

## **Finishing Approaches for Woodturners**

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### **Shellac and French Polish**

A high gloss finish with depth best displays a highly figured and a complex grain pattern. This can be achieved with French polish or high gloss lacquer.

Commercial pre-mixed shellacs contain preservatives, water and wax but this makes them less desirable and durable for finishing. Russ used **Super-Blonde** or **Extra-Pale** flakes because of their light colour.

**Shellac mix:** for a 2 pound cut (2 pounds of flakes in 1 gallon of denatured alcohol): Use a graduated vase, and fill with ½ flakes and ½ denatured alcohol. Then de-wax by letting the mixture set for several days until the wax settles out as a cloudy layer in the bottom of the jar, decant into a clean jar and throw out the rest. Shellac will have a shelf life of 2 to 3 months. Test it by placing a drop on a piece of glass and wait overnight, if it is brittle and pops off the surface it is ok, if it is rubbery, throw it away.

#### **Directions:**

- **Applicator:** use a small piece of new **terry velour towelling**, the velour will form a smooth uniform glaze on the surface, eliminating the surface lines caused by fabric texture.

For bowls, make a small ball from cheesecloth or a single sheet of VivaO paper towel and wrap it in a square of velour towelling. Store the ball for re-use in a closed container with a 1/4 " of denatured alcohol.

For spindle turning, cut 1" wide strips of velour towelling and fold in half with the velour side out, making a double-sided applicator.

- **Preparing the wood:** The wood surface must be as perfect as you can get it. Sand in both directions to at least 600-grit; 1500 or 2000-grit is even better. Dampen the surface to raise the grain and lightly sand starting at 600-grit.

For closed grain woods like maple, no other preparation is required. Open grain wood will benefit from a sealer. CA glue is preferred to pumice. Apply an even coat of *thin* CA with a wad

of synthetic batting stuck to a piece of masking tape (cellulose in paper towels and cotton act as accelerators). Sand away all of the surface film as we are using CA as a filler, not as a finish.

- **Oil to lubricate the surface:** Russ used mineral oil thinned with a little kerosene as a lubricant between the applicator and the surface.

- **The Application:**

- o Decant the shellac into small squeeze bottles

- o Put a small amount, ½ teaspoon, on the applicator pad or strip. Surround the shellac on the applicator pad with a ring of a similar quantity of oil. For a strip fold it in half and place the oil next to the shellac.

- o With the lathe at moderate speed, hold the applicator so the shellac is applied to the surface with the oil following immediately behind it. If the wood tries to grab the applicator away from you, add a little more shellac and oil. If it doesn't get hot, there is too much oil on the surface and it needs to be removed with some soft toilet tissue. Add shellac and oil only if necessary. Run the lathe in the opposite direction, again with the oil trailing the shellac. Repeat no more than 5 times.

Let the shellac dry overnight, remove any excess oil with a clean velour pad, buff the surface with 0000-steel wool, and complete a second application of (5) coats., which will deepen the finish and improve the gloss.

It takes a lot of practice to get the right combination of lathe speed, amounts of shellac and oil and application technique.

- **The final touch**

Wait 2 weeks before handling the finished piece as the shellac is very soft after the application. The shellac will continue to dry and harden for several years.

- o The surface gloss can be improved after the finish has sat for a couple of days. Add a small amount of denatured alcohol to a new applicator, and lightly whisk it across the surface, DO NOT RUB.

- o Remove the circular ridges that remain on the surface with 0000-steel wool and let set for 2 weeks. To restore the gloss, polish the surface with 4F pumice, followed by Rottenstone using a velour cloth as an applicator and raw linseed oil as a lubricant.
  
- o The shellac can also be buffed with White Diamond compound on a linen wheel to achieve a spectacular gloss – only after 3 months to ensure the finish has cured enough.
  
- o To protect the surface use beeswax, Trewax, Minwax. Do not use stick wax as the heat will damage the shellac.

## Products

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Product	Supplier	Recommended by / Comments
Terry velour towelling	Most paint shops	
VivaO paper towel	Home Depot	
Cheesecloth	Paint shops, Restaurant and cooking supplies shops	
Super-Blonde or Extra-Pale Shellac	Lee Valley	
Denatured alcohol	Industrial or scientific chemical supply companies like BSC Inc., 1456B Cyrville Rd. Ottawa	
4F pumice	Paint supply stores	
Rottenstone	Paint supply stores	

## Advice

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**By Advice**

Suggestions welcome...