General Safety / Wood Working Equipment

CVHS Materials Lab Safety

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1. There are safety instructions and safety tests for all machines. Students must pass the safety test on each machine with 100 percent accuracy before they use the machine.

2. Do not operate any machine until you have been instructed how to use it, fully understand how to operate it, passed the appropriate safety test, and have obtained the teacher's permission to use it.

3. Safety glasses are to be worn AT ALL TIMES while in the Materials Lab, but especially when operating or observing the operation of a piece of equipment. For some equipment, full face shields are required.

4. Learn procedures to follow in case of fire or accidents. Safety equipment is not to be abused because it could save a life.

5. Compressed air can be very dangerous. A student using compressed air must wear eye protection and work in such a way as not to blow air, dust, liquids, or scraps toward himself or others.

6. The teacher must be present in the class and have knowledge of all student activities before any equipment is operated within the materials lab.

7. Adjustments and measurements to a piece of equipment must be made when the machine is at a dead stop.

8. Be sure that the switch is in the "off" position before you "plug in" an electric cord.

9. Start and stop your own machine and remain with it until it has come to a dead stop.

10. Give your work your undivided attention while you are using the machines. Do not look away or talk to others. Don't talk to or distract others when they are using power tools.

11. All work areas including machines, benches, and floors must be kept clear of scraps and unused materials.

12. Notify your teacher of any tool or machine that is out of adjustment or broken so it can be repaired.

13. You will be held responsible for vandalism.

14. Report any injury or accident to the teacher immediately even if it seems insignificant to you.

15. Handle sharp-edged and pointed tools with care. Carry them with the sharp part pointed down and away from you or others.

16. Use tools only for their intended purpose.

17. Conduct yourself in a safe and mature manner at all times in the Materials Lab.

18. Do not wear loose clothing, long hair and loose accessories when working with equipment. Any of these may become entangled in rotating machinery and may cause serious accidents.

19. When you finish with a tool, clean it and return it to the proper storage place immediately so others may use it.

Bandsaws

1. Plan your cuts to avoid backing out of a kerf (kerf: the cut or channel made by the saw blade). Backing out often results in a broken blade or pulling the blade off of the wheels. Make relief cuts as necessary to avoid backing out of a kerf.

2. Adjust the blade guard to within ¼ inch of the work.

3. Use a push stick if you fingers will come within three inches of the blade.

4. The work piece should have one flat side so that it will lay flat on the table.

5. No one should stand on the right side (the right side relative to the operator) of the bandsaw when it is running. If the blade breaks, it may extend out of the blade cover in that direction.

6. Hold your work piece on either side of the cutting line so that there is no danger of your hands slipping into the blade. Keep fingers three (3) inches from the blade.

7. If the blade breaks, shut off the machine and call your teacher.

8. When you are finished turn off the machine and allow it to come to a dead stop. Clean the machine and your work area before you leave.

9. Be careful not to crowd, cramp, twist or bend the saw blade as this may cause the blade to break

10. Have your teacher check resawing, round stock, angle cuts and all other special operations.

Drill Press

1. Never leave a chuck key in the chuck. If the power is turned on, the key will be thrown out and may injure someone.

2. All work pieces must be secured to the work table.

3. If the work piece is caught by the drill, turn off the power and lower it to the drill press table. DO NOT TRY TO STOP IT BY HAND.

4. Large drills should turn at slow speeds, smaller bits at higher speeds.

5. Some operations (like drilling into cylindrical parts) require special setups and instruction.

6. The drill press table should be locked in place.
7. Keep hands, hair, loose clothing and jewelry way from all moving parts.
8. Always place a board beneath the work piece to be drilled. It will protect the drill press table.

Scroll Saw

1. Plan your cuts to avoid backing out of a cut. Use relief cuts if necessary.
2. Work piece should have one flat side so that it will lay flat on the table.
3. Adjust the hold-down fingers so they press lightly on the work.
4. Hold down the work piece on either side of the cutting line so that there is no danger of your hands slipping into the blade.
5. Keep your fingers at least two inches away from the saw blade.
6. Before leaving the machine, turn off the power and clean up the area.

Belt & Disc Sander

1. Keep your hands away from the moving belt or disc.
2. Move the stock to avoid burning either the wood or the abrasive belt or disc.
3. Sand only on the downstroke side of the disc sander.
4. Stop the sander to make any adjustments.
5. Sand with the grain, not across it.
6. Complete all cutting operations before sanding.
7. Apply just enough pressure to get the job done. The tendency is to press too hard which results in burning and deeper scratching.
8. Keep your attention on the job being performed.

Wood Lathe

1. Before you start have your teacher check your glued material for proper glue joints, proper glue, and sound stock
2. Mount the work piece properly in the lathe.
3. Keep the tool rest adjusted to within 1/8 inch of your work piece.
4. The tool rest must not be below the center of your work.
5. Rotate the stock by hand to check the tool rest clearance before starting the lathe.
6. Always turn large diameter work, rough stock, or large bowls at the lowest speed.
7. Use only the proper cutting tool; make sure it is sharp. If you are unsure, ask the instructor.
8. Remove the tool rest before sanding or polishing.
9. Keep hands, hair, loose clothing, and accessories away from moving parts.
10. When you are finished, turn off the lathe and allow it to come to a dead stop. Do not stop it with your hand. Clean the machine and your work area before you leave.

Router

1. Select the proper bit for the work to be done.
2. Insert the shank of the bit into the collet chuck and tighten the collet nut securely.
3. Be sure the switch is off before inserting the plug into the power source.
4. Clamp the work piece securely. The path of the bit should be clear of obstructions.
5. Start at the left and move to the right as you face your work.
6. Hold the router firmly against the work; use both of your hands.
7. Keep the cutting pressure constant. Do not overload the router.
8. Make a trial cut on a piece of scrap lumber.
9. Keep your hands, long hair, and accessories away from moving parts.