



Red Tool Wood Shop Training - Purcellville (BASIC)

Dust Collector

Drill Press

Panel Saw

Spindle Sander

Table Saw

Sanding Table

Miter Saw

Paint Booth

Disk Sander

Shop Vac

This training/orientation class will introduce you to the basic tools in the wood working shop. In the classroom we will discuss each tool, what they do, and how they operate. We will then go into the shop to watch a demonstration of each tool. Each member will have an opportunity to operate the tool and at the end of the class each member will demonstrate that they can safely operate the tool.

Walking Tour

- *Where is everything? – Let's take a quick walking tour so you'll know where things are.*
- *Light switches*
- *Storage of your tools and materials*
- *Rest Room*
- *Kitchenette and Refrigerator*
- *Dust Collector & Air Compressor*
- *Heater & AC controls*
- *First Aid Kit*
- *PPE*
- *Spare parts, supplies, hand tools*
- *Out of Service signs*
- *Wood Rack*
- *Electric Panels (location of circuit breakers)*

Dust Collector

What does it do?

Vacuums sawdust to filter outside of building. Keeps sawdust off the floor, out of the machines and most importantly out of your lungs! Check the bags out back and empty them if they are more than half full. We use the sawdust for weed control. On/off switch is on the wall above the tool bench. Make sure the vent is open for the tool you are using!

What doesn't it do?

Not intended for fume extraction

PPE:

Hearing protection (One of the tools not to be used after 9pm)

Accessories:

None

Breaker Location:

Panel in Metal Shop

Consumables/User Serviceable Parts

Dust bags need to be emptied when full. Empty them on the side of the hill and re-use the bags when possible. If a bag needs to be replaced due to a hole, extra bags are available on the shelves next to the firstaid/PPE equipment.

Panel Saw

Milwaukee 6480-20

What does it do?

This saw is handy for reducing big panels of sheet goods (plywood, MDF, OSB, and Acrylic) into pieces for your project or simply pieces small enough to handle conveniently. By rotating the saw you can make both vertical and horizontal cuts. (When cutting acrylic move the saw quickly and smoothly



through the cut, the friction created by stopping or moving too slowly will melt the edges of the cut and in extreme cases can cause the blade to stick in the material.)

What doesn't it do?

This saw is fitted with a special blade meant to reduce tear-out in plywood, it does not cut particularly well through solid woods. If you try you will likely experience burning along the cut and the effort to push the saw through the work piece will be higher than expected.

PPE:

Eye protection, hearing protection

Dust Collection:

Required to remove fine dust during cutting. After use, you will need to sweep/vacuum around the base of the machine.

Accessories:

Black cable spools on the floor protect from trip hazard

Breaker Location:

Metal shop, RH Panel

Consumables/User Serviceable Parts

If you notice that the blade has become too dull, report it to the tool/room steward for replacement.

Table Saw

Delta 10" Tilting Arbor Unisaw 34-761



What does it do?

Most used saw in the shop. A table saw is a very versatile machine, you can rip lumber lengthwise, or crosscut using a miter gauge, you can tilt the blade to cut beveled edges up to 45 degrees and there are a variety of ways to cut dados and rabbits.

What doesn't it do?

Non-wood cutting.

PPE:

Eye protection, hearing protection, proper apparel

Dust Collection:

Required

Accessories:

Push blocks, push sticks, feather boards, crosscut sled, a variety of specialty blades

Breaker Location: LH panel in Metal Shop

Table Saw Operation

- Check to see if it needs to be cleaned and waxed
 - Scotch Brite pad by Spindle Sander
 - Wax by Miter Saw
- Always use a Splitter or a Riving Knife behind the saw blade to make certain that your wood can't pinch the blade if the kerf begins to close as it moves through the blade.
 - **HINT!** If you leave the blade guard on the saw then you don't have to worry about this as all blade guards incorporate a splitter or riving knife.

- Always push your workpiece all the way through the blade.
 - Maintain control of your workpiece until it is completely beyond the saw blade.
- When performing a cross cuts always use the miter gauge to help support the board to make certain that it doesn't twist.
 - Better yet, use the sliding compound miter saw or the panel saw to do your crosscuts.
- Never attempt to "freehand" a cut on the table saw always use a guide, either the fence or the miter gauge.
- Never attempt to place the short side of a board against the fence when the long dimension of the board is more than 10% longer than the short side.
- When making repetitive crosscuts of the same length with the miter gauge never use the fence as a guide.
 - Instead, clamp a block to the fence so that the workpiece slides off the block before encountering the blade.
- Make it a habit not to stand directly in front of the blade.
- Always wear eye protection.
- Always observe the three inch rule.
 - Never let any part of your body within 3" of the saw blade.
- When cutting difficult to hold workpieces or long boards
 - Use fence mounted rollers to keep your work firmly against the fence.
 - Use a feather board to keep your work firmly against the fence.
 - (when not on the saw they are stored in the drawers under the miter saw)
- Never "back out" of a cut.
 - If you don't like the way things are going, hold the workpiece still, stop the saw, and wait until the blade stops turning.

Miter Saw

Dewalt 12"Sliding Compound Miter Saw DW 718



What does it do? Useful for cross cutting long pieces of wood up to 12" wide at any angle from 45 degrees to 90 degrees. Accurate enough to cut miters for picture frames.

PPE: Eye protection

Dust Collection: Required

Accessories: None

Breaker Location: Panel in Green room

Disk Sander

Delta 12" Disk Sander 31-120



What does it do? Great for sanding a variety of jobs in a variety of materials. Need to sand precisely up to a line? Or create a graceful curve? This sander is for you! Change the grit of the disk for a glass smooth finish or to remove tons of material quickly.

PPE: Eye protection

Dust Collection: Not connected, use the Shop Vac

Accessories: Various grit sandpaper

Breaker Location: Panel in Green Room

Drill Press

Delta Shopmaster Benchtop Drill Press DP350



What does it do? Drills holes in wood and other materials.

What doesn't it do? Not an effective sander

PPE: Eye protection

Dust Collection: None

Accessories: Drill bits, clamps

Breaker Location: Panel in Green Room

Spindle Sander

Oliver 6910-003



What does it do? Useful for sanding inside curves in a variety of soft materials, Primarily Wood and plastics.

PPE: Eye protection

Dust Collection: Required

Accessories: Large selection of spindle diameters and sandpaper grades.

Breaker Location: Metal Shop

Note: Clean spindle with Scotch Brite pad when changing spindles

Sanding Table

Denray Downdraft Table 2872



What does it do? Take the dust out of sanding! Do your finish sanding on top of this table and it gently sucks the dust down and away from you down into its filter system.

PPE: Eye Protection

Dust Collection: Self-contained, clean out with Shop Vac after use

Accessories: None

Breaker Location: RH panel in Metal Shop

Paint Booth

Global Open Face



What does it do? Allows spraying of various finishes and exhausts fumes and overspray through filters.

What doesn't it do? Not intended for dust collection

PPE: Hearing protection, Tyvek suit with hood (read finish container for requirements)

Dust Collection: Provides its own

Accessories: None

Breaker Location: Metal Shop