LOCKOUT / TAGOUT

OSHA 29 CFR 1910.147

 Covers the servicing and/or maintenance of machines or equipment in which the unexpected start up or release of stored energy could cause injury or death to employees

WHAT IS LOCKOUT/TAGOUT

- Referred to as LOTO
- Blocks the flow of energy from power source to equipment
- Provides means of warning in the form of a tag and permits

WHY USE LOTO

- Putting the law aside, we can sum it up very easy. We use machinery to enhance our lives and increase productivity.
- These same machines that can do the work of many people in one motion are dangerous and they should be respected.
- Simply put "Machines Win You lose"



Remember, Machines Win

PERSONNEL REQUIRED TRAINING

- Affected Person-Person using the equipment or in danger area
- Authorized Person- Person responisble for placing locks and tags on machinery or processes.
- Other- Visitor or Office Personnel

WHY MUST LOTO BE USED

- Many fatalities results
 from failure to use LOTO
- In one year there are...
 - -50,000 serious injuries
 - -120 fatalities average



LOTO IS REQUIRED WHEN...

- It is required to bypass a guard or other safety device
- Employees are required to place ANY body part in harms way
- Employees are exposed to hazardous energy

TYPES OF LOCKOUT/TAGOUT SYSTEMS

• All authorized employees are issued their own locks and key along with tags.

- The company uses a central point where locks and tags are issued and tracked by issue.
- The one who places a lock is the only one who should remove it as well.

REQUIREMENTS FOR LOTO DEVICES

- Durable
- Standardized
- Substantial
- Identifiable



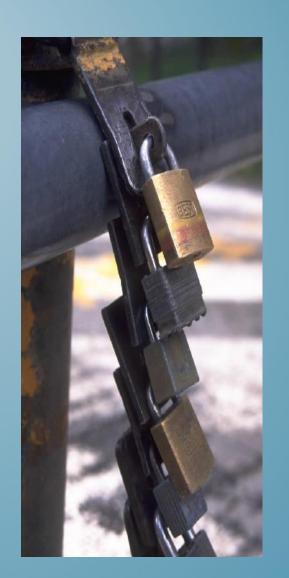
Must be supplied free to employees

LOCKOUT

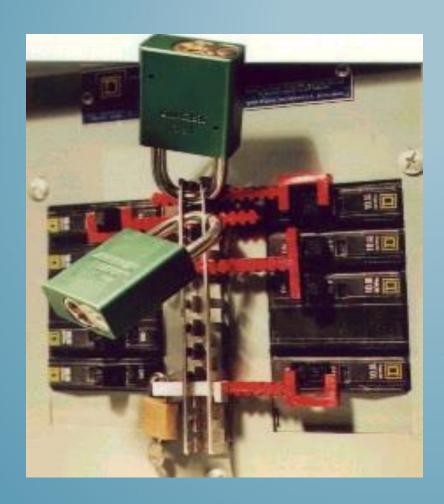
- Lock or other energy isolating device, to prevent equipment use
- Device must be strong enough to prevent removal without excessive force
- Lockout device must be easily identified and used for that purpose only

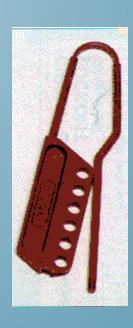
TYPES OF LOCKOUT DEVICES

- Locks
- Blocks
- Chains
- Multi-lock hasps
- Wheel & ball valve covers

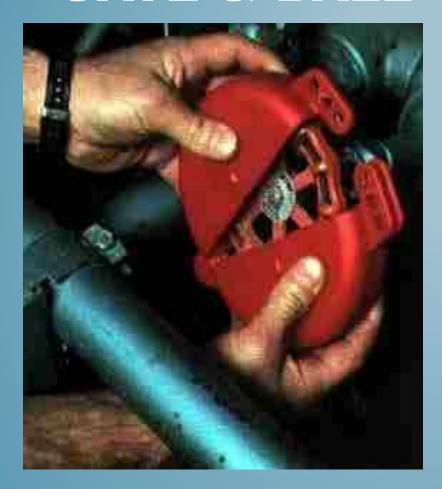


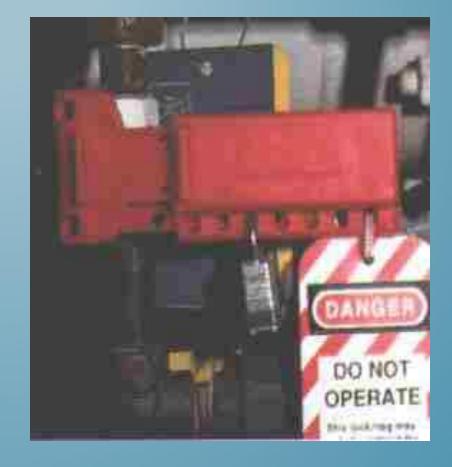
LOCKS & MULTI-LOCK HASPS





GATE & BALL VALVE DEVICES





TAGOUT

- Must provide warning
 - Danger, do not operate, do not start
- Can only be used alone
 if a lock & all other
 avenues have be tried



TAGOUT

- To indicate
 equipment must not
 be turned on or
 used
- Be able to withstand the environment
- Require minimum
 50# force to remove
- Identify person
 applying the device



