

# **Safe Operating Procedures**



#### **Hand Tools**

## Hand Tools - General Rules

Hand tools refer to hammers, screwdrivers, knives, shovels, etc., which do not require electrical, hydraulic, pneumatic or other forms of power to operate.

- 1. The proper tool will be selected for the job.
- 2. Tools must be in good condition and used correctly.
- 3. Tools must never be thrown or used in such a way that anyone could be injured.
- 4. Tools must be placed in a secure position while being sharpened.
- 5. When not in use, all sharp-edged, toothed, and pointed tools must be properly stored in such a manner that points and edges will not be a hazard.
- 6. Make sure the handle or gripping surface of a tool used is free from dirt, grease, oil, and splinters.
- 7. Do not use hammers of any description with cracked, splintered, or badly worn handles.
- 8. Sharp edged and pointed tools become deadly weapons when used in close quarters guard accordingly.
- 9. Unguarded sharp-edged or pointed tools must not be carried in pockets.
- 10. Defective tools must not be used and will be turned in to supervisors immediately.



# **Cold Chisels (engineering)**

- 1. Eye protection must be worn when using chisels.
- 2. Heads of cold chisels will be ground with a slight radius at the first sign of burring or mushrooming.

Keep the chisel head trimmed at all times to prevent mushrooming particles from flying.

- 3. Work away from the body when striking a chisel.
- 4. Chisels must not be used as pries or wedges, as the brittle steel may break and cause injury.
- 5. Gloves and chisel holders are recommended when using chisels.

## **Files**



- 1. Never use a file without a handle attached to it.
- 2. The correct way to hold a file is to grasp the handle firmly in one hand and use thumb and forefinger

of the other hand to guide the point.

- 3. Be extra careful when filing against the cutting edge of item being filed.
- 4. Files must never be used as pries, punches, chisels, or similar tools.
- 5. When filing, pay attention to your work; if interrupted, stop filing.
- 6. Employees will not carry unguarded or unsheathed files in pockets.
- 7. Employees should wear gloves when using a file.

## **Hammers**



- 1. Eye protection must be worn when hammering.
- 2. Select the proper type of hammer for the job.
- 3. Hammers must have securely wedged handles.
- 4. Faces of claw hammers will be kept.
- 5. Hammers with cracked, splintered, or badly worn handles will not be used.

# **Sledgehammers**



- 1. Eye protection must be worn when using a sledgehammer.
- 2. Sledgehammers must have securely wedged handles.
- 3. Never attempt to strike an object with a sledgehammer at or above shoulder height. Use a platform to drive an object at or above shoulder height.
- 4. An employee holding a stake, nail, pin, wedge, etc., to be driven will stand at right angles to the direction of the sledgehammer and use a holding device to grip the driven item. Gloves are recommended.
- 5. Single-bit axes must not be used as a sledgehammer.

## **Picks**



- 1. Eye protection must be worn when using a pick.
- 2. Points on picks, pick mattocks, and pick axes must be kept sharp and properly dressed to prevent the

tool from glancing off the work and striking the user.

3. When using "Swinging" types of tools, make sure to have sufficient clearance to swing to avoid injury

to yourself and others. Spread your legs apart on secure footing and avoid swinging too close to the feet.

4. Picks must be hung or laid across a rack when storing.

# **Crowbars (Pinch Bars, etc.)**



When using crowbars, make sure to have sufficient clearance to avoid injury to yourself and others.

# Pitchforks, Hoes, Rakes, Shovels



1. Pitchforks, hoes, rakes, and shovels must never be left lying around with teeth or blades in an upright

position. Exposed prongs, when stepped on, may cause puncture wounds. Blades or prongs, when

stepped on, may cause the handles to fly up and strike you in the face.

2. Long-handled tools such as pitchforks, hoes, rakes, shovels etc., must be placed in an upright position,

when not in use on the job, or placed on the ground away from walk areas so that tripping hazards

may be avoided.

3. When lifting with a long-handled tool, such as pitchfork, shovel, etc., grip one hand close to the load

to lessen the strain.

# **Pliers and Cutters**





- 1. Pliers must not be used as a substitute for wrenches, as they do not hold the work securely; injury may result from slipping.
- 2. When using wire cutters, guard against fingers being pinched or crushed.
- 3. When cutting short ends of wire, cut away from the face to avoid exposure to flying particles.
- 4. When cutting wire under tension, grasp the wire close to the cutter and stand so that the other end

cannot strike you when the tension is suddenly released.

