Overview of Topic

Subpart P of 29 CFR Part 1910 covers the use of hand and portable powered tools in general industry. The regulation covers general requirements and specifies guarding requirements for portable powered tools. Requirements for inspections and safe use are also included.

Tools are such a common part of our lives that it is difficult to remember that they may pose hazards. Employees who use hand and power tools may be exposed to the hazards of falling, flying, abrasive, and splashing objects. They may be exposed to harmful dusts, fumes, mists, vapors, or gases. A large part of working safely with tools is understanding the hazards and taking adequate precautions.

Your employees should be trained in the use of all tools—not just power tools. They should understand the potential hazards as well as the safety precautions to take to prevent or control the hazards.

Tool quality and design

Tools made from good quality, durable materials will help your employees avoid injuries caused by tools breaking or slipping on the job. Metal tool parts should be strong enough to resist bending, cracking, chipping, or excessive wear from normal use.

Always use the appropriate blades, bits, fasteners, etc. with powered tools. Guards should be durable and secure. Electrical parts, pneumatic and hydraulic hose and fittings, etc., must be rated to meet the requirements of their intended use.

Personal protective equipment

Using personal protective equipment (PPE) should become a habit when using tools.

Wear eye protection if there is a chance that chips, splashes, sparks, dust, or debris could get into your eyes. Some examples of jobs where eye protection should be worn include using hammers, mallets, chisels, punches, bolt cutters, staple guns, drills, abrasive wheels, saws, or any other tool that could create chips, pieces, or splashes. For some jobs, face protection may be needed in addition to safety glasses or goggles.

Your employees can protect themselves from cuts while handling knives by wearing cut-resistant gloves. They can also protect themselves from getting cut while working on materials with sharp edges (sheet metal or glass).

Ear protection may be in order when using powered tools. Even short-term overexposure to excessive noise can be damaging.

Tool use might also contribute to your employees need to wear a respirator. Teach them to use your Respiratory Protection Program, and use their respirator correctly.

Remember that a job may also require foot protection. When using heavy tools (mauls, sledgehammers, jackhammers, etc.) or when working on heavy materials, your employees will want to be wearing safety shoes in case something falls onto their feet.

Tool inspection

Tools should be inspected before and after each use. Some signs of damage and wear to look for include cracked or loose handles, casings, or guards; bent shafts or spindles; worn, cut, brittle, or frayed cords and hoses; loose or leaking fittings; dull, rounded, or chipped cutting
surfaces; gouges or scrapes on gripping surfaces; mushroomed striking surfaces; etc.

**Tool maintenance and repair**

Portable tools should be kept clean. Dirt and grease can hide damage.

Maintain and repair tools before it’s too late. Sharpen cutting edges regularly. Follow a schedule to make sure tools get lubricated. To prevent rust, lightly oil tools before putting them away.

Take damaged tools out of service immediately. Apply a "Do Not Use" warning tag so everyone knows not to use the tool. Only authorized employees should be allowed to repair tools. Some types of tools must meet the manufacturer’s specifications after they've been repaired. All repaired tools should be thoroughly inspected before they are put back into use. Discard damaged tools that cannot be repaired.

**Basic tool safety rules**

All hazards involved in the use of hand and powered tools can be prevented by following five basic safety rules:

- Keep all tools in good condition with regular maintenance.
- Use the right tool for the job.
- Examine each tool for damage before use.
- Use the tool according to the manufacturer’s instructions.
- Provide and use the proper protective equipment.

**Employee training**

OSHA’s regulations do not have specific employee training requirements, but employees who understand the hazards and know how to use hand and portable powered tools correctly will have less risk of injury.

**Training tips**

Ask employees to give examples of their experiences with tool–related injuries.

If you have some samples of damaged portable tools, pass them around so the trainees can see examples of what to look for when they inspect tools.

**Where to go for more information.**


29 CFR 1926, Subpart I—Tools, hand and power (for construction).