



Fast and easy finishes

PHOTOGRAPHS BY KURT HERTZOG

Kurt Hertzog explores a few of the fast and easy finishes he uses on his turnings

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Most woodturners fall into the immediate gratification category of woodworkers. Rather than spending many days or weeks on any project, they tend towards completion rather quickly in the hour(s) or single day realm. For the large majority of turners that are in the short time frame scenario, their desired finishing technique needs to be a fast and easy process as well. There are many fast and easy finishes available, both commercial and homemade. As the process becomes fast and easy, often there are some other sacrifices that must be

made for the sake of speed. A quick and easy finish may not have the durability, toughness, repairability, water repellency, depth of sheen, or other characteristics that might be desired. These needs are something that should always be considered when selecting a finishing process and material. When speed and simplicity of process are more important to you than the other attributes, then knowledge of the trade-offs has already been made and accepted. This month, I'd like to explore just a couple of the fast and easy finishes that I use.

Safety

Most of our discussion this month focuses on relatively common and benign materials. Regardless, be aware that any and all chemicals should be treated with respect and proper PPE. Safety glasses, hand protection, proper ventilation, breathing protection when needed and any other recommended safety equipment and procedures should be adhered to for your wellbeing. Also, be aware that something that you are tolerant to may be extremely hazardous to others.

In particular, I am speaking of the nut-derived oils. For the friction polish application and burnishing, use only the paper towel-type products instead of cloth. Paper products will work as well as cloth but provide a tear away action if there are catches. This is far less hazardous than cloth in these types of workshop use. Be aware that regulations for food-safe finishes vary around the world. Be certain that you know, understand and comply with them as appropriate if your turning's end use falls into categories covered by them.

Walnut oil – as simple as it comes

When I think of finishes and their application to a turning, I can't think of anything that gets much simpler than an oil that can be applied to the surface and let soak in. Most simple, pressed only oils share some common failings. Unless they have been processed into a special concoction creating a hardening finish that builds, they don't harden and they don't provide much in the

way of protection. Soaking into the wood will usually punch up the colour and might provide a bit of liquid repellency. Not many of the simple, pressed oils harden but one that does is walnut oil. Barring a recipient who has an allergy to nuts, you can use this food product as a finish on nearly anything. Purchased in your grocery store, this salad dressing and seasoning agent might be above reproach when considering food safety. The food connoisseur may know the difference between the cold pressed and refined walnut oils for their taste differences. The cold pressed retains more of the nutrients and flavour. For our purposes, the less expensive refined walnut oil will do very nicely. Quite



Walnut oil is available in the salad dressing aisle of the larger grocers. A selection of brands and extraction methods is available

pricey in either form, walnut oil can be used straight from the bottle as a single component. It can also be used as a mixture with beeswax. This one-third oil, two-thirds beeswax melt is often used by woodworkers on cutting boards and wooden utensils. It can be used as well by turners on bowls or other items. Using walnut oil right out of the bottle, apply sufficient oil allowing it to wick into the turning. You can use a traditional brush, foam pad or paper towel. When it appears to have dried, apply additional coats if desired using the same process. Any excess can be wiped away as needed. Allowed to air dry, walnut oil will indeed harden. As noted, don't expect a protective build as you might with a varnish but the wood itself will take on a lustre and can be buffed to your desired gloss. I include walnut oil here and currently exclude the many other pressed oils available. Most of those require advanced added



Used straight from the bottle, it can simply be applied by cloth, brush, foam applicator or by fingertips if you wish

chemistry making them far more than just an oil. Future articles will delve further into finishing options.



Applied liberally from the outside, it will wick into the wood and usually show up on the inside surface



I don't usually count on an even coat on the inside from wicking alone. I apply coats to the inside in the same manner as outside



A single coat applied to the inside and out of this natural edge bowl. Dry to the touch in 15 minutes

