

# Nail Guns Meeting Kit

## **DANGERS/ INJURIES**

Nail guns are widely used on many construction jobs, especially in residential construction. While they boost productivity, they may also cause tens of thousands of painful injuries each year.

Injuries from nail guns send approximately 25,000 construction workers to the emergency room each year. This injury risk can be cut in half by switching to a safer trigger mode on the gun itself, greatly reducing the chances of an unintended nail discharge. Changing the trigger mode combined with some basic safety steps to avoid puncturing your hands and causing ricochets, can reduce the risk even more.

Puncture wounds to the hands or fingers are the most common nail gun related injuries in the construction industry. However, when a nail unintentionally discharges or ricochets off something, the entire body can be at risk. In some instances, people have suffered paralysis, blindness, or worse.

## **EMPLOYEE KNOWLEDGE OF NAIL GUNS TRIGGERS**

Almost all nail guns are equipped with different trigger settings. The most popular is the contact tip (or bump fire) method. It's also the most dangerous.

With bump firing, the user continuously holds down the trigger and once the tip presses against an object, a nail discharges. It is common for workers to continue holding the trigger down when working, even when walking between work areas. Should the user bump into another coworker or trip and fall, a nail could fire unexpectedly and injure the user or someone else nearby. If a user is working in a tight space, the nail gun can strike the worker or a nearby wall during recoil, unexpectedly releasing a nail that

could strike and injure the worker.

Alternatively, the full sequential and the single shot trigger modes are safest, because they allow the gun to only discharge one nail at a time. The user must reset the trigger before firing the next nail, so even if the user is still holding the trigger and bumps a wall or coworker, additional nails don't fire. Older nail gun models may not have this setting. While replacing these older models at your job site isn't required, it does provide greater safety.

## **HOW EMPLOYEES USE A NAIL GUN SAFELY**

Before connecting a nail gun to its power source, the user should set the nail gun to full sequential or single shot mode. With some models, the user can do this by flipping a switch, dial, or lever. In other cases, one trigger might have to be removed and replaced by another. This change alone can help dramatically reduce the injury risk at your worksite.

## **TRAINING/ MAINTENANCE/ TYPES**

All workers who use nail guns should be trained in their safe use.

Training should address the safe operation of the nail gun, personal protective equipment (PPE) requirements and any other specific directions as stated in the manufacturer's manual.

Training should cover:

- the safe operation of the nail gun
- PPE requirements
- any other specific directions as stated in the manufacturer's manual.

Maintain your nail guns to ensure correct operation of the actuation mechanism. If any problems occur, have it repaired by a competent person (i.e. authorised agent) or replace it. Do not continue to use a malfunctioning nail gun.

**There are many types of portable, hand-held nail guns. They are powered by either:**

- electromagnetism
- compressed air–pneumatic
- highly flammable gases—such as butane or propane
- powder actuated—requiring an explosive charge.

## **NAIL GUN SAFETY TIPS FOR WORKERS**

- Read the owner's manual and use it for training.
- Wear safety glasses and be sure anyone in the work area is wearing them as well.
- Use appropriate personal protective equipment as needed.
- Keep the tool pointed away from yourself and others.
- Keep hands, feet and other body parts away from the muzzle of the tool.
- Disconnect the air hose when clearing jams, doing maintenance or when handing the tool to another worker.
- Keep your finger off the trigger except when nailing. A sequential trigger (requiring the gun nose to be depressed before the trigger will fire a nail) is safer than a contact trigger.
- Hold the tool firmly onto the work surface to avoid a recoil kick-back and double firing.
- Avoid nailing into knots or other fasteners.
- Use full sequential trigger nail guns.
- Provide training.
- Establish nail gun work procedures.
- Provide personal protective equipment (PPE).
- Encourage reporting and discussion of injuries and close calls.
- Pneumatic lines should be fitted with moisture filters or self feed lubricators, and routinely maintained.
- All pneumatic tools must be marked with maximum air/gas pressure or operating voltage.
- Eye protection must always be worn when operating nailers/staplers, and ear defenders worn.
- Always assume the tool is 'loaded', and never point the tool

toward yourself or anyone else.

## **FINAL WORD**

When first fired, nails move at a speed of 150 feet per second. So, there isn't much time to react when something goes wrong. Using a safer trigger mechanism and following the other precautionary steps may require more time to get the job done; but will also help dramatically reduce the risk of injury.