Dangers Lurk in the Use of Hand & Power Tools

Everyone has grabbed a hammer & nails or a skill or handsaw and worked on a home project while growing up. And usually, we never had "safety" cross our mind. However, because of such common use and multiple users, hand & power tools have become a major concern in the workplace.

The company is responsible for the safe condition of tools and equipment used by employees because it has the obligation to provide a safe & healthy work environment. But each employee has the responsibility for properly using and maintaining tools at all times. For this reason, the company supervisors may be required to inspect any personal tools an employee brings on to the jobsite, especially on a construction job.

Hand tools are non-powered. They include anything from axes and hammers to wrenches. The greatest hazards posed by hand tools result from misuse and/or improper maintenance. Some examples include:

- using a screwdriver as a chisel which may cause the tip of the screwdriver to break and fly, hitting the user or other employees;
- if a wooden handle on a tool such as a hammer or an axe is loose, splintered, or cracked, the head of the tool may fly off and strike the user or another worker;
- a wrench should not be used if its jaws are sprung, because it might slip; or
- impact tools (such as hammers, chisels & wedges) are unsafe if they have mushroomed heads. The heads might shatter on impact, sending sharp fragments flying.

Power tools such as hand grinders, bench grinders, skill saws, nail/staple guns & chain saws often have guards mal-adjusted, missing or tied back. These situations lead to life-altering injuries, mainly because we were either in a rush and didn't inspect the tool or we knew of an existing hazard and chose to "wait until later." Each worker must be knowledgeable about the hazards of the tool, safe use & operation of their tools, and how to inspect their tools daily for safe operation.

With unguarded tools and equipment, many times it is a co-worker in the vicinity who is injured by the nail that ricochets, wood that flies, or the metal slag that becomes airborne because of no guard. Proper use of eye protection & face shields must also be issued, all employees trained, and PPE use enforced to reduce the chances of injury.

A good source of power tool safety should start with Owner's Manual, in the "Safety Section." Each employee using power tools should be properly trained. To lose an eye or fingers is permanent impairment for life. As of this writing, I know not of any eyeballs being transplanted and vision recoverable. So take tool safety seriously. Establish a routine to inspect your work area and your tools each day. Before using a tool or equipment, take a few moments and inspect it thoroughly. If electricity or air energizes the power tool, take a moment to inspect the cords & plugs and pneumatic hoses & connections for damages. A few seconds of attention may save a lot of pain, a job interruption, lost work time, and a trip to the hospital.