

Band Saw

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear



You must receive 100% on the *Band Saw Safety Test* to use this machine.

Always

- Plan your work so you can proceed in a sequential order.
- Make relief cuts for all curved cuts.
- Back out of short straight cuts only.
- Power down the band saw before making any adjustments.
- Set the upper guide and blade guard about 3 mm (1/8") above the material.
- Keep fingers and thumbs at least 5 cm (2") away from the blade.
- Keep hands to the sides of the blade path.
- Use a push stick.
- Push the wood with light pressure and avoid excessive twisting of the saw blade.
- Use very little pressure as you near the end of a cut.
- Turn off the saw if the blade breaks and tell the teacher.
- Remain at the saw when you are finished until the blade has stopped.
- Use a brush or vacuum to clean up all scraps and sawdust.
- Disconnect the power before opening the machine for maintenance.

Drill Press

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Drill Press Safety Test* to use this machine.

Always

- Power down the drill press before installing or changing a drill bit.
- Use the correct size and style drill bit for the material being used.
- Make sure the bit is sharp, centred, and secured in the chuck.
- Remove the chuck key and ensure it is stored safely before starting the drill press. Never start the drill press with the key in the chuck.
- Set the depth gauge.
- Use a vise to prevent the workpiece from spinning.
- Clearly mark the centre of any holes to be drilled.
- Keep your free hand away from the drill bit.
- Place long material to your left.
- Set up the operation to avoid drilling into the vise or table.
- Slowly lower the drill to ensure the material is cutting easily.
- Reduce pressure just before the bit goes through the material.
- Let up on the feed lever if the workpiece begins to smoke or vibrate.

Hand Drill

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Hand Drill Safety Test* to use this tool.

Always

- Unplug the drill before installing or changing a drill bit.
- Use the correct size and style drill bit for the material. If unsure, check with your teacher.
- Make sure the bit is sharp, centred, and tight in the chuck.
- Remove the chuck key after tightening the drill bit. Never leave the key in the chuck.
- If necessary, secure the workpiece with a vise or clamp.
- Before drilling, mark the drill hole with a centre punch or awl.
- Set up the operation to avoid drilling into the vise or table.
- Do not feed the bit into the material faster than it can cut the material.
- Be aware of drill bits and screws coming through materials.
- Reduce pressure just before the bit goes completely through the material.
- Keep two hands on the drill when possible.

Jigsaw and Reciprocating Saw

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Jigsaw and Reciprocating Saw Safety Test* to use this tool.

Always

- Plan all cuts carefully.
- Position the material so that it is stable and stationary. If necessary, keep the material secure with clamps or a vise.
- Select the correct blade depending on the thickness and type of material being cut. Never use damaged or bent saw blades.
- Unplug the saw before inserting or removing blades. Be sure the blade is secure before use.
- Use both hands to control the saw safely.
- Make sure the line of cut is clear.
- Keep hands clear of the saw blade when cutting.
- Keep cord clear of the saw blade when cutting.
- Make sure the blade is not touching the wood before turning on the saw.
- Be sure the saw reaches full speed before you begin to cut.
- Ensure the saw's base is securely placed on the wood being cut.
- Use relief cuts on curves.
- Slow down the feed speed as you near the end of a cut. Never pull a moving blade out of wood being cut.
- Make sure the saw blade has stopped moving before putting down the saw.

Jointer

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Jointer Safety Test* to use this machine.

Always

- Make sure that appropriate dust control measures are in place and operational.
- Ensure that all guards are in place and functional before turning on the jointer.
- Adjustments must be made by the teacher. Never change the depth of the outfeed table.
- Check the wood for staples, grit, or other debris. Look for loose knots and severe checks.
- On the jointer, always cut wood that is more than 300 mm (12") long.
- Feed the wood into the jointer with the crown up. Never stop part way through a pass.
- Cut with the grain.
- Push the wood all the way through the cut.
- If the wood you are cutting is lower than the fence you must use a push stick or push grips. If you are unsure, consult with the teacher before cutting.
- Step the push sticks over the cutter head to avoid injury.

Mitre Saw and Chop Saw

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Ear Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Mitre Saw and Chop Saw Safety Test* to use this machine.