Friction polishes

Virtually every woodturning supplier has a friction polish product offering that allows the turner to rub on the finish and then burnish it to final gloss. The ones I have used in the past and certainly not all available are U-Beaut Shella-wax and Mylands friction polish. Both of these go on quick and easy. I've heard the term 'speed and ease', which I believe refers to the same type of product. Not knowing the exact chemical compounding of the many available friction finish products, my guess is that they contain shellac, wax, solvent and perhaps each manufacturer's magic additives they believe enhance the process or results. I use the commercial versions as well as a homemade version. The formula I use for the homemade mixture is equal parts of shellac, denatured alcohol and boiled linseed oil. Homemade liquid friction polishes, like

the store bought, will settle out so vigorous shaking to mix all of the components is needed prior to use. Applied directly or on a paper towel, the lathe is run fast yet safe while pressing your application towel firmly to generate heat. After application and the high speed friction burnishing, your turning is left with a high gloss shellac finish. Shellac is a wonderful looking finish but for all of the beauty it doesn't provide exceptional protection. Items that will receive a lot of handling, contact liquids, or live a tougher life than sitting on the shelf for viewing usually require something providing more build and mechanical and abrasion protection. For the beautiful, rarely handled, display only turnings, friction polish is indeed speedy and easy. The advice that I can offer is that the polish should be used sparingly. Most problems occur when using far too much.



Your woodturning retailer will usually have a wide selection of quick finishes available. Many are friction while others are oils or waxes

Put on a small amount and burnish it in. Add more as needed rather than starting with far too much and never effectively burnishing it in. The sticky mess and streaking that can occur is dreadful to try to resolve. Friction polish is best used in smaller piece applications. When applied to larger pieces, it is very difficult to apply and burnish into a continuous coverage. For larger pieces, I favour liquid shellac as below.

Shellac – the real deal

Shellac is a very easy finish to apply. I believe it is one of the most under used and underrated. I'm not speaking of the friction style shellac products but the shellac flakes dissolved in an alcohol solvent. It has been long used by furniture makers for the beauty, ease of application and repairability. Throughout history, shellac has been used based on the availability. The more modern chemical concoctions weren't available. Depending on your needs, shellac may be a finish you should add to your capabilities. As noted above, it does provide limited mechanical and fluid protection but for little handled pieces it provides a beautiful finish that can be very easily applied. There is a cult following among some of the shellac users with everything from the selection of flakes to the solvent to their secret application techniques. I am far from the cult group being a 'buy as mixed' product person or the mix my own but very simply and easily. As long as it is fresh, it works extremely well.

Without getting too far into the shellac foundations, it is simply a bug excretion that is harvested from the trees in India and the subcontinent region. When processed, it is delivered to the end user as a flake that needs to be dissolved. It is also available manufactured and delivered in a can ready for use. The shellac flake is soluble in a variety of alkaline solutions as well as organic solvents. Most commonly, it is dissolved in denatured alcohol. If you buy the shellac in a can, you'll need to be aware of the manufacturing date since shellac does have an effective shelf life once mixed. If you mix your own, the solvent of choice is usually denatured alcohol based on cost and availability. If the shellac flakes have been stored properly, they have a very extended lifetime. Either way, once dissolved in the alcohol solvent the clock begins to run on the effective use life. Bulls Eye, essentially the only supplier in the US, but there are numerous other companies around the world, indicates that their products have a three year life from date of manufacture. Buying in the appropriate quantities to keep your stock within this timeframe is a wise idea since once the product goes over the edge, there really isn't a fix for it that I know of. Once it has degraded based on age, it simply won't harden properly once the alcohol flashes off.



A host of quick finishes available at your retailer. Here are three friction finishes and a water-based quick finish

If used after this time-based degradation, it cures to a soft finish often being somewhat sticky. Mixing your own shellac is very easily done and ensures that your product is fresh. You can mix what you need for your immediate needs with little or no wastage knowing that it is fresh and effective. It is wise to only mix what you'll use promptly and mark the date and mix on the container.

Using shellac is as easy as wiping it on. Your applicator can be a cloth, brush, foam or spray. Be certain your foam products are usable with alcohol or use them quickly before degradation. You can apply shellac with your lathe running but I often use the lathe as a workholding device. My typical application is by brush while rotating the lathe by hand as needed as applied. Once the application has been completed, I will turn the lathe on a very slow speed while the shellac cures. I do this to minimise any sags or drips if the shellac was applied generously. Properly applied in light coats, shellac will cure very quickly allowing for many repeated

applications during the same day. The hard shellac that once was stuck to a tree is now stuck to your turning. The alcohol simply flashes off and the process is done. Because the subsequent applications are laden with solvent, the added coats just melt into the previous coats allowing for a build of shellac without any intermediate operations. The resulting cured finish can be waxed or buffed for a higher sheen. It can also be steel wooled back for any desired matte finish. The fact that the curing process is reversible with the application of alcohol allows for easy repair now or many years down the road. Conservators worldwide use this fact letting them repair finishes as needed for antiquities in their care.

