

POWER TOOL SAFETY

Power tools get jobs done with efficiency and reduced effort. But with power comes responsibility. Power tools can cause injury and even death if they are not used properly. Appropriate training, safe work practices, and power tool maintenance are key to preventing accidents.

Only trained workers should use power tools on the job. Training should include reviewing the instruction manual, how to inspect the tools before each use, and following the manufacturer's maintenance schedule.

When maintaining and inspecting power tools, keep the following tips in mind:

- Use properly sized fittings and parts for the power tools.
- Keep tool cutting edges sharp and clean.
- Remove the adjustment keys and tools before operating the power tool.
- Check that power cords are intact (no nicks, frays, or kinks) to prevent shock and fire hazards.
- Always use safety guards and control switches to prevent accidental contact and activation. Failure to use all safety guards and devices can result in serious injury and substantial financial liability for employers.
- Remove damaged tools from use until they can be repaired or replaced.

Safe electrical work practices for power tools prevent electric shock and other injuries. Follow these electrical safety rules:

- Avoid using power cords in wet areas.
- Use proper grounding or double insulation for power tools.
- Keep tools turned off and unplugged when not in use.
- Don't carry or hoist power tools by their cords.
- Unplug tools at the outlet, not by pulling the cord from the wall.
- Coil power cords out of walkways to prevent trips and falls.

Power tools may send bits of material falling, flying, even splashing at a very fast rate. Personal protective wear needed when using power tools includes:

- Safety glasses and/or face shields protect the eyes and face from flying debris.
- Goggles keep splashing liquids out of the eyes.
- Hearing protection minimizes exposure to noisy tools.
- A respirator protects against inhaling fumes and particulates.
- Snug fitting gloves.
- Anti-vibration gloves to prevent tissue damage from vibrating tools.
- Safety shoes to protect feet from falling materials and tools.

Good work habits ensure power tool safety, and include housekeeping and safe work practices. Please keep in mind the following:

- Use the correct tool for the job.
- Keep the work area clean, organized, and well lit.
- Stay alert when you use power tools.
- Be aware of where you place your hands at all times and keep them away from moving parts.
- Tie back hair, wear snug clothing and remove jewelry that could get caught in tools.
- Clamp, secure, and support work materials to a solid surface.
- Don't hold materials by hand or against your body while working on them.
- Let tools power up completely before contacting stock material.
- Don't touch tool parts until they come to a complete stop and are completely cool.
- Don't force the tool against the material or to do the work.

Using a power tool can make your work go more smoothly and easily. With good training, proper maintenance, and safe work habits, power tools boost work efficiency while maintaining worker safety.

MACHINE GUARDS

Moving machine parts can cause minor injuries such as cuts and scrapes, major crushing and amputation injuries, and even death. Learn about machine guarding and the safe work practices you need to follow.

Get training before you use moving machinery. Understand how the machine works and what the potential hazards are. The main categories of machine hazards include point of operation, ingoing nip points, and rotating parts.

Point of operation hazards occur where the machine work is actually done on the material such as cutting, shearing, pressing, punching, or forming. These machines require a guard that prevents the operator's hands or fingers from coming near the point of operation. The guards can include physical shields or barriers, laser sighted power controls, and even operator restraints that limit the movements of hands and arms.

The in-running side of rolling equipment can pull fingers, hands, and arms into machines. Guarding for roll type equipment is required by using a fixed or self-adjusting barrier that allows material through, but prevents body parts from entering. Machine braking and emergency shutoff bars also control rolling hazards.

Rotating machinery poses a threat of injury, amputation, scalping, and death. Rotating parts require guards or shields to prevent accidental contact. Never wear gloves, neckties, jewelry, lanyards, or loose fitting clothing that could become entangled. Tie back and secure long hair.

A machine guarding safety program includes inspecting machinery before each use and throughout work shifts. Do not remove guards or maneuver them so that the machine can function without them. Do not use machines if the guards are removed or damaged. Use lockout/blockout procedures when performing maintenance or clearing jams.