- 5. Insulated pliers must be used for electrical work.
- 6. Using bolt cutters match the tool to the diameter steel to be cut
- 7. Check bolt cutter is in good order before use
- 8. Watch out for flying offcuts and use appropriate PPE

# Saws



Select the proper type of saw for the job. Use it properly and hang it up when through with job.

## **Hacksaws**



- 1. Select a saw blade that is suitable for the materials to be cut.
- 2. Place the blade in the frame so that the teeth point toward the end of the frame and away from the handle. Tighten the blade rigidly and make sure the frame is in proper alignment.
- 3. Straight cuts cannot be made with loose blades and crooked frames, which may also cause the blade to bend, buckle, twist, bind, or otherwise break and injure you.
- 4. Too much pressure or twisting when sawing with a hacksaw may cause the blade to break, resulting in an injury.
- 5. Place one hand on the upper portion of the frame and the other hand on the handle; cut away from

yourself and cut with long, straight, steady strokes using practically the entire length of the blade. To avoid dulling the teeth, ease pressure on the backward stroke.

6. When work is held in a vise, make certain that in cutting, your hand will not strike the vise.

# **Sharp and Pointed Objects**



- 1. Razor blades and pins must be kept in containers, never loose in desks or thrown in wastebaskets.
- 2. Sharp or pointed articles, such as pens, knives, pencils or envelope openers must never be left on theedge of a desk or any other place where they may puncture or cut someone.
- 3. Never carry an unprotected knife, pencil, pen, or other sharp instrument in your pocket.
- 4. Never toss or throw a sharp or pointed object.

## **Screwdrivers**



1. Screwdrivers must not be used as substitutes for punches, hammers, wedges, pries, chisels, nail

pullers, or similar uses.

2. Work must be secured or placed in a vise when using a screwdriver. Do not hold the work in your

hand. The exception would be small parts, such as electrical parts, which do not require a great deal

of force to turn the screw. Extra caution must be used by employees in this situation.

3. Both hands must be used to safely handle a screwdriver; one hand to turn the handle and the other to

steady the blade so as to prevent slipping.

- 4. All parts of the body must be kept in the clear in case the screwdriver slips.
- 5. Only screwdrivers with insulated handles will be used for electrical work.
- 6. Screwdrivers with blades or rivets extending through the handle must not be used for electrical work.
- 7. Use the correct size screwdriver to prevent slipping.
- 8. When dressing or reshaping a screwdriver, do so forming a long taper instead of a "chiseltype" blade.
- 9. Employees will not carry unguarded screwdrivers in their pockets.

## **Axes**



- 1. Never use an ax as a maul or sledge hammer.
- 2. When carrying an ax, carry it at your side with blade pointing down.
- 3. Be sure to provide a clear area and adequate space to swing before using an axe.
- 4. Cutting edges of axes and other edged cutting tools shall be kept sharp.
- 5. Axe handles shall be kept smooth and the head must be securely attached.
- 6. A cracked handle shall be replaced promptly, not repaired or covered with tape.
- 7. Axes will be equipped with proper guards and securely fastened and carried in the part of a truck where any workers are riding.

## Wrenches / spanners



- 1. Use wrenches that are the right type and size for the job.
- 2. A loose wrench will slip and may cause serious injury. A loose wrench also ruins the corners of the nut.
- 3. When working in a tight place, take care that the grip you use will not injure your hand in turning.
- 4. Pulling on a wrench is the proper way to use it. It is not advisable to push a wrench as slippage may

cause serious injury to your hand, face, or body. If you must push a wrench, do so with a stiff arm, holding your face and body back.

- 5. Do not over strain a small wrench, subject any wrench to a severe side strain, or use a wrench as a hammer.
- 6. Using a pipe or other device "cheater" for extra leverage is not a safe practice, the wrench is not builtfor that extra strain. Such a practice may result in serious injury to the operator

## **Wood chisels**



- 1. Inspect cutting edge for cracks or gaps and don't use if signs of damage are evident
- 2. Do not use as a screwdriver
- 3. Keep the tool sharp
- 4. Ensure handle is not damaged, don't use the chisel if handle is damaged
- 5. Don't use the chisel beyond reasonable intended use (cutting edge could become damaged and a cap could cause personal injury to the operator
- 6. Don't use excessive force (heavy use of a hammer)
- 7. Use appropriate PPE