

Controlling Energy-Related Hazards

- Some tools and equipment can be hazardous even when they're turned off. Potential hazards include:
 - extreme heat
 - high pressure
 - electrical current
 - gravity
- Controlling energy hazards can be as easy as identifying them and using safe work practices.
- Some hazards require more complicated control procedures, such as Lockout/Tagout.

Lockout/Tagout

- This procedure prevents the accidental release of hazardous energy from some tools and equipment.
- Place a lockout device on or over a part of the equipment to physically prevent it from being accidentally energized.
- Secure the lockout device with a strong, weatherproof lock.
- Use a tag labeled with your name and contact information if the device cannot be locked out.
- Ensure that the equipment has been de-energized before you start working.
- Ensure that stored energy is released before you start working.

Mechanical Energy Hazards

- Equipment that can move unexpectedly due to gravity, tension or other forces contains stored mechanical energy that can be hazardous.
- Use blocking devices to prevent accidental movement during storage or transport.
- Be careful when moving this equipment, and warn others of potential hazards.

Hydraulic Energy Hazards

- Forklifts, jacks and other machines are hazardous because the hydraulic system can fail.
- Always stay out from under loads.
- When possible, avoid leaving equipment in a raised position.
- Block the load and barricade the area to warn others.

Electrical Energy Hazards

- Be aware of electrical hazards when you're servicing tools or equipment you plug in or turn on.
- Turn off tools and equipment and use a lockout device to prevent accidental reenergizing during service.
- Use a plug cover lockout device on anything that plugs in when the electrical outlet is not close by and in plain view.

Thermal Energy Hazards

- Stored energy in steam line, boilers and other vessels can be hazardous if uncontrolled.
- Shut off the valve and secure a lockout device so it can't be turned.
- Bleed the line to remove stored energy before beginning service.

Pneumatic Energy Hazards

- Pneumatic tools can be hazardous because of stored pressure in the hose and compressor.
- Shut off the compressor and place a lockout device on the valve supplying air to the hose.
- Bleed the line before starting maintenance.