

Choosing Safer Hand Tools in Construction

Hazard Alert



Construction workers use many hand tools, such as, hammers, screwdrivers, pliers, and tin snips, plus power tools, such as electric drills and screwguns.

The Hazards

If you use hand tools over and over every day, you can injure your hand, wrist, or arm. You can be injured if you must hold on tight for a long time or keep twisting the handle, for instance. You can get carpal tunnel syndrome, trigger finger, white finger, tendonitis, and other painful problems. They can force you to quit construction work.

Protect Yourself

You can buy “safer” hand tools. Then, you can use them better.

WHEN YOU BUY A HAND TOOL:

Look for a tool that needs less force to use it.

Look for a tool that is balanced and does not tip forward or back when you hold it.

Look at the handle:

- It should be **comfortable in your hand** — not too thick or too small or too short.
- It should **not conduct electricity or heat**. (Work with a cold handle can make some repetitive stress injuries worse.)
- It should **not hurt your hand when you hold tight**. You do not want sharp edges or finger grooves or ridges.
- If you can, get a **non-slip** handle.
- If you can, get a handle with a **surface made of soft materials**, like rubber or plastic. (You may want to get a special **plastic or rubber sleeve** or a custom grip kit for the handle.)
- If you need to use a lot of force on the job, the handle should be **long enough for your whole hand** — not just your fingers. (You want a power grip, not just a pinch grip.) You can use a long handle as a lever to add to the force of a tool and save your hand.
- **If you wear gloves** when you use a tool, you may need a thicker handle. (Gloves can make it harder to hold onto a tool.)
- For some tools, the handle should have a **spring return**; this re-opens the tool for you after you use it. The spring return saves wear and tear on your finger muscles.
- **A bent angle or adjustable angle** on some tools can help you keep your wrist straight on some jobs. You may need different tools on different jobs so you can keep your wrist straight. For instance, on walls, a pistol grip is better.

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If you get a power tool:

- It should have a **long trigger**, so you can use more than one finger at a time.
- Get a tool **with lower vibration and noise levels**. Too much vibration can damage the blood vessels in your hand and cause “white finger.” If a tool vibrates, you have to grip harder and can hurt your muscles.
- Get a tool that is **heavy enough to do the job**, but not so heavy that it adds strain. Suspend a very heavy tool with a counterbalance, if you can.

If more than one person will use a tool, try to find one that’s comfortable for everyone to hold. You may need different tools for left-handed and right-handed workers and for workers with big and small hands.

WHEN YOU USE A HAND TOOL:

Keep the tool sharp and in good condition. This way, you can reduce the force you must use on the tool — and reduce stress on your hands and wrist.

Try not to use tools with your wrist bent.

Try to rest your hands during the day. Even a perfect tool can hurt you if you must use it over and over. Lay down the tool or put it in a holster when you don’t need it.

You Should Know

A good hand tool improves productivity; it helps you get your job done well.

Use a *power* tool when you can. A power tool can cut the wear on your hand.

Many tools in the stores are labeled “ergonomic” tools; don’t be fooled. You are the one who can tell if a tool is comfortable and easy to use. Try many tools until you find one you like. Everyone has a different hand size, strength, and preferences. Keep asking the stores for better-designed tools; they respond to demand.

One tool cannot do all jobs. If you try to use a tool for a job it was not designed for, the job will be harder to do.

How you use a tool is as important as which tool you use.

For more information, call your local union, the Center to Protect Workers’ Rights (CPWR) (301-578-8500 or www.cpwr.com), the National Institute for Occupational Safety and Health (1-800-35-NIOSH or www.cdc.gov/niosh), or OSHA (1-800-321-OSHA or www.osha.gov). Or check the website www.elcosh.org

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