Hand and Power Tool Safety 1

# HAND & POWER TOOLS PROGRAM

For:



Dated: 01-08-2016

# **Purpose:**

The following written program is designed to provide employees of R.W. LaPine, Inc. with the knowledge of safe tool usage and the ability to recognize the hazards associated with hand and power tools.

# **Personal Protective Equipment:**

Appropriate PPE shall be worn based on the type of operation. Such PPE may include safety glasses with side shields, face shields, goggles, hearing protection, and gloves.

# Hand Tools:

Hand tools are non-powered. They include anything from axes to wrenches. The greatest hazard posed by hand tools result from misuse and improper maintenance.

The following rules shall apply:

- All tools and equipment shall be kept in a safe condition.
- Employees shall properly use and maintain all tools and equipment
- Saw blades, knives, or other tools are directed away from aisle and other employees working in close proximity.
- Knives and scissors must be kept sharp, dull tools can be more hazardous than sharp ones.

#### **Power Tools:**

The following general precautions shall be observed by all employees using power tools:

- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect it from the receptacle.
- Keep cords and hoses away from heat, oil, and sharp edges.
- Disconnect tools when not in use, before servicing, and when changing accessories such as blades, bits and cutters.
- All observers shall be kept at a safe distance away from the work area.
- Secure work with clamps or a vise, freeing both hands to operate the tool.
- Avoid accidental starting. The worker should not hold a finger on the switch button while carrying a plugged-in tool.
- The proper apparel should be worn, loose clothing, or jewelry can become caught in moving parts.
- All portable electric tools that are damaged shall be removed from use and tagged "Do Not Use".

#### Guards:

All proper guards shall be in place when the tool is being used. Guards shall not be modified unless approved by the manufacturer.

#### Safety Switches:

The following hand-held tools must be equipped with a momentary contact "on-off" control switch:

Drills, Tappers, Fasteners drivers Horizontal, vertical, and angle grinders with wheels 2 inches or less in diameter Routers, Planers, Laminate trimmers, Nibblers, Shears Scroll saws, Jigsaws with blade shanks one-fourth of an inch wide or less

#### **Powered Abrasive Wheel Tools:**

Powered abrasive grinding, cutting, polishing, and wire buffing wheels create special problems because they may throw off flying fragments.

Before an abrasive wheel is mounted, it should be inspected closely and sound or ring tested to be sure that it is free from cracks or defects. To test, wheels should be tapped gently with a light non-metallic instrument. If they sound cracked or dead, they could fly apart in operation and so must not be used. A sound and undamaged wheel will give a clear metallic tone or ring.

To prevent the wheel from cracking, the user should be sure it fits freely on the spindle. The spindle nut must be tightened enough to hold the wheel in place, without distorting the flange. Employees shall follow the manufacturer's recommendations. Care must be taken to assure that the spindle wheel will not exceed the abrasive wheel.

Due to the possibility of a wheel disintegrating (exploding) during startup, the employee should never stand directly in front of the wheel as it accelerates to full operating speed.

Portable grinding tools need to be equipped with safety guards to protect workers not only from the moving wheel surface, but also from flying fragments in case of breakage.

In addition, when using a powered grinder:

- Always use eye protection (safety glasses with faced shield)
- Turn off the power when not in use
- Never clamp a hand-held grinder in a vise

# **Pneumatic Tools:**

Pneumatic tools are powered by compressed air and include clippers, drills, hammers, and sanders. There are several dangers encountered in the use of pneumatic tools. The main one is the danger of getting hit by one of the tools attachments or by some kind of fastener the worker is using with the tool. The following safety procedures shall be followed when using pneumatic tools;

- Eye protection is required and face protection is recommended
- Hearing protection is required when working with noisy tools, such as jackhammers.
- When using pneumatic tools employees must check to see that they are fastened securely to the hose to prevent them from becoming disconnected. A short wire or positive locking device attaching the air hose to the tool will serve as an added safeguard.
- A safety clip or retainer must be installed to prevent attachments, such as chisels on a chipping hammer, from being unintentionally shot from the barrel.
- Screens must be set up to protect nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.
- Compressed air guns shall never be pointed toward anyone. Users shall never "dead-end" it against themselves or anyone else.