Tools for Shaker Box Class

Hello students! Thank you for taking my Shaker box class. I wanted to give you a list of tools that will be helpful for our class as well as describe the sort of workspace you'll want to have. Although this project can technically be done using only hand tools, a bandsaw and a disc sander will definitely speed up some of the fussier steps. I'll explain all of this in further detail during class but wanted you to know ahead of time so that you could plan. Please feel free to contact me with any questions.

WORKSPACE

• You'll need a way to safely boil water in the soaking tray (provided with the class materials) **close to where you will be working**. I use the base of a turkey cooker which runs off of propane. Other options include a hot plate or camp stove. I built simple stands out of 2x4s to support the ends. These may not be necessary for your setup.

- You'll want a work surface that can get wet. I use a piece of 24" x 24" melamine for this.
- You will need a way to immobilize the pipe that we're using as an anvil in a way that leaves one end free for hammering on. I have mine clamped in a vise. If you don't have a vise you will want to figure out a way to clamp it to your work surface. Here is one option:

- You will need a way to clamp a hand drill on its side so that a 1/16" drill bit is perfectly horizontal. You will also need a way to elevate the boxes in relation to the drill bit so that the center of the bit is ⅛" higher than the elevated surface. I found the combination of sheet goods that put the box at the perfect height and clamped my drill to my work surface.

TOOLS

Please note… many substitutions of the below tools can be made. Please feel free to contact me regarding alternatives. I don't want you to go buy a tool just because it's on this list unless you just need an excuse to buy a new tool!

• scissors
• small combination square (optional)
• 12" ruler
• utility knife; I prefer these small snap knives by OLFA: **olfa 30o knife**. The 30o blade is nice for getting into tight spots. My second choice would be this: **olfa standard knife**.
• self heal mat or cardboard for cutting on
• scratch awl (**scratch awl**) or small nail to mark the drill locations for the copper nails
• cordless drill with a 1/16" drill bit and sacrificial backer board to drill into
• We have to taper about 1-½" on the ends of our box bands. This goes quite quickly by using a stationary belt sander (best) but could also be done using a sanding block with 100 grit sand paper (good) or a file (better). Here is a little combo belt/disc sander if you are in the market: **combo sander**.
• tongs for removing hot bands from the water
• heavy gloves to protect tender hands from the hot wood
• small hammer
• bandsaw (best) or utility knife (good) or coping saw (better) to cut the rigid foam for the cores and the cherry tops and bottoms. The OLFA knife mentioned above would work. Here is an option for a coping saw: **coping saw**. This should also be available at any big box store.
• We will need to put a 4o taper on the top and bottom boards once they are cut. There will be a lot of fussing and finessing to get a perfect fit. This is done most quickly with a disc sander (best) but could also be done with a lot of patience and elbow grease using a sanding block with 100 grit sand paper (good) or a little less patience and elbow grease and a file (better). But you're in luck! The belt sander listed above also has a disc sander!
• t-bevel, tilt box or other way of setting the table on the disc sander to an angle (optional if using a disc sander)
• double sided tape
• several 6" f-style clamps. I buy all of these types of clamps at Harbor Freight: **f clamp**. These should be easy to find at any big box store.
• small wire cutters, jewelry pliers, cutting pliers or flush-cut saw for trimming wood pegs that hold the tops and bottoms in place.
• vise (optional)
• cloth tape measure (optional) **cloth tape measure**