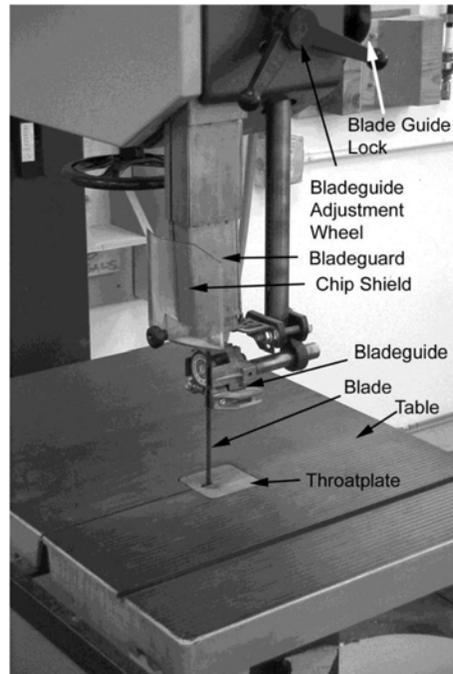


BAND SAW



The band saw is almost indispensable for making curved cuts and resawing (cutting wood to make it thinner). The blade is a thin loop of steel, typically $\frac{1}{4}$ to $\frac{1}{2}$ inch wide. The blade runs over wheels above and below a table, allowing wood to be cut where blade is traveling downward through the table. The size of a band saw is determined by the diameter of the wheels, which roughly indicates the largest piece that can fit between the blade and the body of the saw. The band saw is the fastest cutting saw in the woodworking lab. It is a rough cutting and shaping tool not intended for finish cuts.

1. Adjust the upper guide and guard to about $\frac{1}{4}$ " above the stock with the machine at a full stop.
2. Allow the saw to reach full speed before starting to feed your work.
3. Plan cuts carefully; lay out and make relief cuts before cutting long curves and curves of small radii. Turning holes should be made where required. Plan work so that all cuts will be made in the forward direction.
4. If the stock binds or pinches the blade, do not attempt to back the stock out. Shut the power off and remove the stock after the machine stops. Backing up while the machine is running could pull the blade off the wheels.
5. When removing scrap material from the band saw table, always be aware of the blade. Use a piece of scrap stock to remove scrap pieces or a brush; do not use your hands.
6. Keep the floor areas surrounding the saw clear of scraps.
7. If the blade breaks, stand clear and shut off the power if possible. Keep others clear until the machine stops completely and notify the supervisor.
8. Never make adjustments to the saw while it is running.
9. Do not place your fingers close to the saw blade when cutting stock. Always maintain a 4" margin of safety.

10. If it is necessary to back the saw out of a long cut, turn the power off and wait for the blade to stop. Then seek assistance from the supervisor.
11. To stop the band saw make sure the power is off then apply gentle pressure on the brake pedal until the blade stops. Leave the machine only after the blade has stopped moving completely.
12. The supervisor should approve all resawing and other **special setups**.
13. Use a pushstick when resawing.
14. When resawing, the edge of the stock on the table and the face of the stock against the resaw fence must be surfaced.
15. Keep upper and lower doors closed and all guards in place.
16. Use a pushstick or guide for cuts that would place your hands near the saw blade.
17. Cutting cylindrical or irregular stock on the band saw may be done only with a special jig, such as a V-block (**special setup**).
18. Never stand or allow others to stand to the right of the band saw when it is running. If the blade breaks it could potentially whip out in that direction.
19. If you hear a clicking noise, turn off the saw at once. This indicates a crack or kink in the blade as it passes through the guide.

BAND SAW TEST

1. Adjust the upper guide and guard:
 - a) when the power is shut off but the saw is coasting.
 - b) within $\frac{3}{4}$ " of the stock while cutting if the blade is not tracking properly.
 - c) to the exact thickness of the stock before the power is turned on.
 - d) to about $\frac{1}{4}$ " above the stock when the machine is at a full stop.

2. Cuts made on the band saw should be planned so that:
 - a) small curves can be cut by twisting the blade.
 - b) relief cuts are used to minimize back-out on long cuts and small radii.
 - c) the final cut is made while the saw is coasting to a stop.
 - d) All of the above.

3. Stock with a round or otherwise irregular base:
 - a) may be cut provided that the operator has adjusted the tilting table.
 - b) requires a special band saw.
 - c) may be cut only with a **special setup** cutting jig such as a v-block.
 - d) should be cut fast while the instructor is not looking.

4. If it becomes necessary to back out of a long cut, you should:
 - a) yell for help.
 - b) turn off the motor. Bring the blade to a complete stop and then back the stock out carefully.
 - c) try to turn the stock on the blade.
 - d) rapidly back the stock out.

5. When you are finished using the band saw you should:
 - a) turn it off and walk away; the blade will stop eventually on its own.
 - b) turn it off and step on the brake with all your weight to stop the saw.
 - c) turn it off and gently apply the brake until the blade is stopped.
 - d) take a short break.

6. Should the band saw blade break while the machine is in motion:
 - a) run for your life.
 - b) shut off the power if possible, keeping yourself and others clear. Notify your instructor.
 - c) back your stock away from the blade immediately to avoid damage to the stock.
 - d) continue cutting until the blade comes to a stop.