



Hand and Power Tools

Hand tools

- **Hand tools can be hazardous.**
- Proper tool handling/ use reduces risk of injury.
- Improper tool handling/use increases risk of injury.
- Hazard increases if hand tool not properly used or maintained.

Power tools and equipment

- **Power tools and equipment can be hazardous.**
- Power tools classified by type of power source, e.g.: electric, pneumatic, liquid fuel, hydraulic, and powder-actuated
- Hazard increases if power tool not properly used/maintained

Tools and equipment use and operation training

- Safe-use training provided before any hand tool used.
- Safe-operation training provided before any power tool used or equipment operated.

Housekeeping

- Ensures floors are kept clean and dry to prevent slips with or around dangerous tools.

The Student is able to demonstrate safe and correct performance of the following:	Date	Sign-off	Notes
1. Keeps knives and scissors sharp; knows dull tools can be more hazardous than sharp ones.			
2. Never carries a tool by the cord or hose.			
3. Never yanks the cord or hose to disconnect tool from plug-in.			
4. Keeps cords and hoses away from heat, oil and sharp edges.			
5. Disconnects tool from the power source before servicing or changing accessories.			
6. Uses both hands to operate tool, securing work with clamps or a vise, as necessary.			
7. Keeps finger off the "on" switch button unless operating the tool.			
8. Follows manufacturer's instructions for lubricating and changing accessories.			
9. Wears proper clothing - Does not wear clothing or accessories that could be caught in moving parts.			
10. Removes all damaged portable electric tools from use and tags "DO NOT USE".			
11. Uses the appropriate personal protective equipment, as necessary.			
12. Ensures manufacturer's safety guards are in place and never removed when tool is in use.			
13. Uses each tool for purpose for which it was designed.			
14. Inspects each tool for unsafe parts before use.			



Hand and Power Tools

The Student is able to demonstrate safe and correct performance of the following:	Date	Sign-off	Notes
Hammers			
1. Uses correct type of hammer for work being done.			
2. Ensures swing is unobstructed and free from overhead interference.			
3. Checks for defects before using hammer.			
Wrenches			
1. Selects correct size of wrench for the job.			
2. Ensures pipes are not used as wrench handle extensions.			
3. Ensures too much leverage is not used while operating the tool.			
Knives, sharps and edged tools			
1. Ensure sharps (.e.g.: needles, syringes) are handled safely and disposed of properly in approved sharps disposal containers.			
2. Ensures blades are kept sharp.			
3. Ensures sharps are safeguarded and secured when not in use.			
4. Cuts away from the body and ensures hands and body are clear of the knife stroke.			
Chisels			
1. Ensures edges are kept sharp and protected when not in use.			
2. Ensures chisels are not used to pry.			
3. Ensures chisel is driven outward and away from the body.			
4. Uses safety goggles or face shield when using a chisel.			
Electric Tools:			
1. Knows tools must either have a 3-wire cord with ground and be grounded, or be double insulated, or be powered by a low-voltage isolations transformer.			
2. Only operates electric tools within their design limitations.			
3. Wears proper personal protective gloves, safety shoes/boots, glasses, etc.			
4. Stores tools in dry place.			
5. Does not use power tools in damp or wet sites.			
6. Ensures work areas are well lighted.			



Hand and Power Tools

The Student is able to demonstrate safe and correct performance of the following:	Date	Sign-off	Notes
Powered Abrasive Wheel Tools – grinding, cutting, polishing and wire buffing wheels			
1. Uses proper PPE (eye protection).			
2. Never stands directly in front of the wheel until it reaches full operating speed.			
3. Inspects wheel to ensure it is free from cracks and defects.			
4. Ensures safety guards are in place.			
5. Checks that wheel fits freely on the spindle.			
6. Turns power off when not using the tool.			
Pneumatic Tools – chippers, drill, hammers and sanders powered by compressed air.			
1. Ensures all hoses have safety devices at the source of the supply or branch line to reduce pressure in case of hose failure.			
2. Wears PPE (eye protection, face guard, ear protection, etc.)			
3. Installs a safety clip or retainer to prevent attachments from being hot from the barrel.			
4. Never points compressed air guns against the user or anyone else.			
Powder-Actuated Tools:			
1. Recognizes that powder-actuated tools are very dangerous and are like loaded guns.			
2. Understands that only specially trained persons should operate this type of equipment.			
Hydraulic Tools			
1. Uses only approved fire-resistant fluid.			
2. Understands that manufacturer's recommended operating pressure for any part must not to be exceeded.			



Hand and Power Tools

The Student is able to demonstrate safe and correct performance of the following:	Date	Sign-off	Notes
Jacks			
1. Knows that all jacks must have a safety device that stops them from going up too high.			
2. Knows that manufacturer's load limit must be permanently marked in a visible place and not be exceeded.			
3. Knows that a lifted load, once it reaches the proper height, must be blocked immediately.			
4. Ensures that: <ul style="list-style-type: none"> - base rests on a firm, level surface - jack is correctly centered - jack heads bears against a level surface - lift force is applied evenly. 			
5. Lubricates tool regularly			
6. Inspects each jack before each use.			
General Safety Skills			
1. Identifies hazards associated with each type of tool used			
2. Demonstrates safe-use practices to eliminate or reduce risk of injury from each hazard.			
3. Uses power tool only with the instructor's permission.			
4. Uses appropriate PPE at all times.			
5. Advises instructor of hazardous tool, equipment or situation.			