

Salt and Pepper mill.

Parts needed: (this is for a 4" mill)

One 16oz plastic water bottle, Peanut butter jar or a pringle can. (make sure it fits your design)

One piece of $\frac{3}{4}$ " Sq X 5" long pine (or soft wood)

Hot glue gun

scrap wood (small pieces)

Duck tape

Rubber bands

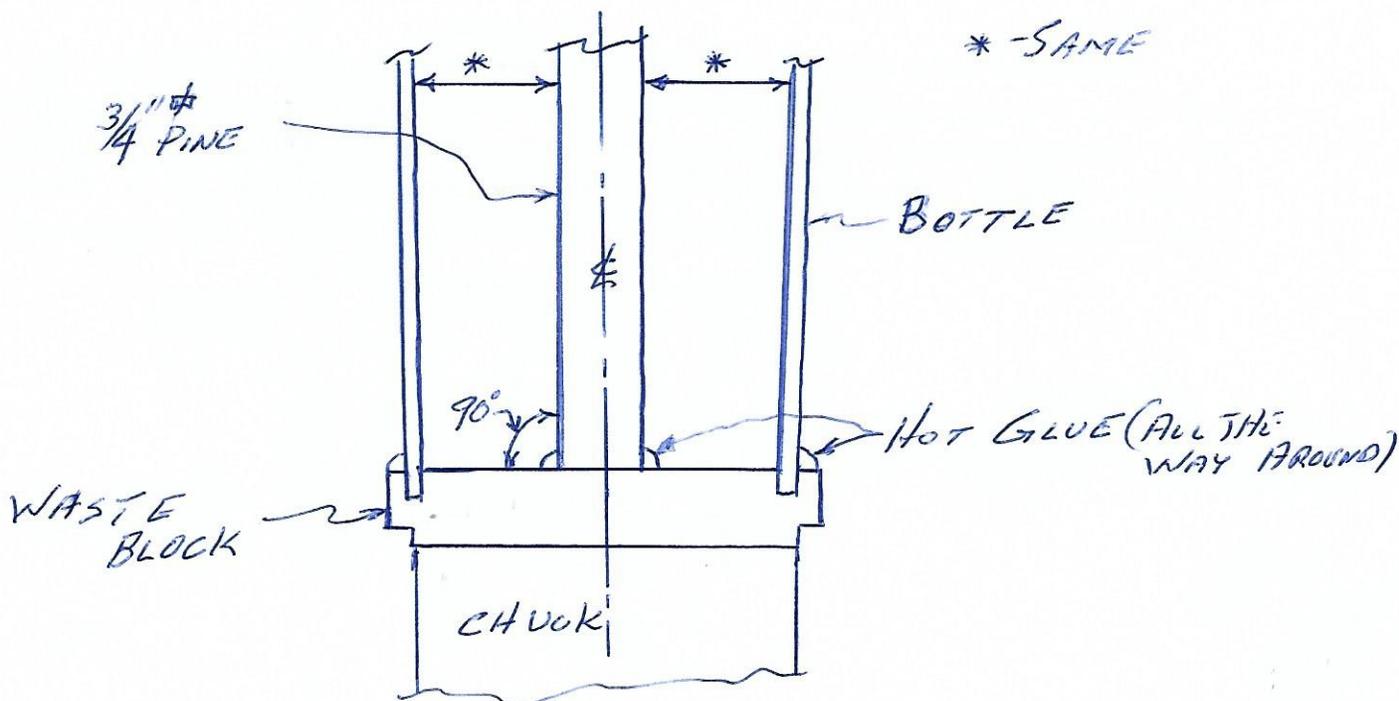
Resin

One piece of $\frac{3}{4}$ " x 4 " sq or 2x4x 4"sq. Pine.

Start with the 4"sq piece of pine block. This will be your base/waste block. Cut a Tenon one side that will fit into your chuck that you want to use. Mount it in the chuck and on the face side cut it flat. It has to be flat. Next cut a groove in the face about $\frac{3}{16}$ " deep that match's the bottle, jar or can that you are going to use. Mark the center point.

Leaving the waste block on the chuck take it off the lathe. The $\frac{3}{4}$ " sq x 5" long piece of wood that needs to be sq on the ends. Mark the center point of the waste block. Using a SQ and the hot glue gun, center the $\frac{3}{4}$ " piece 90deg to the waste block. You want it to be center and SQ on to the waste block. Make sure it is glued on good.

Now put one end of the bottle, jar or can into the groove that you cut in the waste block. Place a small amount of hot glue on the outside on one side then a small amount across from the first one. See if the $\frac{3}{4}$ " piece is in the center at the top. If not center it. Now add a small amount of hot glue to the other sides and again ck to see if it is still centered. After making sure the piece is centered let the glue cool. You need to seal the bottle to the waste block all the way around making sure the piece in the center stays in the center.



Starting with the largest pieces of scrap wood, place them in the open area. Be careful not to push the center piece off to one side, that needs to stay in the center. Just keep adding wood, smaller and smaller pieces. At times shake the bottle to get the pieces to settle in. Keep adding smaller pieces. You have to get the bottle full and above the outside. Once you get it full and you can't get any more in there add some more. One thing to keep in mind, Color, Try to mix up colors. You do not want all the maple on one side not unless that's the way you are wanting it to come out.

