Kurt's clinic

Kurt Hertzog answers some readers' questions

Drying timber for stabilising or casting

Question: I'm looking to ensure small scraps of wood are dry before stabilising or using them in casting. What is the best method to be certain they are dry?

PHOTOGRAPHS BY KURT HERTZOG

Use a shop dedicated oven or microwave for drying wood and baking castings

Answer: If you are trying to dry them in short order, I recommend a microwave or a small oven appliance. But several cautions are in order. Never leave either machine unattended while they are in operation. You really need to be nearby should your drying go awry and ignite.

The second caution is that you should use dedicated shop equipment. Never use a machine that will be used for food service afterwards. Get a microwave or oven at a garage sale or discount store and dedicate it to shop use only.

Go slowly. You are far better to dry wood on the defrost cycle than to blast it with intense heat or microwave energy. Also, do not set the oven too high – about 95°C is about right – and let the wood 'bake' until dry.

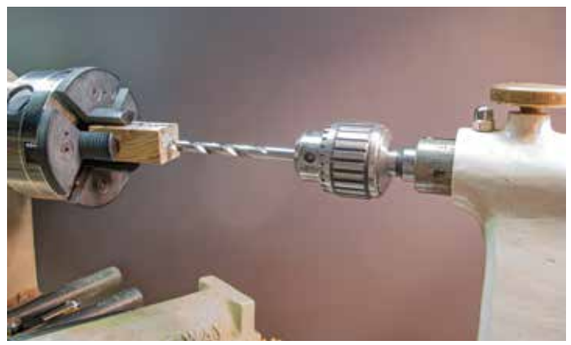
In the microwave, to avoid cooking the wood too much, put it on the defrost cycle and let it cook for a while, then let it cool and keep repeating the cycle until it's dry, checking progress between each cycle.

If you are interested in the best method to ensure dryness regardless of your heating method, weigh the wood on a digital scale (capable of the low value weights) at the beginning and jot down the value. Between cycles, check the weight again and make a note of the value. When the weight doesn't decline appreciably any longer, it is dry. Put the wood into a sealable plastic bag, expel the excess air, and seal it. If you leave it out in the environment, the wood will reabsorb moisture until it reaches the current equilibrium content. Sealed in the bag, it will stay dry until you open it when you are ready to perform your casting or stabilisation.

What's best for hole drilling?

Question: I bought a 200mm drill press a discount store and it doesn't drill all the way through my longer pen blanks. I've tried flipping the blanks over and drilling from the other end, but it never lines up with the first hole I drilled, causing problems when I'm trying to get my tube through. I've also moved the blank up the bit, turned it on and drilled through, but with my longer blanks it's still not long enough to drill through. I think my drill press has a 63mm travel depth. What would be a better drill press for me, please?

Answer: I can't recommend a specific brand name for you but I can suggest that, when you shop, you check the machine specifications for the manufacturer's listed quill travel. You know you need more than you have. Be certain that the machine you are considering gives you as much or more than you need. Solutions that are immediate and potentially at little or no cost are to: use your lathe as a drilling system; use a spacer block(s) on your existing drill press; or use a pistol drill. Your lathe is the best drilling system there is. Obviously, you'll need a drill chuck that fits your taper and a chuck to hold your blank. If you have these you are all set and are limited to a drill depth only by the drill bit length. You mention using spacers with your current drill press but I can't understand why that doesn't work. Again, your quill travel only limits the stroke on each pull. By drilling to maximum depth, turning off the drill press, allowing the quill to retract while keeping the drill bit bottomed in the blank, putting a space block underneath to support your blank (be certain the faces are parallel), and drilling again to the quill depth repeating the process as often as needed should work. You may need to move your drill press platform as part of this. Again, your total drilling depth is limited by the length of your drill. Perhaps the simplest solution is to hold your blank to be drilled in a vice and make the hole with a pistol drill. A starter point will help start the drill where you wish and you'll need to keep things reasonably aligned to exit the blank with sufficient wall thickness of wood for turning. As with the other suggestions, your drilling depth is limited to your drill bit length. Should you need longer drill bits, mail order or internet industrial suppliers will certainly be able to offer you myriad choices in drill types, geometries, and lengths.



Boring a hole on the lathe

Drilling on hole with a drill press

There are plenty of options when it comes to drill bits

Sealing fresh-cut blanks

Question: I just got these pieces of maple from my neighbour as he was cutting down his dying tree. How long do I have until I have to seal them and what is the best method for doing this?

Answer: The cut tree will begin losing moisture immediately through the open end grain from the felling and trimming. Depending on your availability, you can leave a cut tree for quite some time without excessive wood loss if you leave it as a tree. Once you cut it into smaller sections, you'll need to seal the end grain quickly to minimise cracking loss. Depending on the environment, the lengths you cut and your willingness to accept some cut end loss, you have anywhere from hours to days to seal the end grain cuts.

You are trying to seal the end grain so the moisture loss is minimal. The bark protects the tree from moisture loss and your unsealed end grain cuts let it bleed moisture profusely. Uneven drying is what causes cracking. There are several commercial wood sealing products available. The ones with which I have experience are emulsified paraffin. They are heavy, so shipping becomes an important part of the cost. I live near one of companies that invented end grain sealer nearly 100 years ago. My turning club drives to its manufacturing site, buys in 55-gallon drum quantities, and repackages in smaller sizes for the members to buy at a very reasonable cost. This spares the members the small-quantity mark ups and especially the shipping costs that can drive the retail prices way up.

An alternative to the emulsified paraffin products commercially offered is consumer latex paint. Use the latex paint to seal the grain of any cuts, especially end grain. Don't be frugal with it. Slobber it on and get good coverage to the edges and around the corner on to the bark. This is a great use for those leftover quantities of paint from decorating around the house.

Sealed logs

Sealed blanks ready for storage before use

Send your questions to Kurt's email: kurt@kurthertzog.com