Galloway Woodturners

Project Notes – Needle case

Example above in teak, 95mm x 20mm

Wood required – 120mm long by 20mm square. As this is a small item, the wood needs to be fine grained so yew, box, holly, or apple would be suitable.

1. If the blank is reasonably square, hold it directly in a small set of chuck jaws such as pin jaws. Bring up the tailstock fitted with a revolving centre and rough to round using a spindle roughing gouge.

If the blank is not squarish, mount it between centres, rough to round using a spindle roughing gouge and cut a spigot to suit your jaws. If you do not have a small set of jaws you will need to work out some other work sequence.

2. Set a pair of callipers to the diameter of the drill you are going to use to drill out the inside; 6mm in this example.

3. Mark a pencil line just to the left of the tailstock end to allow for the dimple made by the revolving centre. Mark a line 15mm to the left of this to indicate the base of the stopper cap. Then mark another line 10mm further left to indicate the length of the actual stopper plug.

4. Start to shape the stopper, using a spindle gouge. Bear in mind that the user will need to able to grip the stopper to remove it, so a cove may be a good idea.

5. Use a parting tool to form the actual stopper plug into a slight taper, checking with the callipers. Make the left hand end slightly smaller than the callipers and the right hand end slightly larger than the callipers to ensure that the stopper is a snug fit.

6. Carefully part off the stopper on the left side of the stopper plug, cutting to about 3mm diameter with the parting tool then completing the cut with a fine saw. If you try to part through with the parting tool there is a risk that the cap will break off and pull fibres out of the plug. Set the stopper aside.

7. Mount the 6mm drill in a Jacobs chuck in the tailstock. Measure and mark the depth on the drill with a piece of insulation tape. Drill carefully at moderate speed, removing the drill at frequent intervals to clear the waste and keep the drill and workpiece cool. Remove the Jacobs chuck.

8. Fit the stopper and complete the shaping of the stopper, blending the stopper with the body. If the stopper doesn't fit, gently enlarge the hole with rolled up abrasive. Remove the stopper and support the body by running the revolving centre in the hole.

9. Shape the body, again bearing in mind that the user will need to grip the body to remove the stopper. Decorate in any way you choose.

10 Use abrasives to smooth the work, say 180 grit, 240 grit, 320 grit, 400 grit.

11. Apply your chosen finish which should be able to withstand frequent handling. One option would be a coat of sanding sealer, smoothed with abrasive, then either melamine lacquer or microcrystalline wax.

12. Carefully part off the body, cutting to about 3mm with the parting tool then completing the cut with a fine saw. Finally, finish the handle end by hand.

Admire !!