

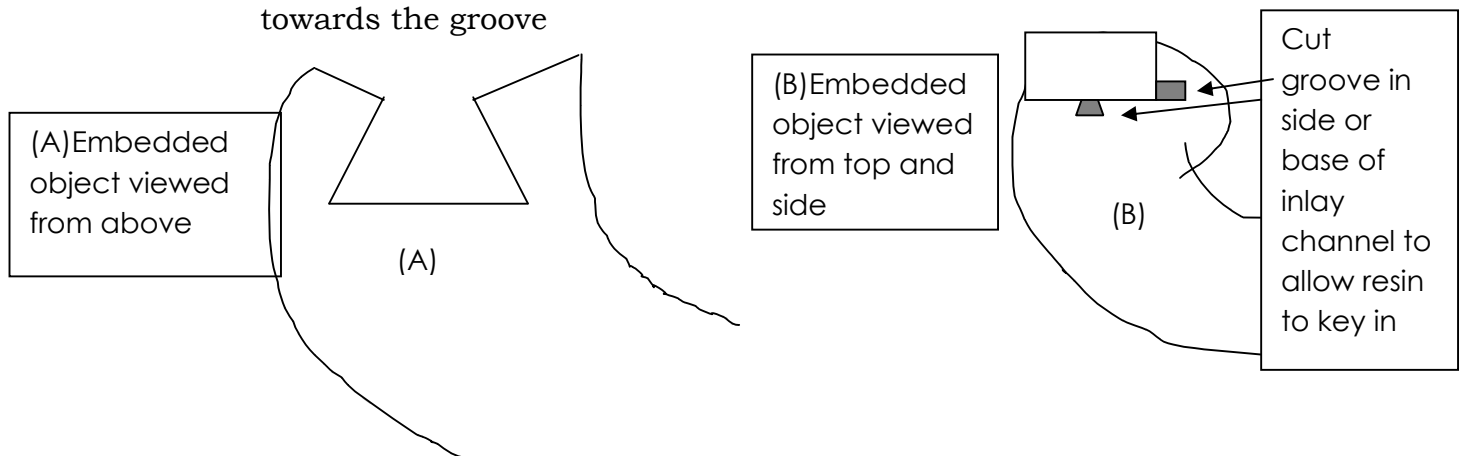
EPOXY RESIN INLAY FOR BOWLS

Preparing the bowl blank

1. Make sure your wood is totally dry.
2. Rough turn the bowl blank to required shape keeping it between 25/50mm thick. Resin becomes very hot once mixed and a thin edge bowl may crack or warp.
3. Create an internal and external foot for remounting. Make sure that your external foot is level or slightly concaved so that it will sit flat on your worktop.

Cutting the Groove

1. Create a dovetailed groove of between 10/20mm deep or to a depth deep enough to cover the largest piece being embedded. Add to this an additional 5mm for the epoxy resin to completely cover the embedded pieces as you will cut away some of the resin once cured.
2. To stop any overflow of resin slope the top edges of your bowl towards the groove



3. Gently sand the groove.
4. Coat the groove and top liberally with cellulose sanding sealer.
5. Allow to dry thoroughly.
6. Paint the groove with quality paint. (I use Resene's Metallic paints)
7. Once dry arrange your inlay pieces. Pieces that are likely to float should be glued in place using a drop of super glue.

