

Turning a Lidded Box

1. Mount your wood blank between centers using a spur drive (or some other method that works for you) and a live center. I usually use a spur drive.
2. Using a roughing gouge or bowl gouge turn the blank round. You will turn a tennon on each end of the round blank so that it can be mounted into a four jaw chuck later as you make the box. **It will be safer if you mount the blank into a 4 jaw chuck now.** Now turn the blank into the shape you want your box to be. Sand the outside of the box at this time. Sand to 320 or 400 grit to get a smooth finish. Mark a line near each tennon to indicate your waste wood. You will need to part the top and bottom off and you need room to do this next to the chuck.
3. When you have the shape that you want you will part/cut the blank into two pieces. The lid and box body are usually divided into thirds. One third is for the top and the bottom is two thirds. Have the bottom mounted near the head stock as you will work on the bottom before you do the top. Mark the tennon and chuck jaw with a marker so you can remount it in the same spot later, this will help keep things round.
4. You will now cut the lip or tennon on the top of the box bottom (the end away from the chuck). The box top or cover will fit over this lip when the cover is on the box. Make the lip about 1/8th of an inch deep and about 3/16 to 1/4 of an inch tall. Be sure that these cuts form a right angle to the box sides (L). The box's top will slide over this. Now you can hollow the box bottom out. I drill as much of it as I can with forstner bits and then use a gouge or scrapper to finish the hollowing down to the bottom of the box. You will want to leave enough on the bottom so that you don't make a funnel when you finish the outside of the box bottom. Don't make you wall too thin (1/8 of an inch is good) because it needs to have enough strength to not break with the on and off of the box cover/lid. Sand and finish the inside of the box at this point, you will not need to or want to come back to do this later. Remove the bottom from the chuck. **Make sure you have marked the location in the chuck.**
5. Now mount the small piece into your four jaw chuck. You will now hollow out some of the top. Leave the wall about 1/8th in. thick as this will fit over the lip or tennon you made on the box bottom and so that it is strong enough not to crack or split as you put the top on and off. Be sure to leave enough wood on the top of the box so that you can finish the outside of the top. Check where your waste wood line is. You will finish the outside of the box top after the box bottom is almost finished. When the top is finished it will have to fit over the tennon or lip on the top part of the bottom of the box to hold the top in place. You need to have parallel edges on the inside and outside of the top so that it will fit over the lip that made on the bottom of the box. (Sounds very confusing but as you look at a sample of a box and make your box it will make sense.) You need to sneak up slowly as you cut the wood away on the inside of the top so you get a good fit. You can take more wood away, but you can't put it back. When you get a good fit finish hollowing out the inside of the top of the box cover. Sand and put your finish on the inside of the box top now while it is mounted in the chuck. You will fish the outside later.
6. When your top is finished, except for the outside of the top, remove it from the chuck and mount the bottom into the chuck again (mount it in the chuck in the same place as before). Now take your box top and mount it to the box bottom using the tail stock and live center to hold it in place. Sand and finish the outside of the top and bottom of the box. Line of the woodgrain when you do this so you end up with a nice fit. When done, take painters green or blue tape and tape the top and bottom together and finish the top of the box anyway you want. Remember how much wood you have on the top so you don't turn a hole in the top. Now sand and finish the top of the top, trying to blend the already finished part to the box top.
7. When that is done, remove the top and bottom. You will need to mount the bottom onto a jam chuck or expand the chuck jaws inside the box to hold it in place so that you can finish the bottom of the box like you did the top. Another option would be to part/cut the bottom from the tennon that is holding the box bottom in the chuck and finish the box bottom by hand.