MARK RABY'S FINISHING DEMONSTRATION

Notes taken by Judith Simpson & Roger Cutler on 25 May 2013 at Galloway Woodturners

See Mark's videos on finishes on the Record Power website:

http://www.recordpower.co.uk/category/finishes

SANDING

If your fingers are getting hot, your sandpaper isn't working, go up a grit.

TREATEX

Treatex is completely waterproof. It is a hard wax oil, you could even use for a flower vase. They buy it in industrial quantities, and decant it into little bottles for turners. A little bottle covers 2 sq m in 2 coats. Second coat is applied in 6-8 hours, after de-nibbing with Webrax. Treatex is not food safe at present but they are changing the formula soon, and it will be. It gives a satin finish. It is dry by the next day, and completely waterproof. You apply it off the lathe, 2 coats but 3 on end-grain.

WEBRAX ETC.

Webrax, Chestnut equivalent Nyweb, also Mirlon, these are the pads that look like washing up pads, but are not. Webrax is washable in the pocket of your jeans. Red is the coarsest, then green, then grey. White Webrax is non-abrasive, and is good for applying material and for buffing. Colours are consistent across brands except that the Mylands grey equates to Chestnut orange. Orange/grey are 1000-1200 grit.

TACK CLOTH

Use a tack cloth before applying finish or you will get scratch marks. Don't use kitchen towel to apply finish. It absorbs the finish. Use safety cloth.

CUTTING WAX

Abrasive wax or cutting wax – certain woods, eg walnut, no matter how you sand, you will get scratch marks. So, use various grit of Webrax to drive the cutting wax in. If you use oil or wax with your Webrax, quarantine your Webrax, i.e., use oiled Webrax only with oil, etc. Take care with paper which is wet with oil. It can spontaneously combust. Put it in a jar with a screw top, or in water.

Cutting wax – go through green, red, grey Webrax. To take the wax off, you can use kitchen towel, then buff with white non-abrasive Webrax, cutting at the same time with the wax. Buff with a cloth until the cloth is clean. Leave the wax 10 minutes to harden.

SHELLAC/FRICTION POLISH/CARNUBA WAX/SEALERS

SHELLAC

Makes people wary because of long drying time, but Shellac for wood turning dries quickly. Shellac sealer is only suitable for use below wax and French Polish.

Finishes, especially oils, go off in extremes of temperatures. Acrylics thicken in heat, but can be rescued at an early stage with tap water.

SEALER

The commonest is *cellulose* sealer – don't thin more than 20%. If you've been in the habit of thinning it more, give it a try. It is a *universal* application and is best for melamine lacquer. *Acrylic* sealer is better in aerosol form, and is *virtually universal*, *except for melamine*. A white haze that develops in a sealer, etc, is from moisture, e.g. a humid day. Only acrylic lacquer will go back to normal once dry, but other than that, there is no cure except to sand it back.

If you are thinning cellulose sealer chose a reputable brand and not the industrial car paint thinners as these are reclaimed thinners and can contain moisture.

You can use acrylic over cellulose but NOT cellulose over acrylic.

FRICTION POLISH

De-nib first with grey/orange to make a key for the next coat. Then use a tack cloth to remove dust. Record Power Speed'n'Eze says it can be used on bare wood, but it won't last. Use a coat of sealer. Mylands friction polish is the best. The competitors agree. Apply little and often. Move your cloth about and bring fresh friction polish in to work. Friction polish goes hard as you use it. That's the Shellac. Too much gives ring marks. You can finish then with carnauba.

CARNAUBA WAX

Thumb nail test – if you can't get your thumb nail in, it's carnauba. If you can, it's a blend. Don't apply too heavily. Five quick sweeps at mid-speed. Rub with white non-abrasive with very little pressure to move the carnauba to smooth. Buffing cloth –if you have not applied too much, there should be no wax on your cloth. Let set 10 minutes. How to go wrong – press too hard, apply too much. It can scratch or dent. If you make a mess you have to sand back to bare wood.

RUSTIN'S PLASTIC COATING

Rustin's Plastic Coating is good.

