2 - Safeguarding Against Machines: Safety Training

EH&S – MGA

Goals: This safety session should teach you to:

A. Recognize how machines can cause injuries.
B. Use guards, safety devices, and safe practices to prevent injuries when working with machinery.

OSHA Regulations: 29 CFR 1910.211-222

1. Contact With Moving Machine Parts Can Cause Injuries

A. Machine parts that move to cut, drill, press, or form materials can harm human bodies.
B. Contact with moving parts can cause such injuries as:
    1. Amputations
    2. Broken bones
    3. Cuts and bruises
    4. Damage to muscles, ligaments, and tendons
C. Machines that throw off chips or sparks can cause eye injuries or burns.

2. OSHA Requires Guards or Devices on Machines in Order to Prevent Injuries

A. Safety regulations require one or more guarding methods at a machine's:
    1. Point of operation, where it performs work on the material being processed
    2. Ingoing nip points, where moving parts contact or come close to other parts
    3. Rotating parts, such as rollers, grinding wheels, or circular blades
    4. Blades or other cutting parts
    5. Pinch points or similar moving parts

3. Guards and Other Safety Devices Block Body Contact

A. Machine guards are barriers or enclosures that keep hands and fingers away from the point of operation. Guards may be:
    1. Fixed in place
    2. Adjustable
    3. Interlocking
B. Some machines use other safety features to prevent injuries, such as:
    1. Restraints, as well as two-hand controls pull-back devices that force hands away from danger points
    2. Pressure-sensing devices that shut the machine down when a body part comes dangerously close
    3. Controls that allow operators to turn off machine power from a safe position

4. Never Remove, Disable, or Reach Through or Around a Guard

A. Don't use a machine with a missing or disabled guard; report it immediately.
B. It’s advisable not to place your hands under, around, or through a guard.

5. Know How to Operate All Machinery Properly to Prevent Injuries

A. Follow instructions from the manufacturer's manual and on-the-job training.
    1. Know how to turn the equipment on and off and operate it safely.
    2. Check for guards or other safety devices.
    3. Make sure that all parts are in place.
    4. Check that scheduled maintenance has been performed.
    5. Be sure machines are locked or tagged out before they're repaired or serviced.

6. Know What Actions to Take to Prevent Injuries from Machinery

A. Use a push stick or tongs, not your hands, to feed material into the machine.
B. Follow all operating steps; don't take shortcuts.
C. Wear ANSI-approved eye protection with side shields if there's danger of flying pieces.
D. Avoid wearing gloves, loose clothing, jewelry, loose long hair if they could get caught in moving parts.
E. Give the job your full attention.

Summation: Have Respect for Machine Capabilities

Always keep in mind that the machine parts that can cut, press, or process metal or wood can do serious damage to the human body.