



Basic Machine Safety



It's tough to imagine modern society without machines hard at work all around us. New and improved machinery leads to increased productivity, higher quality, and more affordable production. But misused machines can be as harmful as they are helpful. Machines that cut metal can cut off fingers. Machines that punch through steel can punch through flesh. Such injuries can cause career-ending disabilities as well as severe pain and suffering.

Be alert to these areas when working around or operating machinery:

- **The point of operation**: That is where the work of the machine takes place. It's where the pressing, cutting, punching and boring takes place. It's a place where no part of the body should be. If any part of the body is in the way at the point of operation, the force of the machine can cause a serious injury. The point of operation may also produce sparks or fragments that can fly toward the operator. Safety glasses are important for this type of work.
- **The power train**: That is where energy is transferred through moving parts like gears, shafts, belts, cables, hydraulic or pneumatic cylinders. No body parts should be in these areas either. When working on this type of machinery, always follow the lockout/tagout procedures and replace all guards when repairs are complete. Employees should report any missing guards to their supervisor before operating this equipment.

Workers must control machines carefully. In addition to avoiding the power train and point of operation, employees should always:

- Ensure machines are anchored securely to prevent "walking," tipping, excessive vibration or other movement that could be hazardous.
- Never reach blindly into areas that may contain energized parts.
- Be sure there is enough lighting to clearly see all points of operation.
- Keep conductive items -- watches, rings, steel wool, belt buckles -- away from exposed electrical parts.
- Never plug or unplug electrical equipment with wet hands.
- Follow all lockout/tagout procedures.
- Always wear the proper protective equipment for each job.

Material handling equipment such as : Power lifts, forklift trucks, etc. are not considered to be production machinery, but their points of operation and power train can be just as hazardous.

Employees must be properly trained in the operation of this type of equipment before they are allowed to use it.

Mechanical hazards may come from many different areas and have potential for serious injury.

Beware of the danger zones located within your operation!!