

November 2018 - Jason Breach

Jason started by showing us the proposed finished piece which was a box with interesting lid design made from a highly attractive and figured wood called Masur Birch found in Finland and Russia.



We were all immediately wondering how he managed to cut the circular inlays of African Blackwood and we were about to find out!

Using the chuck as a friction drive and with tailstock in place the blank was turned down to round using a bowl gouge and a spigot turned using a beading tool. Remounting the spigot into the chuck a similar spigot was cut on the other end.

Top Tip 1 - one end of the blank was the original waxed end of the blank and therefore most likely to have potential cracks so, when marking out the 1/3 lid and 2/3 base, it is advisable to use the non-waxed end for the lid.

Top Tip 2 - when using the 1/16" parting tool to separate lid and base don't have the tailstock in place as this will put pressure on the parting tool.

Top Tip 3 - when parting off put a sheet of card or something light to better see how far the parting cut has gone.

Top Tip 4 - part down to about 1/2" and then complete the cut with a saw - it's safer!

THE LID

Because of the depth required for the inlay the lid was to be recessed to only one half of its thickness.

- using a bowl gouge, cut from the centre, having marked the required depth and then finish from the outside in to the centre

Top Tip 5 - there was a long discussion as to the favoured grip to use on the gouge for this process. Most people would naturally use the finger & thumb or the overhand grip but Jason favours using the long toolrest which he then grips with his left hand and uses the left thumb to guide and push the tool along - see example below ...



- sand the lid inside down to 400grit, cut the parallel straight cut recess using a skew chisel and then seal and wax.



THE BASE

- mount the base in the chuck and then mark out the width of the spigot to fit the inside recess of the lid.

Top Tip 6 - to gradually get a tight fit create a taper on the spigot and gradually modify the taper until a tight fit is achieved.

- with the lid attached turn down the outside until the required wall thickness is achieved
- square off the top of the lid with the gouge using the same toolstop grip as before
- now hollow out the base having set the required depth
- flatten and soften the top edge using a round nosed scraper
- sand the inside of the base
- replace the lid and sand the outside and lid top

Top Tip 7 - for a tight fit ensure that the sanding is done with the lid attached to the base so that there is an even heat in both parts.

- add a shadow line between lid and base and then wax the inside of the base

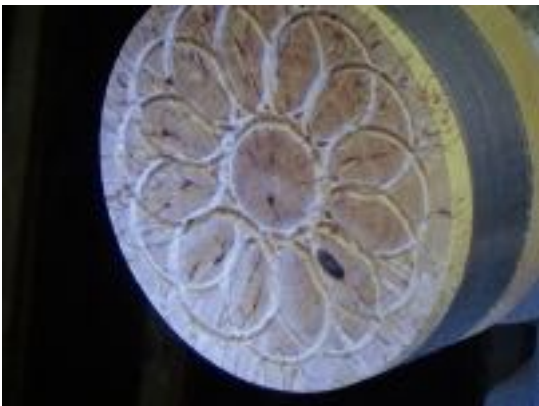
THE LID DESIGN

- mount the base on a variable centre chuck attached to the main chuck. Fit the lid and secure with duck tape
- remount with the chuck offset
- using a modular toolrest, with a clip on the pillar maintaining a constant height, and two collars with a fixed gap to allow the beading tool accurate access between the collars cut the first circle.



- Repeat, moving the chuck offset until all the interwoven circles have been cut
- Finally, recentre and cut the central circle

Top Tip 8 - throughout the whole of the above process make sure that the position of the banjo on the lathe bed is not disturbed.



And now for the magic ...

African Blackwood dust was mixed with epoxy resin and hardener (warmed to ensure easy application) and then rubbed into the design on the lid, keeping it slightly proud, and leave to set for at least 24hours.

Top Tip 9 - make sure that the lid top is well sealed beforehand otherwise the colour may get pulled into the grain.

We couldn't wait 24hrs! so in true Blue Peter fashion Jason produced the lid of a sycamore box that had gone through a similar process but using 2 colours. This was achieved by cutting alternate circles and filling with one colour, allowing to dry, and then cutting the other alternate circles and filling with the second colour. (The red colour was using Paduk dust)



The lid top was cleaned up using a round nosed scraper and then the base mounted in a jam chuck in order to finish the base bottom.

Top Tip 10 - when using a parting tool there are sometimes fluffy fibres on the edge. These can be removed using a burnishing brush.

Once again a brilliant demonstration from Jason with lots of learning points - he managed to break the record of Top Tips with 10.

Thanks to Jason, particularly when he had to fly to Norway before dawn the following morning!

David Langan