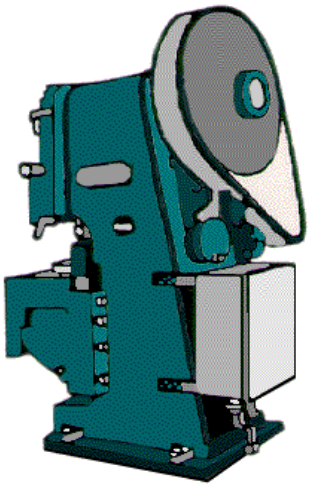

Machine Guarding

Arkansas Workers' Compensation Commission/
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The Occupational Safety and Health Administration (OSHA) requires that machine guarding be provided and maintained in a manner sufficient to protect machine operators and other persons present in machine areas from hazards associated with the operation of machines. Such hazards include those created by points of operation, in-going nip points, rotating parts, flying chips and sparks. The following information is provided to assist machine operators and machine shop supervisors and managers in carrying out their responsibilities for assuring machine safety through hazard identification and evaluation, safeguarding, training, and safe operation.

Types And Points Of Hazardous Machine Operations

Motions:

Rotating: in-running nip points, spindles, shaft ends, couplings
Reciprocating: back-and-forth, up-and-down
Transverse: movement in a straight, continuous line

Operations:

Cutting: bandsaws, drills, milling machines, lathes
Punching: punch presses, notchers Shearing: mechanical, pneumatic, or hydraulic shears
Bending: press brakes, tube benders, plate rolls

Safeguarding Requirements

Machine safeguards should be installed and maintained to ensure that they:

Prevent Contact:
Safeguards must minimize the possibility of the operator or another worker placing their hands into hazardous moving parts

Remain Secure:
Workers should not be able to easily remove or tamper with the safeguard.

Protect from Falling Objects:
Safeguards should ensure that no objects can fall into moving parts.

Create No New Hazards:
A safeguard defeats its purpose if it creates a hazard of its own.

Create No Interference:
A safeguard should not create an unacceptable impediment for the worker.

Allow Safe Maintenance And Lubrication

It should be possible to lubricate the machine without removing the safeguard.

Types of Machine Safeguards:

Barriers and guards that prevent contact with machinery:

Mechanical or electronic devices that restrict contact, such as presence-sensing, restraining, or tripping devices, two-hand controls, or gates.

Feeding and ejection methods that eliminate parts handling in the hazard zone.

Aids such as awareness signs that do not provide physical protection, but warn of a danger area.

Training

Training is a necessary part of any effort to provide safeguarding against machine-related hazards. Supervisors are responsible for providing training to machine operators and maintenance personnel when any new safeguards are put into service or when workers are assigned to a new machine or operation. Training should involve instruction or hands-on training in the following areas:

- A description and identification of the hazards associated with the machine(s).
- A description of the safeguards and their functions.
- Instruction on how to use the safeguards.
- Instruction on how, and under what circumstances safeguards may be removed, and by whom.
- Instruction on what to do if a safeguard is missing, damaged, or inadequate.