

## Wacky Salt Shaker

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Parts: Probe, wacky mold, wacky shaker, and lid

**Probe:** 6" 12-gauge stiff straight coat hanger wire, wood handle



Figure 1 12-gauge coat hanger probe

**Wacky Mold:** 3 1/2" square, 3 3/4" long side grain, dry (soft) hard wood poplar

ROUGHING GAUGE, BOWL GAUGE, SPINDLE GAUGE, PARTING TOOL, 3/8" drill bit.

1. Between centers. Rough to 3 1/2"; one side tenon
2. In scroll chuck. Turn 2 1/2" cavity of approximate half sphere shape. With 3/8" bit about 1/2" off center – drill tangent through center of opening for the throat. Reduce diameter at the headstock side to get good access to the drilled hole with the probe.

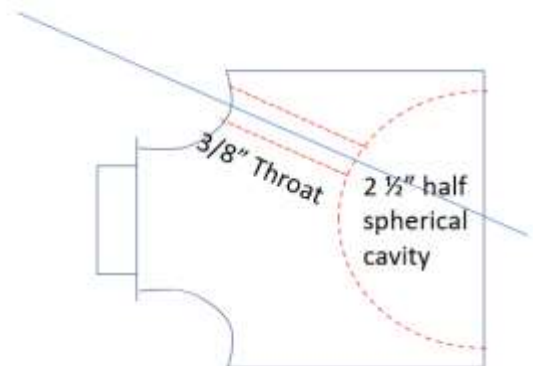


Figure 2 Mold with cavity and position of throat

**Lid:** 1" square, 2" long side grain, dry hard wood

Pen blank chuck or similar, ROUGHING GAUGE, SPINDLE GAUGE, DETAIL GAUGE, PARTING TOOL.

1. Between centers. Rough to 1".
2. In scroll chuck. Turn a straight shoulder. Apply a finishing cut at the outside diameter. With a PARTING TOOL create a slightly smaller diameter 1/8" off the end. Now part the lid at about 7/32" off the end.



Figure 3 Lid with two diameters

Wacky Shaker: 2 ½" square, 4 1/4" long side grain, dry hard wood

ROUGHING GAUGE, BOWL GAUGE, SPINDLE GAUGE, 1/8" drill bit 1 3/8" length, DETAIL GAUGE (optional), PARTING TOOL, masking tape, small hollowing tools (e.g., Hunter ¼"), hot melt glue, butter knife.

1. Between centers. Rough to 2 ½" diameter, one side gets a tenon that is close to smallest opening of the chuck jaws.
2. In scroll chuck. Turn shape as in figure 4 with a large diameter of 2 ½" diameter; the large diameter is about 2 ¼" from tailstock side. With the neck still thick and the shape approximated, drill a 1/8" hole in the center. Drill about 3/8" past neck. Then turn outside of the neck to less than 3/8" diameter. Now, trace the widest diameter with a pencil. Fit the mold on top of shaker such that about half of the pencil line is covered, figure 5. Reconfirm with drill or probe the depth of the neck. Round the bottom of the shaker to about 1 ½" diameter, figure 4. Sand and add texture optionally. Add your favorite finish on the outside. Add masking tape around maximum diameter.
3. Mold in scroll chuck. Insert shaker and fix with hot melt glue on to the masking tape, figure 6. Bring the tailstock in to reduce vibration of the eccentric base end of the shaker. Trim the eccentric base such that there is at least a 1 ½" flat (or better: slightly indented) base. Mark the approximate large diameter of the lid and create an opening that fit the bottom side, the larger diameter of the lid. Make sure the hole is nice and straight with a recess for the smaller diameter of the lid. Fit the bottom in reverse at this stage, figure 6. Drill a pilot hole to about 1 ¼" depth into the base of the shaker to ease the hollowing. Start to hollow the salt cavity. You will discover the opening of the predrilled hole from the neck, figure 7. Now fit the smaller diameter of the lid such the lid fits flush at the bottom of the shaker, figure 7. You can use the probe to extract the lid from the neck side. Ideally the lid sits tight such that it can be extracted by a conventional wood skewer through the neck. Now finalize the cavity. Use a light and/or your finger to check the cavity size. Due to the multi-dimensional character of the shaker the wall thickness is not constant, you may not aim for the thinnest walls on the first project 😊.
4. To extract the shaker from the mold sometimes pulling with the finger from the inside is sufficient. Alternatively heat a butter and melt the glue without



Figure 4 Shape of the main axis of the shaker

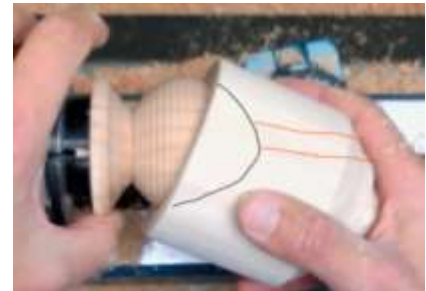


Figure 5 Fit the shaker into mold.



Figure 6 Shaker glued in mold. Fit the lid in reverse.

damaging the masking tape. With the shaker extracted the masking tape can be pulled off together with the hot melt glue.

5. Add salt and check the function of the shaker. Ideally the lid sits snug with salt inside the shaker and can be opened with a conventional wood skewer from the throat.



Figure 5 Shaker from below. Closed and open.