Always

- Power down before making adjustment to the saw.
- Have the teacher check the setup before making a bevel or mitre cut.
- Ensure the blade guard is in place and working properly.
- Plan cuts to avoid irregular grain, knots, cavities, warps, waness, and bends.
- Cut flat and straight material only. Never cut round or irregular material.
- Check wood for foreign materials such as gravel, nails, and staples and remove them before cutting.
- Use clamps when cutting wood shorter than 300 mm (12").
- Keep hands a minimum of 150 mm (6") from the blade at all times.
- Support long pieces of wood at both ends in a level position.
- Release the trigger on the saw if the wood moves while cutting.
- Hold the material with your left hand at least 150 mm (6") to the left of the blade as you operate the saw with your right hand. Hold the wood down firmly on the table and flat against the fence. If not possible, ask the teacher for assistance.
- Ensure the blade has stopped spinning before raising it.
- Clean up sawdust and scraps using a brush or vacuum.

Thickness Planer

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Ear Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Thickness Planer Safety Test* to use this machine.

Always

- Make sure that appropriate dust control measures are in place and operational before use.
- Ensure all guards are in place and functional before turning on the planer.
- Remove staples, grit, or other foreign matter. Look for loose knots and severe checks.
- Keep fingers above the wood surface so they do not get pinched.
- Ensure wood being cut is longer than 300 mm (12").
- On the first pass through the planer, place the smooth face of the wood downwards, away from the planer knives.
- Position the board with your hands clear of the infeed table and gently push the board into the planer.
- Stand to the side so you will not get hit if the wood shoots out. Never look into a running planer.
- Use a backing board when cutting stock that is less than 10 mm (3/8") thick.
- Remove no more than 1.5 mm (1/16") of wood per pass.
- If the wood gets stuck, disengage the clutch and turn the planer off. Ask your teacher for assistance.
- Allow the planer rollers to push the wood through, do not pull it out.
- Use a brush or vacuum to remove all dust, do not use your hands.

Pneumatic Nailer

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Pneumatic Nailer Safety Test* to use this tool.

Always

- Disconnect the air supply hose from the nailer before performing maintenance, loading or reloading nails.
- Disconnect the air supply hose to ensure the trigger guard is working properly and moving freely.
- Keep left hand a minimum of 30 cm (12") away from the point of contact.
- Set the nailer on the "single-trigger fire" setting. Never set the nailer to the "bump fire" position.
- Secure small materials with clamps before nailing.
- Select appropriate nail length, gauge, and material based on the intended use.
- Avoid nailing into knots, wind-shears, or other grain issues in the wood. Never put more than one nail in the same spot.
- Ensure nails do not extrude beyond the wood.
- Keep the nailer as dust free as possible.
- Never point a nailer at a person. Only use the nailer for its intended purpose.
- If you notice a loss of pressure while nailing, stop and let the compressor return to normal pressure.
- Always operate the nailer at the pressure recommended by the manufacturer of the nailer or compressor.
- After you have finished, disconnect the air supply hose before removing all unused nails from the nailer.

Portable Circular Saw

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Ear Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Portable Circular Saw Safety Test* to use this tool.

Always

- Wear hearing protection when operating the portable circular saw.
- Position the wood so that it is stable and unable to move. Smaller pieces should be secured in a vise or clamped to a bench.
- Operate the saw from a balanced and comfortable position.
- Make sure the two ends of the material will fall apart at the end of a cut to prevent pinching the blade.
- Make sure the cut path is clear.
- Unplug the saw to adjust blade depth.
- Unplug the saw to check blade guard operation.
- Before you begin a cut let the saw reach full speed.
- Make sure the blade is not touching the wood when you pull the trigger.
- Keep a firm grip with both hands when using a portable circular saw.
- Wait until the blade stops spinning before putting it down.

Portable Router

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Ear Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Portable Router Safety Test* to use this tool.