There are a few terminology and various mixing option things you should know about shellac. Whether you mix your own or buy it already mixed, you'll hear the term 'X' pound cut. 'X' is the number of pounds of flakes that were dissolved in a gallon of solvent. You'll usually run into a one, two or three pound cut



Shellac flakes are available in a variety of processed levels including waxed, dewaxed and different colour tints

although fractional cuts are often made and used as 'spit' coats. When purchasing pre-made shellac finishes, the manufacturer rarely spells out the actual cut instead preferring to give it a name. For the Bulls Eye products, their Sealcoat is about a two-pound cut and their shellac, whether amber or clear, is about a three-pound cut – this is similar for other brands around the world. Since nobody I know mixes a gallon or more at a time, some simple maths for smaller volumes

will allow for mixing your own or diluting pre-made shellac to the desired cut. In practice, a two-pound cut makes a wonderful sanding sealer or a primer coat for subsequent finishes. The beauty of shellac is that you can use virtually any other finish directly over the top. It will accept oils, varnishes, lacquers and more.

Shellac can also be used as a barrier coat when that is needed. My standard use right from the pre-made cans is the

two-pound cut Sealcoat when I plan on shooting lacquer over the top. I use the three-pound cut Shellac as a finish completely by itself. I personally have never used shellac from a spray gun but it is widely done by many finishers. As with any sprayed material, the dilution is needed based on your equipment and process. If you are in this mode of application, you'll know how to alter your material and measure it with your viscosity cup.



If you've never seen flakes up close, they are dry to the touch and fractured in different sizes and shapes



Bulls Eye branded Zinsser shellac products dominate the pre-made shellac products available in the US



First coat of shellac applied generously by foam brush from a three pound cut of Zinsser Bulls Eye Clear



I usually spin the wet coats in the lathe to prevent any drips or sags that can occur with heavier applied coats



One pound to one gallon or proportional fractions thereof yields a 1# cut. Heavier cuts, i.e. 2# or 3#, use the added pounds of shellac to a gallon



A homemade finish that uses shellac with melted bees wax is created in a double boiler and used as a bowl finish



Some of my applications for shellac. Left – shellac matted back with steel wool; centre – shellac alone; right – shellac undercoat for lacquer top coat

Toning with shellac

One of the very underutilised capabilities of shellac is the ability to tint the shellac and perform a process commonly known as 'toning'. Shellac, whether factory made or your own blend, uses alcohol as a solvent. That allows you to mix in any dye that is alcohol soluble. There is a vast array of these available in the market place with many of the brands being well known for their light fastness. The beauty of these products is that the colour and intensity of the toning is completely in your hands. You can take a small amount of shellac and mix in the dye(s) of your choice to create any colour palette you wish. The dye colours can be mixed and matched as needed without problem letting you create a final product specific to your needs. If you record the shellac cut and volume along with the dye information and number of drops used, you'll have a repeatable blend for creation of the next batch you might need. It is an interesting process with the dye particles carried into the wood fibres to remain there with the flashing off of the alcohol and the shellac being largely deposited and remaining on the surface at the curing completion.



The colour options for mixing alcohol soluble dyes into shellac are endless. Mix and match colours and intensity to effect toning



A simple application of shellac alone makes a wonderful finish providing reasonable protection while punching up the figure

Conclusions

Finishing can be a fine art that is rarely practised by the woodturning community. In the quickly turned, sanded and finished world many of us woodturners live in, the process of finishing is usually as rapid as we can get away with. While a woodworker or instrument maker may spend days or weeks on a finishing process, most of ours is often measured in minutes or in some rare occasions in hours. When you select a finish, it is a balance between cost, time, durability, final appearance,

repairability and ease of application.

I've presented a few of my quick and easy finishes ranging from walnut oil straight from the bottle to friction finishes to traditional shellac. Depending on your protection needs, any of these will work quite quickly and with little effort. Spending far more time and space in this column on the traditional shellac wasn't an accident. My hope is that you'll see how simple it is and how versatile a finish it can be. It can be a finish alone, a barrier protection between

other finishes that don't like each other, an undercoat for a different finish, or a toning mechanism. It is so versatile and so easy. If you haven't tried it yet, I highly recommend you do at your earliest convenience. The track record is impressive and it continues even in a world with many alternatives. Furniture and instrument makers can't have been wrong for all these centuries. I believe you'll find a great finish to add to your current finishing repertoire that you may have overlooked. ●