

Machine Guarding

An overview of the requirements for machine guarding in the workplace.

General Rule

29 CFR 1910.212 (a) states: One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips, and sparks.

Why?



- People would not deliberately put their hand into a machine, would they?
- Accidental contact with machine parts can cause very serious injury.
- Flying debris from machines is a danger, not only to the operator, but to other employees in the area.

What Needs to be Guarded?

- **Point of Operation:** Where the actual work of the machinery is performed (shearing, cutting, etc.).
- **Power Transmission Points:** Pulleys, belts, gears, etc.
- **Moving Machine Parts:** The motions could be rotation, reciprocating, or transverse.



The Guards Must:

- Prevent accidental contact with the moving parts or point of operation.
- Prevent foreign objects from entering cycling machinery (such objects can become projectiles).
- Not interfere with safe machine operation.
- Be secured to the machine.
- Create hazards (sharp edges, etc.).



Basic Rules for Machine Operation



- Never wear loose clothing around moving machine parts.
- Do not wear rings or jewelry.
- Keep long hair tied back to avoid entanglement.
- Do not “by-pass” guards and safety devices.

Machine Maintenance



- Guards should only be removed when:
 - Machines have been shut down and proper lock-out and tag-out procedures are followed.
 - Machinery is idle for maintenance.
- Do not operate machinery without the guards in place!

Guards do not Guarantee an Accident-Free Machine!

- Ensure employees are trained in the proper operation of the machine.
- Machinery must be maintained in safe condition and not modified in any way not approved by the manufacturer.



In Summary:

- Guards are not only a good sense precaution, but they are also required by law!
- Guards must *always* be in place when machinery is operating.
- Guards are not a substitute for a good machine maintenance program and employee training.