Mixing Epoxy Resin

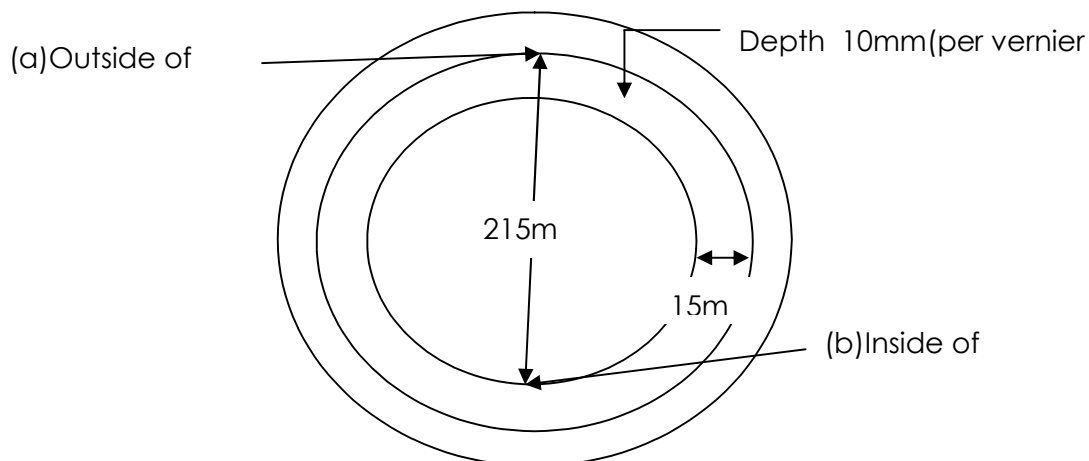
There are a variety of Epoxy Resins available my preferred one is ADR 247 Epoxy Resin and ADH28 Hardener from Adhesive Technologies Ltd. Phone No. 09 838-6961.

Calculating quantity of resin required.

I prepare a number of bowls in advance so that I don't have to accurately calculate the amount of resin required. I will then mix up 200mls of resin at a time, which is 160mls of resin to 40mls of hardener. I always have some unfilled or part filled bowls left over.

If you are only making one bowl than this is the formula you need to follow:

Diam(mm) x π (3.142) x Groove width x Groove Depth=Cube Volume



Measure (a) outside groove to (b)inside of groove

Calculate .215mm x π (3.142) x 15mm x10mm

(When using a calculator do .215) Divide by 5 to get the quantity of hardener.

Mixing Resin

1. Pour the hardener into the measuring jug and then add the resin.
2. With a wooden spatula gently stir the mixture in one direction for 60 seconds, lifting up from the bottom.
3. Repeat this action 3 more times changing direction each time.
Total stirring time 4 minutes

Do not stir too quickly as this will create air bubbles

4. Pour resin it to groove to just below the rim
5. Leave to settle for 5 minutes and allow bubbles to come to the surface (go have a cup of tea).
6. With a fine screw driver or sewing needle gently move loose pieces of inlay to release hidden bubbles.
7. Top up resin to the rim so that a slight dome is formed.
8. Leave to cure for 1 week.

Remounting your bowl

1. Remount the bowl and completely finish the outside.
2. Turn the bowl around
3. With a sharp 6mm gauge gently cut the resin from the centre out and from the centre in. Creating a dome shape. (The dome magnifies the embedded items giving a nicer appearance when finished).
4. Make sure you cut sufficient resin away to remove any flat spots.
5. Turn and complete the inside of the bowl for sanding.

Sanding and Polishing

1. At 500rpm power sand the inside of the bowl and the resin creating a smooth transition between the wood and the resin. I use 80, 120, 180, 240, 320 and 400 grit sanding disks.
2. Liberally seal the inside, the edges and resin with a cellulous sanding sealer.
3. Remove the lacquer from the resin by using a liquid sandpaper on a paper towel.
4. Very gently hand-sand the resin using wet, wet and dry sand paper.

5. Hold a clean paper towel against the rim to prevent splashing and to remove any grit.
6. I use 800,1000,1200,1500 and 2000 wet and dry grits.
7. On a clean piece of Chamois Leather pour a small quantity of Brasso and continue to gently sand the resin.
8. Using a new piece of chamois, pour a small quantity of Finesse-It II and finish the sanding process.
9. Finally wax and buff the bowl including the resin. I use EE Ultrashine followed by Old Bucks applied using 4 zero wire wool and buffed with a paper towel.

Remove your work and admire your success.

Shopping List

Inlay stuff	Spotlight, 2 Dollar shop, Devonport Market
Wooden Spatulas	2 Dollar Shop
Chamois Leather	2 Dollar Shop
Cheap Paper towels/toilet rolls	The Warehouse
Vernier Tool	Bunnings, Mitre 10 (not a plastic one)
Measuring Jug	Payless Plastics (good pouring spout and clearly marked graduations in mls)
Large needle or fine Screw Driver	Spotlight, Bunnings, Mitre 10
Kitchen Timer	Bunnings, The Warehouse, Brisco
Calculator	2 Dollar Shop
Super Glue	2 Dollar Shop