Always

- Unplug the router before changing the bit or making any other adjustments.
- Install the bit with at least 15 mm (5/8") of the shaft in the collet chuck before tightening.
- Make sure the switch is off before you plug in the router.
- If using a bit with a ball-bearing guide, ensure that the guide is securely fastened to the bit.
- Test your setup using scrap materials.
- Before you turn the router on, make sure the bit is not touching the wood.
- Use both hands while using the router.
- Secure the material with a vise, clamps, or friction mat. Never hold the wood with one hand while routing with the other.
- Cut with even pressure at a steady pace.
- Cut against the rotation of the bit.
- When you have finished the cut, allow the bit to stop rotating before putting the router down.
- Unplug the router and remove the bit before storing the router away.

Router Table

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Ear Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear



You must receive 100% on the Router Table Safety Test to use this machine.

Always

- Unplug the router before changing the bit or making other adjustments.
- Make sure the switch is off before you plug in the router.
- Install the bit with at least 15 mm (5/8") of the shaft in the collet chuck.
- Ensure push sticks are within reach before starting the router.
- Position the table fence so that an appropriate amount of material will be removed based on material, depth, and bit shape. Before you turn on the router make sure the bit is clear of the material.
- Make multiple passes, removing small amounts of material with each pass, to avoid burning.
- Feed the material against the rotation of the bit, feeding material typically from the right side of the machine to the left.
- Use featherboards to ensure consistent contact with the router bit.
- "Step" your hands over the bit and use push sticks or blocks. Never pass your hand directly over the bit.
- If using a bit with a ball-bearing guide, ensure that the guide is securely fastened to the bit.
- Before you turn on the router make sure the bit is clear of the material.
- Once the router is up to speed, cut with even pressure at a steady pace. Don't force the cut or overload the router.
- When finished, turn off the router, wait for the bit to stop spinning, and then use a brush or vacuum to remove unwanted material or a buildup of sawdust.

Safety Orientation

LAB SAFETY



Eye Protection



Ear Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

Always

- Move at a safe pace in the lab—no running or playing.
- Use electronic devices appropriately.
- Keep your personal work area clean and clear.
- Return all tools as soon as you are finished using them. This allows other students to use them and helps keep your work area clear.
- Report any damaged or missing tools to your teacher immediately.
- Use a vacuum or brush to keep your material and work area clean.
- Clean up spilled liquids immediately.
- Use extension cords temporarily, and use extreme caution to avoid tripping hazards.
- Be alert in the lab—do not distract others while they are working.
- Identify locations of emergency power shut-off switches.
- Identify emergency exits and know the evacuation plan.
- Treat other students, teachers, projects, tools, and materials with respect.
- Ensure you know where the first aid kit and eyewash station are located.
- Ensure a safe operating distance when others are near.
- Ensure power is disconnected before opening machines for cleaning.

Safety Orientation

PERSONAL SAFETY



Eye Protection



Ear Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

Always

- Remember the ABCs of safety: **A**lways **B**e **C**areful.
- Wear eye protection when working in the lab.
- Ensure ear protection is worn by everyone when the thickness planer is in use.
- Tie long hair back and tuck it out of the way.
- Remove or secure loose clothing, including hoodie strings and long sleeves.
- Remove jewelry and lanyards.
- Wear sturdy footwear.
- Do not operate equipment when under the influence of drugs or alcohol.
- Notify the teacher immediately in the event of an injury (even minor injuries).

Safety Orientation

TOOL / EQUIPMENT SAFETY



Eye Protection



Ear Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on each Safety Test, including demonstration to the teacher, to use tools and equipment.

Always

- Ensure machines and tools are turned on and off by the operator only.
- Power off machines and tools before making any adjustments.
- Sharp tools are safest when used correctly—they will cut most accurately and with little force.
- Use tools the way they were intended to be used (for example, a chisel is used for cutting, not for prying).
- Power off the machine and report to your teacher if the machine starts to make unfamiliar sounds.
- Carry hand tools carefully and with sharp tips facing down.
- Ask the teacher for help if you are unsure about proper tool usage.
- Use the handle to move or lift a power tool. Do not carry a tool by the electrical cord.
- Be alert in the lab—do not distract others while they are working.
- Be courteous in the lab—share tools and materials.
- Ensure your hands or body are not located in the direction of force when using sharp tools.
- Secure materials using clamps and/or vises.
- Report all dull or damaged tools immediately to your teacher.

Scroll Saw

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Scroll Saw Safety Test* to use this machine.