MELAMINE LACQUER

Use cellulose sealer below. Apply sealer with cloth. As soon as it starts to stick, stop rubbing. It's dry in seconds. De-nib with grey/orange. Use tack cloth (keep folding your tack cloth to a new corner). Don't shake lacquer, invert it once. If you do shake by mistake, you will get bubbles in it, so leave it 24 hours. Melamine lacquer dries very quickly, but takes 10-12 days to cure fully. Wipe on with a cloth. It's dry almost immediately. Apply 2nd coat in 30 seconds. If you leave it longer, more than 10 mins, you need to de-nib to provide a key. If you apply when it's very fresh, it blends with the previous coat. You can buff it just before it goes off. Too soon and you'll mark it. Leave 4-5 hours, then burnish, or you can use friction polish almost immediately. If you get rings, leave it an hour, re-friction polish and melt it back.

CLEAR PASTE WAX

This is normal wood wax. You can use sealer first, but bare wood is fine, better even, the wax feeds the wood. Turn your tin upside down when you buy it, for 24 hours. It does slightly separate, becoming more liquid on the top with standing, and more solid on the bottom. Turning it over allows the oils to feed back through. Turn if over occasionally also when it's in use. (Give all you products a shake sometime, especially **Danish oil** or it will be solid). Apply the wax, let it dry a minute, buff with the same cloth, add more coats if you like. Clear paste wax is a soft wax, and not for things that will be handled.

You can try mixing paste wax with spirit stain. Make sure you mix up enough. This will bring a hint of colour to a bland wood – just a drop or 2 of spirit stain. You can apply this with a kitchen towel. Let it sit for a minute or 2 then buff with a cloth. The stain is in the wax and not in the wood, so protect the wax with an acrylic sealer – 2-3 light coats. Then another coat of clear wax if you like.

OILS

Oils give total control of gloss levels. Most common are finishing oil, citrus oil, tung oil, Danish oil. Finishing oil keeps the wood's natural patina. Use it on nice wood. Danish oil will darken the wood. Use it on bland wood. Tung oil is food safe. Proprietary food safe oil varies, eg Chestnut's food safe oil is liquid paraffin. Rustin's have finishing oil and Danish oil which are food safe. They haven't changed their formula, but have passed the test and got approval. Citrus oil – the contents vary too. None are food safe, despite the name. The aroma doesn't last in air, but will do inside a box. Food safe is not the same as toy safe. Most oils are toy safe. To pass the test to be food safe, it must be that if the food breaks down, it can't re-float the oil. Olive oil goes rancid. Nut oils cause concern for allergy sufferers.

STAINING

Sand your work with the foam pads. (Mylands product, abrasive 240-600). Occasionally stop and go lengthways to get rid of ring marks. But don't buff with the white non-abrasive if you're staining your work. Many colours available. The white stain in the pack though is a blender to make pastels, not intended to be used alone. You *can* wear gloves when applying a spirit stain, but be careful with a moving lathe, which can grab the gloves, which melt and blister you.

Stain normally goes on to bare wood. (Brian Conchie has an unusual technique of sealing then dabbing). A slow lathe leads to a heavy stain. Apply stain with safety cloth. Leave a feathered edge on the stain to blend the colours. It's dry almost immediately and doesn't have time to penetrate the wood. Kitchen towel wastes stain. It's absorbed and spread everywhere. You can add extra colours at any time with the lathe on or off. The colour re-floats if you add more colour. It must then be sealed with an acrylic or cellulose sanding sealer. Painting on the sealer will lift the colour and leave a hazy effect. Acrylic or cellulose aerosol sealer will leave colours vivid. When spraying, turn the lathe by hand, spinning may cause a run.

De-nib the sealer then add any topcoat you like. Laburnum, yew and most fruit woods are good for blending colours because the grain structure is tight.

If pen-turning, you can turn your pen, then colour it.

Metallic spirit stains drop out of suspension, but shake them and they will re-suspend. They are lovely on oak. Apply on top of colour if you like and then acrylic sealer. If you bought the previous formula, you may find they settled and did not re-suspend, and you were left with a pound coin in the bottom of a bottle of spirit...if this happened to you, contact him.

Open grained woods stain less easily but you can rip the soft grain with a brass brush, from the pound shop, with the lathe running, then sand, apply base coat, then add colour.

