

Preparation steps for turning
Laminated Pepper Mills

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06 May 2008

1. Select and cut wood to 12" X 3" long, in various thicknesses.
 - A. Joint one side of the board.
 - B. Bandsaw (resaw) boards to various thickness. Always joint one side before continuing to resaw.
 - C. After cutting required number of boards, stack them from thickest to thinnest for planing.
 - D. With jointed side down, plane all boards. This gives 2 flat surfaces.
 - E. Arrange boards in whatever order you chose. The emphasis is on putting different woods next to each other. Thin colored or natural veneer's may also be used.
 - F. Glue boards with yellow glue, using a roller to apply glue, making sure both sides are glued. Glue as many boards together as time for glue set to take place. Clamp, or put in press, with heavy pressure. When gluing, try to start and end each group of glue-up with thicker boards on each end.
 - G. After groups of boards are dry, joint each end to insure flatness. Glue the groups together as before.

2. Cutting the blanks.
 - A. After the block is dry, set the table saw miter to 10 degrees, or what ever incline you want.
 - B. Make the first cut using the miter. After the first cut set the saw rip fence to 3" and continue cutting the blanks.
 - C. After ripping, square the ends of the blanks with a miter saw.

3. Turning the blank.
 - A. Mark the center on each end of the blank and install between centers on the lathe.
 - B. Turn a tenon on the head end of the blank to fit your jaw chuck
 - C. Measure from the shoulder of the tenon 8" to the right. Place a mark. Also place a mark at the 10" position. This will be the top of the pepper mill. Next, cut a tenon on the left side of the 10" mark to fit your jaw chuck.
 - D. Using a sled, cut the excess off of the tail stock end, leaving the tenon. Next, using the sled, cut the top off of the pepper mill.

4. Drilling the blank.
 - A. I resaw 3/4" construction pine to 3/8". Using a 2 1/4" hole saw, cut sacrificial glue blocks.
 - B. Place the bottom blank back in the jaw chuck.
 - C. Glue the temporary glue block to the approximate center of the top end of the bottom pepper mill blank and let dry. (Super glue can be used in place of yellow glue).
 - D. After drying, true the temporary glue block.
 - E. Reverse end of the bottom pepper mill blank and rechuck. Drill a 1 5/8" hole 3/8" past the tenon, or approximately 3/4" from the bottom of the tenon on the pepper mill. Next, drill 1 1/16" hole as far as you can drill from the bottom of the pepper mill. I don't go all the way through because the drill bit is usually wobbling and would give an off center hole at the top of the bottom of the pepper mill.

- F. Reverse the bottom of the pepper mill and rechuck. Cut the temporary glue block off, being careful not to take any more of the pepper mill wood off than is necessary to clean up the temporary glue block.
 - G. Finish drilling the bottom of the pepper mill using the 1 1/16" drill. Remove the bottom of the pepper mill blank from the chuck.
5. Preparing the top of the pepper mill.
- A. Rechuck the top of the pepper mill.
 - B. Drill a 1 3/8" hole in the bottom of the top mill piece 1/4" deep. Remove the top from the jaw chuck.
 - C. Chuck up a scrap piece of maple or any other wood you like. Turn it round so that it will fit into the hole drilled in the bottom of the top piece of pepper mill. Make this piece approximately 1" long. Part this piece off of the block and glue into the hole on the bottom of the top of the pepper mill making this the tenon that goes into the pepper mill bottom..
 - D. Drill a 7/8" hole in the end of the top tenon. Make the depth deep enough to allow the metal part and screws to be below the tenon bottom. This hole will probably have to be widened slightly as the metal piece that goes into the top is slightly larger than 7/8". Drill a 17/64" (next drill size larger than 1/4") hole all the way through the top
 - E. Turn the tenon down to fit inside the 1 1/16" hole in the pepper mill bottom. Remove the top from the chuck.
6. Turn the Pepper Mill
- A. Rechuck the bottom of the pepper mill in the jaw chuck. Insert the top of the pepper mill in the hole. If the fit is loose, use a paper towel to tighten the fit.. Bring the tail stock live center up and tighten against the top. Make sure all lines between the top and bottom line up..Turn the pepper mill to what ever shape you desire. Stop often to recheck lines. Adjust and tighten tail stock if necessary.