Take some rubber bands put them around the outside of the wood. You are wanting to pull everything to the center. The center piece is hot glued to the waste block and will not float when the resin is added. So by pulling all the smaller pieces up to it should not float. However keep the tape on hand.

Take a piece of duck tape going around the bottle putting about $\frac{3}{4}$ " above the bottle. Why you ask..... when you mix the resin you will not get it just right so the tape is there for the over flow.

Mix your resin, you may want to add a little color, not too much or it will not set up.

If you want to add Brass or Copper you can add some on top and tap on the sides and some will settle down. After you have mixed the resin and poured it in wait about 3 hrs and put some on top and with a stir stick mix it in and it will sink down. If you add it too soon it will just go to the bottom.

NEXT DAY

First ck the length you need. I leave about $\frac{1}{4}$ " off the face of the waste block and then mark off the size I need. On the band saw cut off sq. you should have the $\frac{3}{4}$ " piece in the center. Find the center point. Mount the chuck back on the lathe, pull the tail stock up and center it in the center piece. You are ready to turn it.

Think : On a Salt and Pepper mill you will drill a $\frac{21}{32}$ " at the top (you will need to sand out a little so the handle will turn freely). A $1 \frac{1}{16}$ " hole for $3 \frac{1}{2}$ ". The center piece is mostly gone. Some will drill the $\frac{21}{32}$ hole all the way through, I will not. Why.... The bit will move and when you do your turning the hole will not be in the center at the top. I wait until I have it all turned and then drill the top so I have it centered. If you have it right on there will be a small amount of the center piece of wood to show but the handle will cover it, the drill size and the piece of wood size is $\frac{3}{32}$ " diff. If not it fits in.

BOWL'S

First we start with the backing plate. At first I was using a piece of plywood and cover it with about 3 layers of News Paper. If you are just using glue, after you are done you can split the bowl from the backing plate with ease. I did that on my first bowl with resin. Resin will soak through the paper and into the wood. I had to turn the backing plate which was made of plywood off the bowl.

Plan "B".. Made the backing plate out of a piece of solid wood. Soaked right in, tore up the backing plate.

Plan "C".. Same as B but this time I coated the paper with a coat of glue. Did not work.....duh the glue is water soluble, the resin went right through it.

Plan "D".. Covered the backing plate with what I call heavy paper then coated it with a good coat of lacquer. The bowl split right off from the backing plate.

Make sure your backing plate is flat. Put a waste block on the bottom with a tenon that will fit into your chuck. This will come up again later. Cover it with heavy paper. When gluing the paper on make sure there are no bubbles or wrinkles. The heavy paper is about the same as the back of a pad of paper. Let it dry well and then put on a good coat of lacquer, making sure you coat the whole thing good. Let it dry well.

Think of a pattern, lay it out on a sheet of paper and then find the wood you want to use and start putting the pieces on. Put a few drops of glue on the bottom of each piece, this will hold it from floating. Also between the pieces glue a small piece of stir stick on the side near the bottom. This will give a gap between the pieces that the resin will fill. Also this is where you can add copper or brass.

Let the glue dry or set up good and on the band saw cut the pieces you glued to the backing plate off flush with it. Along the edge where the backing plate, paper and the pieces of wood you added, put a small amount of hot glue. Just rub it along that area all the way around. The reason is when you pour the resin in it will fill in the gap that you left between each piece of wood, over to the tape you are going to add to hold it and will soak into the paper and wood along the edge and then it will be stuck.

Now for that Duct tape I talked about. Start the first roll with the edge about 1/2" above the wood pieces. Go all the way around with one round. Now rub the tape down on the edge of the backing plate good and on the ends of the wood pieces. For the 2nd roll of tape, center it on the bottom edge of the backing plate. Half will go under the bottom the other up the side. Again rub it down good. On the bottom look for spots where you think the resin will run out. If you see some, use a little hot glue. Resin will find a way out. You can add a 3rd roll if you wish. Put it over the first one, this way you can seal up the edge of the 2nd roll again rub it down well.

Before you pour the resin you need to level the bowl. On small ones you can be a little off but on a large one you need it level. If you do not do this the resin will run to one side and

maybe over the top of the tape. Here is a good way to do it. Place the bowl in your vise. Using the Tenon to clamp down on lightly, move it around until you have it level. Now tighten the vise down good and recheck.

You are ready to mix up your resin and pour. If you do put dye in the resin, do not use too much as it will not set up. Mix up a small batch and pour over the wood. Check to see if you have any leaks. If not, then mix up some more and pour. Keep this up until you have the depth that you want. I use $\frac{3}{4}$ " to just short 1" deep. Go around the edge with a small hammer and lightly tap on the backing plate. This will help with any bubbles. Again check for leaks. If you have one, take a piece of tape and put over it fast and rub it down.

If you want to add copper or brass, wait about 2-3 hrs. Put a small amount on top over one of the gaps and take a stir stick and mix it in. Watch to see if it sinks in. If it seems to want to float then add more and mix. Some will sink down. If you see if it does sink down in a short time then wait a little longer and try it again. Adding it too soon it will just go to the bottom.

Next day you are ready to turn.