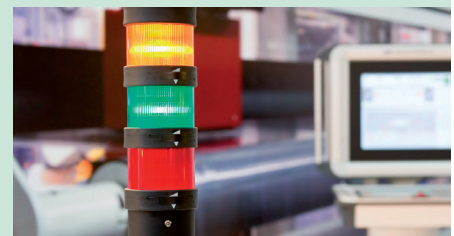
Step 8 Secure the work area by replacing guards and shields, removing blocks, picking up tools and inspecting the work area.

Step 9 Take your lock and tag off the main power isolator.

Step 10 If there are no other locks on the main power isolator, turn on the power.

Step 11 Unlock the operator's control panel.

Step 12 Warn others before starting the machine.



Step 13 Start the machine and continue with your work.

Whether you are clearing a jam, replacing bearings or making a repair, safe and effective lock-out practices will protect your life. Always follow the exact lock-out procedure for the machine you work on and do not take chances!

There are no short cuts in safety!