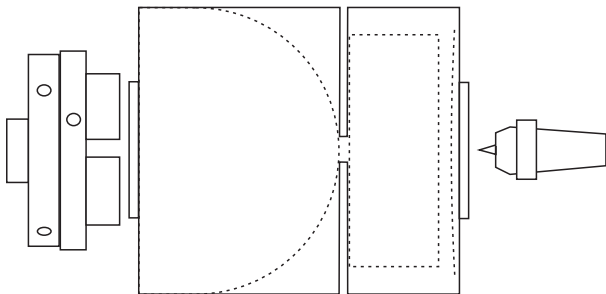
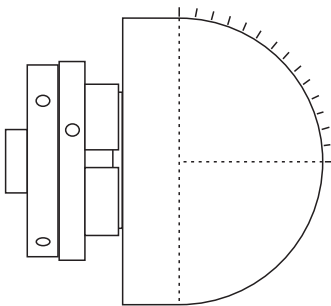
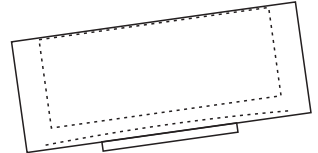


Rainbow-lidded Box

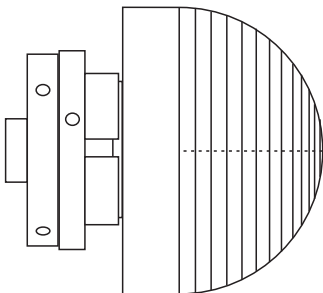
The plan is to make a box with the interior of the bottom being 65mm wide and 20mm deep. The lid of the box replicates a rainbow. Start with a block of wood about 85mm square and 100mm thick with the grain across an 85mm axis.



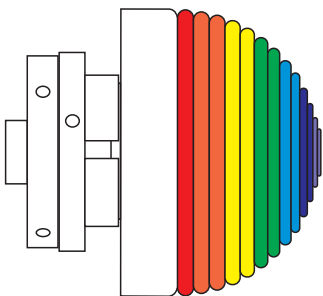
Mount the chosen wood between centres. Round it off to 79mm diameter and make a chuck bite spigot on both top and bottom. Mount this in a chuck by the side planned to be the top of the box. The bottom of the box is to be completed later, so just part off about 30mm and set that aside.



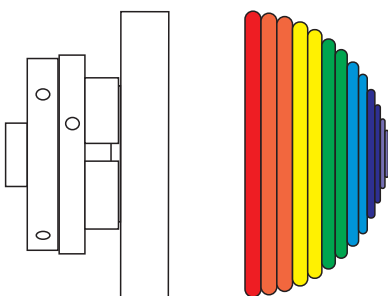
Turn the outer part of the lid to an exact hemisphere. On a line around one half of this hemisphere mark 15 equidistant points at about 4.4mm. These are to be the separating lines for 14 beads to be cut around this surface



Rotate the wood and mark the bead separation lines around the piece. Note that the 14th bead on the rounded end is not visible in this drawing.

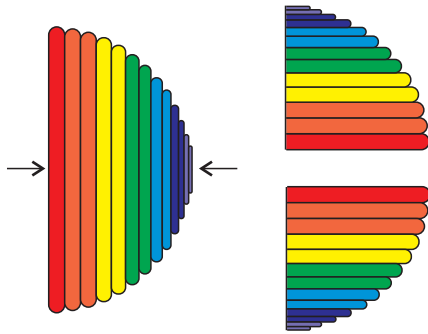


Cut and sand these beads. Apply the colours of your choice. This was designed to be a rainbow but you may use whatever colours your like.

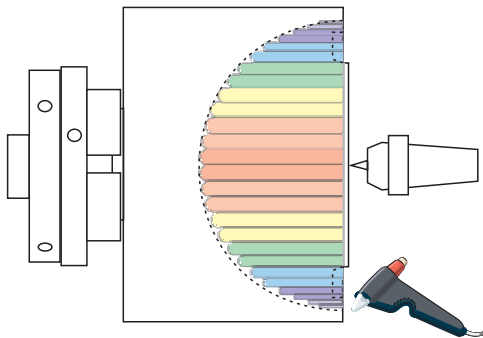


Part off the coloured portion of the work. This parting cut should be exactly flat or leaving enough wood for it to be sanded to the exact line of the first colour.

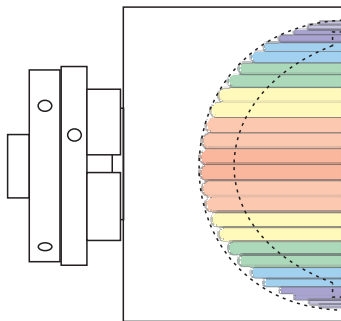
Rainbow-lidded Box page 2



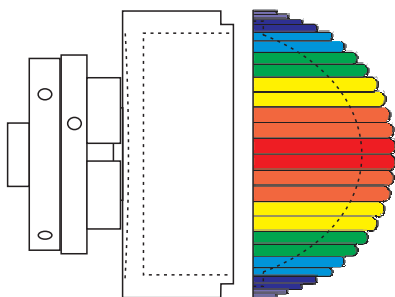
Cut the coloured block in half. Then rotate the halves and glue them together again.



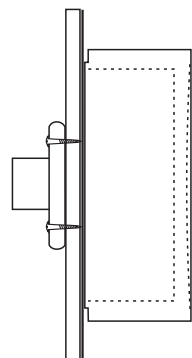
Make a jam chuck to hold the coloured block. Bring up the tailstock to hold the block in place. Cut away just the edge of the jam chuck and the edge of the coloured block. Then cut a recess into the coloured block where it is to fit over the lip of the base of the box. Apply a little hot-melt glue to hold the edge of the coloured block to the jam chuck.



Remove the tailstock and complete the hollowing of the lid. Sand and finish all the inside. Remove the coloured block from the jam chuck.



Re-mount the bottom half of the box. Cut the recess needed for the top to fit nicely. Cut the top surface to the finished dimension and hollow the box. Sand and finish the inside.



Re-mount the bottom by its upper side on a jam chuck, press-fit faceplate, vacuum chuck, or other device. Remove the spigot and cut the bottom to a slight concave. Sand. Remove from the lathe and apply the finish of your choice to the entire outside surface.

