

Lighthouse Woodturning Project

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Materials:

Log 5 in. to 6 in. diameter x 13 in to 14 in. long blank with bark on if desired.

1 ¾' diameter x 2 ¼" long clear rigid plastic pipe

Battery tea lamp

Blank Preparation

- Mount the blank **between centers** and determine which end will become the **base**.
- On the base end, turn a **tenon** approximately:
 - **2-1/8 in. diameter**
 - **7/16 in. long**
- Mount the tenon securely in the lathe chuck and verify that the blank runs true.



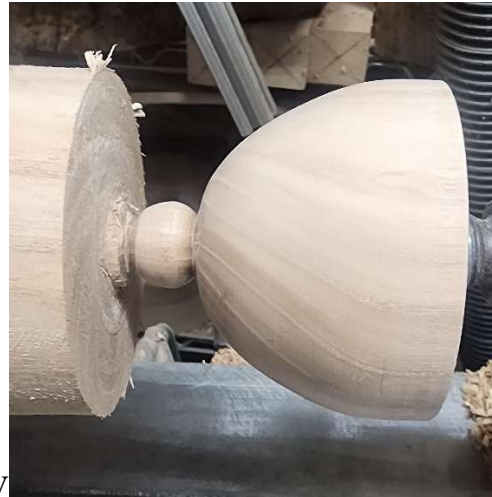
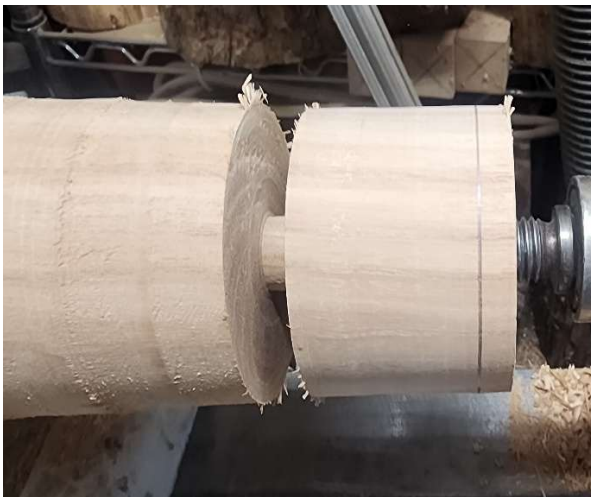
Rough Turning

1. Determine the location of the lighthouse base.
2. Using a parting tool, cut a parting line to approximately **3-1/2 in. diameter**, located **1-1/2 in. from the chuck end**.
3. Rough turn the blank from the tailstock end to the parting line until it measures **3-1/2 in. diameter**.



Making the Roof

1. Using a **45 mm Forstner bit**, drill **5/16 in. deep**.
2. Return the tailstock live center to support the workpiece.
3. Mark the blank:
 - **3/8 in. from the tailstock end**
 - **2-1/4 in. from the tailstock end**
4. At the **2-1/4 in. mark**, cut a groove on the headstock side of the line:
 - **3/4 in. diameter**
 - **3/4 in. wide**
5. Beginning at the **3/8 in. mark**, shape the roof using either a bowl gouge or spindle gouge.
 - The roof may be a straight taper or a smooth radius. The diameter at the tailstock end should be no smaller than the ultimate diameter of the top of the tower (**2-1/2 in.** in this example).
6. The **3/4 in. diameter section** may be left straight or rounded on both ends.
7. Sand and apply finish.
 - **Do not apply finish inside the 45 mm drilled recess**, as this will serve as the glue surface.
8. Part the completed roof from the blank using a narrow parting tool.
9. Glue light house glass to the roof section using small amount of thick CA glue.



Making the Lighthouse Body

Drill the Top

Using Forstner bits, drill the following recesses:

Bit Size	Depth	Depth from End	Purpose
2-1/4 in. (57 mm)	3/8 in.	3/8 in.	Walkway around lighthouse
45 mm	1/4 in.	5/8 in.	Recess for lighthouse glass
1-9/16 in. (40 mm)	3/8 in.	1 in.	Recess for lighthouse lamp

Return the tailstock center for support.



Shape the Upper Portion of the Body

1. Mark the blank **1–1-1/4 in. from the tailstock end**.
2. Cut a groove:
 - **1/4 in. wide**
 - **2-3/8 in. diameter**
3. Turn the section from the tailstock end to this groove down to **2-1/2 in. diameter**.

Shape the Body

1. From the headstock side of the groove, taper the lighthouse body toward the base parting line. This is not the final diameter. This diameter will be the diameter at the top of the beads
2. Mark bead locations:
 - **3-1/2 in. from the tailstock end**
 - **6 in. from the tailstock end**
3. Form a **1/4 in. bead** at each mark.
4. Raise the beads by removing material between:
 - the two beads,
 - each bead and the ends of the lighthouse.
5. Blend the lower bead into the lighthouse base and island.



6. Sand and finish as desired.

Parting Off the Body and Island

1. Retract the tailstock center approximately **3/8 in.**
2. Loosen the chuck and slide the lighthouse toward the tailstock.
3. Retighten the chuck so that only **1/8–3/16 in.** of the tenon remains engaged in the jaws.
4. Bring the tailstock center back into contact to support the work.
5. Using a thin parting tool, remove the remaining tenon while tapering the underside from the outside edge of the island toward the center.
6. Leave a small nub, then cut the remainder with a handsaw.
7. Sand the bottom smooth.
8. Apply the final finish if needed and sign your work.