Always

- Unplug the scroll saw before making any adjustments.
- Use relief cuts where appropriate.
- Check the blade tension to ensure the blade is tight and will not bend during use.
- Be sure the blade guide is resting on top of the wood.
- Keep your fingers at least 2.5 cm (1") away from the blade, never allow your fingers or thumbs to be in line with the blade.
- Stop cutting if you see or smell smoke from the blade area.
- Use a jig or clamp for cutting cylindrical or odd shaped pieces.
- If a blade breaks, turn off the machine immediately and then tell the teacher.
- Release the blade tension before unhooking the blade.
- Adjust the blade speed according to the thickness and type of material being cut.
- When finished, wait for the machine to stop, and then clean up any scraps and sawdust using a brush or vacuum.

Stationary Sander

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Stationary Sander Safety Test* to use this machine.

Always

- Before sanding ensure the dust collection system is activated and functioning.
- Ensure the disc and belt are not ripped or damaged.
- Before changing the sanding disc or belt unplug the machine.
- Before sanding make sure all layout marks are clear.
- Check that guards (if applicable) are located correctly (10 mm) over the disc and belt.
- Ensure the wood is not touching the sanding disc or belt when you start the sander.
- Hold the wood firmly to the table and lightly to the sanding surface.
- Hold the wood carefully against the work table so that you never touch the moving disc or belt.
- Remove only small amounts of wood. Use a saw if large amounts need to be removed.
- Use a “cleaner” (crepe rubber block) to keep the disc and belt free of buildup.

Table Saw

SAFE OPERATING PROCEDURES (SOP)



Eye Protection



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Table Saw Safety Test* to use this machine.

Always

- Remove unnecessary wood, tools, and sawdust from the table and floor area where you will be working.
- Turn off the power before adjusting or maintaining, .
- Ensure the blade guard, anti-kickback fingers, and splitters are in place and working properly. Check that no one is in the kickback zone.
- Material being cut must be longer than 300 mm (12").
- Set the blade height to clear the wood by about 5 mm (1/4") for most jobs.
- Ensure the correct throat plate is matched to the blade.
- Ensure the fence in the correct position and secure.
- Keep hands well away from the blade at all times. Hands should never be in line with the blade. Use push sticks that are in good working order and appropriate for the cut.
- Use a bench, or roller to support the outfeed area of the table saw.
- Use a push stick when ripping pieces less than 150 mm (6") wide.
- Stand to the left side or right side of the blade to avoid kickback injury.
- Support the wood on its longest side; use the fence when rip cutting. When ripping, hold the longest side of the wood against the fence.
- When crosscutting, use a mitre gauge or crosscut jig. Never use the fence when crosscutting.
- Always use either the mitre gauge or fence, never both.
- Make sure the blade has stopped completely before picking up material or scrap wood from the saw.
- Always push the wood all the way through and past the blade when making a cut.
- When crosscutting use both hands to hold the wood tightly to the mitre gauge.
- Always cut flat stock; never cut round or irregular shaped wood that doesn't sit flat on the table.
- Always feed the wood through the front of the saw and never back a piece of wood out of the blade.
- Use of jigs and fixtures must be supervised by the teacher.

Wood Lathe

SAFE OPERATING PROCEDURES (SOP)



Face Shield



Hair Tied Back



Close Fitting
Clothing



No Jewelry



Appropriate
Footwear

! You must receive 100% on the *Wood Lathe Safety Test* to use this machine.

Always

- Unplug the lathe before making any adjustments.
- Inspect the material for bad glue joints, loose knots, or severe checks. Any of these defects could cause an accident.
- Remove all chuck keys and wrenches before operating the lathe.
- Rotate the material by hand before turning on the lathe to check clearance.
- Begin turning the lathe at a low speed to check for balance.
- Keep the tool rest close to the workpiece at all times—within 5 mm if possible. Move the tool rest closer as the work progresses.
- Turn off the machine to adjust the tool rest.
- Control the chisel by holding it against the tool rest with your front hand while pressing down with your thumb. Your back hand should steady the chisel by holding the chisel against your hip.
- Remove the tool rest from the lathe when sanding or finishing your project so there is no danger of pinching your fingers.