LIME WAX

If you then directly apply lime wax, you end up with a pastel colour. If you add sealer, then lime wax, you get a vibrant colour. Never apply lime wax with lathe turning. Wear gloves — it's messy! Also wear gloves when using gilt cream or you will get whitlows (septic finger). Kitchen towel is fine for applying lime wax. You can treat your lime wax with spirit stain. Apply the lime wax and let it dry = 10-15 mins, depending on temperature. Remove excess lime wax with citrus oil. Finishing oil would also work, but not Danish oil. Use kitchen towel. Try running metallic spirit stain over it to give highlights. Over that put acrylic sealer.

GILT CREAM

Open grained wood – lift the grain with a brush, apply ebonising lacquer. You must seal it before using gilt cream. De-nib, apply gilt cream with kitchen towel and let it dry. Remove excess gilt cream with citrus oil. If you think you've spoiled it, you can sand it back and you get a reverse pattern with black in the grain.

DIFFUSER

This is a blow gun. Grind the mouth bit back, it's too long. Make sure the bits are butted up tightly together. Stains don't need thinning. Blow, and it sprays using the Venturi effect, the vacuum created by the fast moving air drawing the stain up the tube. Turning the speed of the lathe up makes it spread in all directions. Try with a texture tool. Clean diffuser with thinners and a cocktail stick when you switch between colours and metallic, and after use. You don't need to clean when moving from one colour to another, there's so little there.

BURNISHING CREAM

Anything finished with acrylic gloss lacquer can be burnished with burnishing cream. Don't use T-cut, it's too aggressive. Shake burnishing cream well and regularly. Follow the contours of the work. Don't use a swirly motion or it will mark. As you apply, the finish will go dull, but once it comes back, rub with a clean piece of cloth until there is no residue. Now buff. You can also use burnishing cream on dry hard carnuba wax.

ACRYLIC GLOSS LACQUER, HIGH VOLUME, LOW PRESSURE

Blue can, one coat is enough. It is an automotive lacquer and very resistant to water. It has 2 nozzles, one adjustable. One tin is equivalent to 4 normal tins of lacquer. It can be burnished, but leaves a good finish without burnishing. It takes longer to dry but is very tough and durable.

JO SONJA IRIDESCENT PAINTS

You can use a fat round paint brush with a twisting action, making a round pattern. You can thin with water or flow medium and use an airbrush, or a coarse sponge, or your fingers. Bubble wrap stuck on top for 10 minutes then ripped off gives an interesting effect. Try blowing air with the diffuser to spread the paint, then cut off both sides to leave the pattern as a rim. Finish with acrylic gloss. Burnish the lacquer. See Jo Sonja DVD, "How to get the best of Jo Sonja." (I couldn't find this online). Disturb the colours as they are drying and you get a silver haze. Finish with acrylic gloss/matt/satin.

Opal dust can be applies with a brush with the lathe running. Apply it in the middle of the work and it will spread. Then paint on Jo Sonja's Iridescent Paint immediately also in the middle. Do this while the work is still chucked from turning. If you put it back on, even if it's slightly off centre, the spread will be uneven.

To use up waste iridescent paint, have a bowl turned ready. Add your left over paint in random fashion. Every so often, add a coat of ebonising lacquer, then more coats of Jo Sonja iridescent paint. Finish with ebonising lacquer, then wet-sand with soap and a 240 pad, then finer grits and lacquer it up. You get a lovely marbled pattern.

TREASURE GOLD

Ash plate charred with blow torch then cleaned with copper brush. Use Treasure Gold (available www.artvango.co.uk), available in about 14 different colours. It's a gilt wax, apply with gloved finger. All colours blend. Remove with kitchen towel, buff with cloth, acrylic sanding sealer.

PEARLESCENT PAINT

Changes colours with angle/light. Wipe it on inside bowl, with lathe running, with your finger, over black. Up the lathe speed, vortexes into bowl. Doesn't need dark background though. Pearl white will mix with any acrylic to make in pearl. For the outside of a black tea-light with a steep curve, apply pearl paint in various colours and push it downhill with a brush.

LINING TAPE

To mask wood if you're using different techniques, you must first seal your wood. Don't use masking tape, it allows stuff to bleed. Use 3 or 6 mm lining tape to create patterns. Do it in 3's...odd numbers, anyway, but 5's get complicated. Plan it out, or you'll get red next to red. Where you cross over you must press it in with a thumb nail.

TEXTURE PASTE

Can be re-turned once it's set, or pierced. It's easy to work with. It comes in black and white. White mixes with any acrylic colour. It dries overnight.