

## Lockout/Tagout



#### When is Lock Out Tag Out Required?



- Servicing, maintaining, or un-jamming equipment where:
  - Hazardous energy exists
  - When a start-up could occur
  - Either of these could injure a worker



#### Use Lock Out Tag Out when:



- Employees are required to remove or bypass a safety device.
- •Employees are required to place any part of their body in harm's way.
- Employees are exposed to hazardous energy.

#### **Energy Sources**



- Mechanical
- Thermal
- Hydraulic
- Pneumatic
- Magnetic
- Gravity

- Electrical
- Gas
- Water
- Other stored energy (i.e. springs, capacitors)

#### Remember



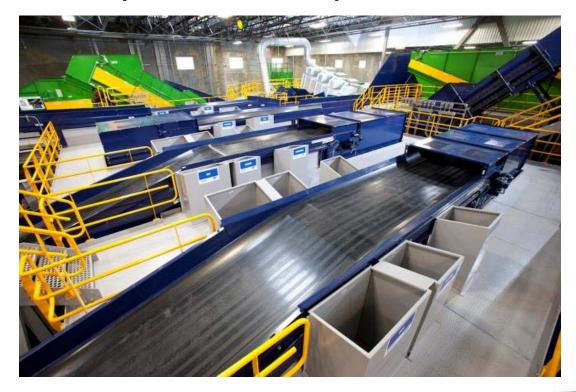
- Lockout is not *just* for when things go wrong.
- Lockout is not *just* for maintenance workers.
- Make everyone understand **AND** uses it.







### Machinery with Multiple LOTO Points





A 47-year-old man was operating a forklift in the bed of a semi-trailer. As the truck driver was pulling away from the dock, the forklift fell from the trailer bed to the ground...The forklift operator was able to get himself off the ground and enter the facility, where he was treated by medical personnel. Approximately 16 hours later he died as a result of the injuries he suffered.

#### **Always Chock Your Wheels**



#### Glad Hand Locks



#### Make it Foolproof



#### **Authorized Employee**



- Maintains and/or uses the equipment
- Services equipment
- Is **properly** and **thoroughly** trained to use lockout/tagout procedures
- Operates equipment (sometimes)



#### Affected Employees



#### Employees who:

- Operate
- Work around
- Occasionally adjust equipment that is subject to lockout tagout

#### Where to Begin



- First, conduct a **HAZARD ASSESSMENT** by identifying each piece of equipment that is used, serviced, or maintained
  - Include broken or stored equipment
- Then, determine the requirements for lockout
  - If there is more than one primary energy source to the equipment, document each source

#### Where to Begin



- Document all energy sources
  - Hidden
  - Direct
- The hazard posed
- The magnitude or measurable degree of danger
- Special or unusual conditions
- Proper isolations and devices

#### Types of Lockout Devices



- Locks
- Blocks
- Chains
- Multilock hasps
- Wheel valve covers
- Ball valve covers
- Gladhand locks



#### Overhead Crane Controls/Plugs







#### Options for mobile equipment









#### Requirements for LOTO Devices



- Durable
- Standardized
- Substantial
- •Identifiable



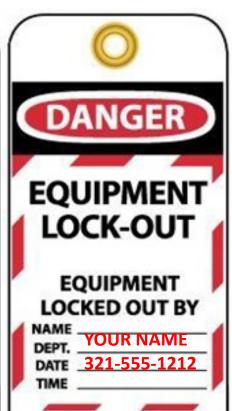
One Person

One Lock

One Key







Name & Phone Number



#### **Label your Lockout Points**









#### Lock Out Tag Out Checklist



- Annual authorized person training complete
- Annual affected person training complete
- Disconnects labeled and accessible
- Authorized employees have access to locks
- All hazards are locked out
- Employees maintain key during LOTO

- Try (verify) out is done after LOTO is applied
- Locks and tags used to identify user
- LOTO devices are in good working order
- Written procedures accessible to all
- Periodic (annual) inspections are getting done

#### Quiz – Lock Out Tag Out



#### What is the purpose of a group lockout?

- A. To lockout multiple energy isolating devices
- B. To ensure that each employee performing the servicing or maintenance is provided the same level of protection
- C. To identify energy isolating devices
- D. To communicate the lockout/tagout/tryout procedure



# Which of the following is important and must take place at the beginning and at the end of every lockout/tagout/tryout situation?

- A. Lock removal
- B. Communication with all employees in the area
- C. Lock placement
- D. Lockout procedure review



Equipment must be locked out when servicing or doing maintenance work, when the point of operation is accessed, or when a guard is removed or bypassed.

True or False



An energy control procedure is unique to each piece of equipment and is a step-by-step guide for how-to lock out a piece of equipment that is being worked on.

True or False



# Is it ok to un-jam a baler without locking it out?

True or False