

Winged Lidded Box

Turning a winged item is not for the light hearted. You need to be comfortable with the lathe turning at 2,000+ rpm. It is best to start with a short piece, say 6", to gain this comfort level. Once you feel comfortable at this size you can go longer.

1. Select a hardwood like hard maple. A softer wood will general produce cut off corners. Crisp clean corners is one of the indicators of a well turned piece. Be sure to have clean cut ends and sides.
2. The piece should be at least 2" thick in order to produce a good curve.
3. The chuck should have jaws that will expand from ½" – 1" and compress at about 1.5" - 2". Usually you will use two chucks or change the jaws.
4. Center and balance the piece between centers before starting to turn a tenon. Use tool rest to verify balance.
5. Turn a good quality tenon for compression that is about 1.5" or one that will fits your chuck jaws. This is a quality step to ensure good grip by the chuck for turning at high speeds. The tenon can be turned at normal speed, about 1,000.
6. This first tenon will be the bottom of the box and will be removed later.
7. Reverse the piece and use your compression chuck jaw chuck.
8. Check balance of the wings. Adjust as needed and **BE SURE THE TAIL STOCK IS ENGAGED. SAFETY FIRST.**
9. Now you can crank up the speed for starting the wings (1,500 – 2,000). Allow for a small dome in the center which will be the top of your box. The dome can be smaller than the width of the piece. The dome part can be turned at a slower speed. Pull cuts will be better as it will go with the grain of the wood. Make multiple cuts to create the curve. Finish cuts will be shear type using the bevel. Anchor the tool on rest and your right arm against your body. I use a winged gouge to make these cuts.
10. Sand the wings with an orbital sander with the lathe stopped, duh, but used as a vise.
11. Produce a small opening for your box. Drill the hole. Be sure your chuck will fit for expansion. Again make a quality tenon with flat surface. This is usually a dovetail tenon for better grip.
12. Hollow the box using small hollowing tools. Make a shallow box to allow for the bottom to be removed. This is a keepsake box.
13. Create a lid of contrasting wood, if desired. This can be an overlapping lid.
14. Make a small finial that matches the size of the piece.
15. Reverse the piece and secure in the expansion chuck. Measure the depth of the box and mark on side.
16. Check balance again and adjust as needed. **TAIL STOCK IN PLACE.**
17. Begin cutting the bottom side of the wings. High speed again. Starting at the outside cut about 2" at a time and ride the bevel. Next do another 2". This ensures accurate cut with as much bulk support as possible.
18. Finish the thickness of the wing before continuing to cut the next section of the wing. The cuts around the bottom of the box can be acute or rounded depending on your desired design. Sometimes you will make the edge of the bottom to match the edge of the top for a symmetrical appearance.
19. Remove the first tenon at slower speed and sand the wings as before.