

WHO NEEDS A MOISTURE METER ?

Answer: The wood turner who is concerned about the possibility of splitting of his finest hollow-form turning.



In the Bayou Land that we live in, the natural atmosphere is high in humidity and so we rarely think about our wood creations drying out. If we are quite certain that our products are not going to travel out of the Gulf Coastal regions, then we really do not need to worry about the moisture content of our wood. However, if we continue to learn, and to improve our turning skills and designs, we will surely have products that are competitive with our fellow wood turners in other areas of our great Nation.

Either by sales or by donation, our prized turnings could end up in our Mid West, or Mountain Desert regions.. If we have not been very careful in our preparation, our fine turnings could suddenly start drying by the natural forces of a much dryer climate and start cracking and splitting, This could create a very negative reputation for items produced in The Bayou Land that could severely impact the desirability for our turnings in the future.

Prevention of this is what the wood Moisture Meter can do for us. We know that a moisture level of 10 - 12%, is a normal and comfortable level for southern areas of Louisiana. This level would be near disaster for states such as West Texas, Colorado, Utah, Idaho, Nevada, or Wyoming., where the moisture level of wood may be close to 3 -or 4%.

The natural process of drying in an arid climate involves evaporation of minute particles of water from the surface of the material as dry air flows by and around it. In wood grain, the rapid growth areas,, the lighter colored layers, have the most easily mobilized moisture. Rapid evaporation from these layers causes shrinkage of the volume of the wood. Small depressions or defects develop and then gradually enlarge, producing cracks or small splits on the surface of the wood. Progression of these from the surface into the deeper zones of the wood continues until visible splitting advances to a severe degree. becoming through and through cracks. The wood turning is now a disaster.

Now the question is: HOW CAN THIS BE PREVENTED ?

One very rapid and relatively safe way is by carefully directing a stream of warm , dry air into the interior of the hollow-form turning, which is held upside-down, facilitating drainage and removal of water by gravity as well as by evaporation from the surface of the interior of the turning. Any local shrinkage along the inner surface will result in contraction of the entire chamber of the

hollow form vessel. This results in actual compression of the outer layer of the vessel, improving its appearance, becoming smoother and firmer.

Exactly how much moisture needs to be removed? And how do we know when we have removed enough by internal drying?

The Wood Moisture Meter, working by electro-magnetic energy radiation, a system far more accurate and more friendly to the wood than the two-pin system that must penetrate the wood's surface, is used. Its zone of study is 1 ½ in wide, 2 ½ in long, and ½ in thick. much larger than the two pin zone.

The first measurement of the freshly turned wood could be close to 33% if it was wet wood. The wooden vessel is then placed on the warm air blowing rig, which uses a normal electric hair dryer, and the air current is begun. At time intervals of two to five minutes, the moisture level of the piece is determined by touching the meter to the bottom of the vessel. When the desired level of 3 to 5% is reached, the procedure is complete. This is more reliable than the paper bag storage system.

Each of our Bayou Wood Turners members will be able to check out the Wagner Moisture Meter in a manner similar to checking out a book from our library. In this manner all, or as many of the turnings as he wishes to study, can be done before the instrument is returned to the library. Only a few of our fellow Turning Clubs in the nation have a similar arrangement for their members, So now, The Bayou Woodturners are on the cutting edge!

How To Operate WAGNER MOISTURE METER



1. Lay instrument on a flat surface and press The On/Hold button. The model No.2.20 will Show for 4 sec. To turn off press it for 3 sec.



2. Move inst. to flat surface of the wood to be studied. Its moisture percent. will appear on the screen.



3. Field of study in the wood by the Electro-magnetic radiation is 1 ½ x 2 ½ x ½ in. Approx 560 AM

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