

MOISTURE CONTENT OF WOOD THAT IS USED IN BOWL TURNING

Ideal; Properly seasoned, gradually dried wood over a one to two year period of time.

A moisture content of between 33% and 36% is gradually reduced down to the local average content, approx. 10-12%

More commonly, a freshly downed tree in the neighborhood, suddenly becomes available. It could be any one of our locals, Cedar, maple, magnolia, pecan, hackberry, live oak, water oaks, Oaks, and a host of others. They all will be very fresh and very wet. A moisture content of 36% would be possible.

Fresh, wet woods are easy to turn, and if you do not mind having a little water sprayed on you they are fun to turn. But now comes the problem, our completed turning has a very high moisture content and will start losing that moisture by evaporation from its exposed surface. It is the thin walled vessel cells that run longitudinally that are the first to open, lose their water, and thus start drying. As more and more of these cells open, little microscopic sized defects develop that then begin to develop into cracks. As surface evaporation continues, the cracks begin to extend into the deeper layer of our turned piece. If this were allowed to continue as it naturally would do, more and more of the vessel cells would be exposed, losing more water and the cracks continue to grow deeper and wider and depending on the thickness of the wall of our turning, will eventually extend to the inner surface and then we have a complete split of the wall of our turned piece.

What can we do to prevent this natural sequence of events? By stopping the evaporation from the exposed outer surface of our hollow turned vessel, with an effective sealant, such as molten parafin, clear laquer, polyethylene resin, shelac, glues, yellow or cyan acrylate, or clear enamel, we will greatly retard the drying of the outer surface.

Now, taking a tip from nature, the downed tree on the floor of the forest will split in one or two years if it was an intact trunk. If it was a hollow trunk when it fell it will lose its moisture from its hollow inside surface and its outer shell, or skin, will remain intact. So, if we can remove the moisture from the inside surface of our hollow turning, maybe we will preserve the outer shell or skin, of it intact. One way of drying our bowl from the inside would be to direct a stream of warm dry air into it that would evaporate water from the exposed inner surface. By positioning the bowl upside down, gravity gives us slight boost by allowing any surface water to drip right out of the mouth of our bowl.

A relatively safe and inexpensive source of warm air flow can be obtained from the simple hair drying tool sold to many of our ladies for their daily hair care. A simple rig can be assembled from PVC pipe, obtainable at most hardware stores using short lengths and joints and reducing connectors. With the warm air blower set on the low heat and speed flow, the inverted

wooden vessel is positioned on the vertical support. Its moisture content can be read by placing the Moisture Meter on the bottom of the vessel. The initial reading would likely be somewhere in the range of 30%.
 Now, in a matter of hours, or minutes, or weeks or months, drying of our turning will take place. At short time intervals, the moisture meter can be reapplied to monitor the progress of the dryer. When we have reached our goal, 5, 4, or 3% we can stop. The finish of the outer surface can now be completed, and, if desired the inner surface can be completed as well.
 Our Bayou Bowl is now ready to travel to the very dry Bad Lands of our nation. Good Luck!



Wide open bowls



Narrow hollow bowls