

## Pneumatic Tools

### 5-Minute Talk

#### Overview of topic

Pneumatic tools are often used at construction jobsites. These tools are powered by compressed air and include nailers, drills, hammers, and sanders. In one respect, they are safer than electric tools because the shock hazard is eliminated. But, they are still very dangerous because the tools are under pressure and can come apart. When this occurs, there is the danger of a “flying missile” striking nearby workers. It is extremely important that pneumatic tools are inspected daily and kept in good working order.

When your employees work with pneumatic tools, eye protection is required, and head and face protection is recommended. When required, screens must also be set up to protect nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.

Some of the most obvious OSHA requirements that must be stressed to workers using pneumatic tools are:

- Never point compressed air guns at anyone.
- Check pneumatic tools to ensure they are fastened securely to the air supply hose to prevent them from becoming disconnected. A short wire or positive locking device must attach the air hose to the tool. This will serve as an added safeguard to prevent “whiplash” if the hose becomes disconnected.
- Make sure a safety clip or retainer is installed to prevent attachments, such as chisels on a chipping hammer, from being ejected during tool operation.
- If the air hose is more than 1/2 inch in diameter, a safety excess flow valve must be installed at the air supply source to reduce pressure in case of hose failure.
- Take precautions to protect the air hose from physical damage. The hose is subject to the same kind of physical damage as electrical cords.
- Equip pneumatic tools (that shoot nails, rivets, staples, or similar fasteners, and operate at pressures more than 100 pounds per square inch) with a special device to keep fasteners from being ejected, unless the muzzle is pressed against the work surface.
- Equip airless spray guns (that atomize paints and fluids at pressures of 1,000 pounds or more per square inch) with automatic or visible manual safety devices. These devices will prevent pulling the trigger until the safety device is manually released.



- Don't let workers use compressed air for cleaning, unless the pressure is reduced to less than 30 pounds per square inch, and then only with effective chip guarding and personal protective equipment.
- When a worker is operating a jackhammer, require them to wear safety glasses and safety shoes. These items will protect them against injury if the jackhammer slips or falls. A face shield should also be used.

Working with noisy tools, such as jackhammers, requires proper, effective use of appropriate hearing protection.

### **Employee training**

The OSHA rules require the following training for employees using hand and power tools:

- Only employees qualified by training or experience can operate equipment and machinery (1926.20(b)(4)).
- Employees must be trained to recognize and avoid unsafe conditions and the regulations applicable to their work environment to control or eliminate the hazards (1926.21(b)(2)).

### **Training tips**

Prior to presenting this 5-minute lesson, you may want to review manufacturers' safety requirements for your pneumatic power tools.

### **Where to go for more information**

29 CFR 1926.302(b)—Pneumatic power tools.

