Volume 4 – Issue 19 May 7<sup>th</sup>, 2017

### **Working Safely with Power Tools**

Accidents involving portable power tools happen all the time. You've all heard of cases where a chip flew off a drill and hit someone's eye or of someone getting a shock because a tool had a faulty ground. And then there's the person who lost a finger because the guard on the circular saw did not return. In one recent year, there were more than 800 OSHA citations for violations of power tools standards (both general industry and construction), with penalties totaling well over half a million dollars. There are more than 100,000 hospital emergency room visits each year in the United States due to power tools accidents.

In some ways, portable power tool accidents are more likely to happen than those associated with stationary machines because:

- Portable power tools are difficult to guard completely.
- They're mobile, so they run a greater risk of coming in contact with the user's body.
- They are easily dropped and damaged, so there's a risk of them being used when faulty.
- The power source (electrical, hydraulic, etc.) comes in close contact with the operator.

If you've ever actually witnessed a power tool injury, you don't forget it. Know how to work safety with power tools--saws, drills, sanders, grinders, etc. This is an extremely serious topic, because injuries from power tool accidents can be severe and permanent.

### **Power Tool Injuries:**

According to the Power Tool Institute, a trade group, there are three main reasons most such injuries happen:

- Loss of concentration operators can stop paying attention to their work if they repeat the same actions with a power tool over and over again.
- Unexpected events a kickback or other sudden problem with a fast-moving power tool can be very dangerous, especially if they operator does not have the experience to expect the unexpected.
- Inexperience and overconfidence it's a hazardous combination if the operator doesn't know the importance of being careful at all times when using a power tool.

#### **Proper Work Practices:**

Portable power tools are designed for a wide variety of uses. Circular saws, jig saws, drills, hammer drills, sanders, grinders, routers, and numerous other power tools save us time and effort on the job.

The growing popularity of cordless battery-operated tools is putting power tools to use in more places than ever before, heightening the need for awareness of the dangers they present if not operated properly.



## **Weekly Safety Meeting**

The following safety rules are common to all power tools. In addition, each type of tool has its own unique hazards, which must be taken into account.

- Read the manufacturers manual to understand the tools proper applications, limitations, operation, and hazards
- Do not use electric power tools in the proximity of flammable vapors, dusts, or construction materials. Also avoid using electric power tools in wet environments
- Protect yourself from electric shock by insuring your tools are properly grounded; use a Ground Fault Circuit Interrupter for corded tools.
- Always check for hidden wires that may contact bladed tools.
- Select a tool based on the task for which it is designed.
- Only use attachments specifically recommended for your power tools and ensure their proper installation.
- Inspect tools for damage including the cord, presence of guards, correct alignment, binding of components, or any condition that would affect the operation of the tool.
- If a tool is damaged, or a condition develops while a tool is in use, have the tool fixed before using it again.
- Avoid excessive force to make cutting tools cut faster; feed material only as fast as the tool
  is designed to accept to prevent excessive wear and decreased control.
- Keep others away from the work area, or provide shields to stop flying debris and other distractions.
- Always maintain tool control by keeping a tight grip on a tool.
- Maintain your balance and do not overreach.
- Do not operate a power tool if you are under the influence of medications or alcohol, or if you are tired or distracted.
- Secure your work in a vise or clamp for increased stability.
- Use the tools side handle, if available, for better control.
- Verify that all tools are unplugged or that the power source is removed when changing blades, performing maintenance, or when tools are not in use.
- Be sure adjustment knobs are tightened and remove any adjustment keys before use.
- Keep tools in a secure location when not in use.
- Avoid unintentional tool start-up by keeping your finger off of the power switch.

Remember; you have to know the tool well enough to know when it is right and when it is wrong for a specific job.

Too many accidents are a result of people trying to force a tool to do something it was never intended to do.

You've got to understand the limitations of any power tool you operate.

At the same time, never underestimate its power. Portable power tools can be lethal if used improperly.



## **Weekly Safety Meeting**

#### **Extension Cords**

The length of cord and the amperage required by the tool determines proper extension cord size. Longer cords and higher amperage tools require extension cords with larger wires.

Consult your manufacturers manual for the recommended wire gauge size for your application.

Don't be a fool...inspect your tools!



# **Weekly Safety Meeting**

### **Safety Meeting Sign-In Sheet**

Supervisor:	Subject:
Location:	Date:
Conducted By:	Trainer Signature:

Name (print clearly)	Signature	Comments / Safety Concerns / Training Requests

