

Preparing Parts for Embedding In Polyester Resin



Take scrap of pen-blank material. Pre drill it with 1/4" drill, as tho preparing a pen blank.

Then at bandsaw, slice the pre-drilled blank into 1/16 to 1/8" slices.

Take a 1/4" dowel and saw off 3/8" (not precise) pieces of dowel.

Take dowel pieces and with just a drop of CA, glue them into the pre-drilled slices.

These parts will be the "Plugs" and "Stand-offs" for your parts, when put into the molds.



To place the "Plugs" - apply just a small "stripe" of CA from the base of the wood plug OUT to the end of the dowel. Just one stripe, for it will hold inside the brass tube and the 1/4" is close enough to the brass inside diameter that no PR will flow into the tube.

Don't push the dowel all the way in to the tube, but rather leave it out about 1/16". This way, when it's molded and ready to cut into blanks, the bandsaw cut can be made on the 1/16" protruding dowel area - away from the actual tube surface.



Normally, I pre-glue at one or both ends of a section, some material that will be maybe a centerband, or nib or finial, with whatever material I might select. In the case that one or both ends represent the just mentioned parts, then the wooden "Plug" assemblies are not used.

To plug these ends, use some form of clay (not the expensive stuff I'm showing - gave all my cheap stuff away). Get some at Wal-Mart - just get "Junk" clay - make a small "ball" - press it into the hole (just cover) and then tightly press down the edges over the flat end surface.

See next pic

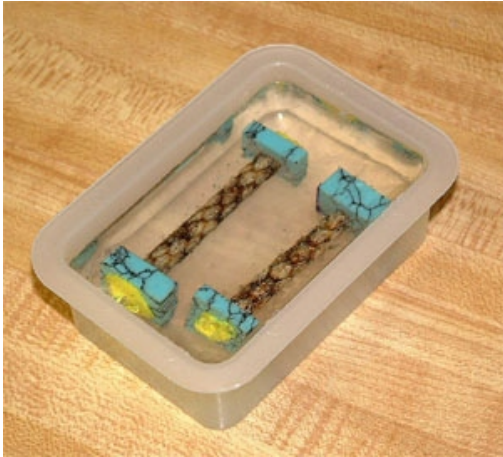


IF your finished piece has one end with the wood plug, before sealing the other end with clay, place a 1" to 1-1/4" piece of welding rod or large nail or whatever inside the brass tube. The tube is hollow and holds air, PLUS the wooden end makes a nice "float" and often, the wooden end floats to the surface, after PR is poured.



When parts are all plugged, place them into your mold. These particular molds are about 3 x 3 x 1".

To predetermine how much PR you'll need, see how high your "Plug Ends) rise from the bottom on the mold. Make a general height mark. Take the parts out of the mold and pour water into the mold until it rises to the height "marked". Now pour this water into your plastic throwaway "Highball" glass. On the outside of the glass, make a mark, showing the level you'll use in the future to pour your PR. After that mark is made, grab another and transfer that water into the next glass and mark - and so on and so on. Keep plenty of your cups marked, so no time waste will be in your future. It makes preparation quick and simple.



When ready, pour the PR to where it just covers the uppermost "top" of your stand-offs, be they wood or some other material. If you keep pouring, you are just adding PR material that you will later have to turn or saw off. If a little is left, who cares - just throw the left material and the cup in the trash.



These blanks have been removed from the molds - wooden "plugs" sawed away - clay sawed away - then the remaining wooden dowel (which you glued originally into the brass tubes) is "knocked through the brass tube" with a punch or flattened nail or whatever. The part is held upright in the hand, bottom resting on the bench. A slight smack or a hammer on the punch and the dowel piece breaks loose, going into the brass tube - keep tapping, and it hits the "weight" (if used) - keep tapping and everything comes out the other end (i.e. Clay, weight and dowel piece). The tube might need minor cleaning with end mill, but that's it - quick and easy. Now, use whatever method you use to square up each end of the blanks .

The picture to the left, shows blanks ready for the mandrel and turning.