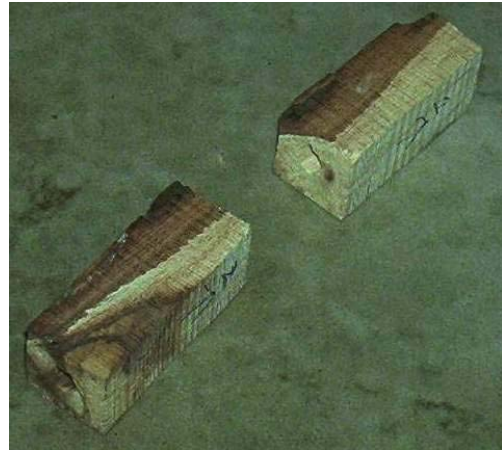


Stabilizing Wood With Polyurethane Using Vacuum

By Lee Biggers

Nature abhors a vacuum and will do everything in its power to equalize a vacuum. With this in mind, I placed two cut and drilled Spalted Pecan blanks in a pint can of *Minwax Fast-Drying* polyurethane and placed it under 20-inches of vacuum.



My vacuum chamber is nothing more than a one-gallon pickle jar with the gauge/valve assembly screwed into the lid.

When I place the polyurethane under a vacuum, it starts to foam once the vacuum nears 20-inches. This foam quickly disappears as the air is removed from the soaking blanks.



Within an hour, the blanks have sunk to the bottom of the can.



I left the blanks in the polyurethane overnight. I pulled them out the next day and hung them to dry in a warm, dry place for 24 hours. I then cleaned out the drill holes, put tubes in them, and turned them. As I turned them, I had to stop a few times to repair some tear-out of some of the really fungus-damaged areas using wood shavings and a slow-drying CA glue. Fortunately, the tear-outs were minimal.

After shaping, I sanded with 180-grit paper and used the slow-drying CA glue as a sealer. Then I followed my sanding practice of sanding to 600-grit, using 0000 steel wool in between and finished using slow drying CA glue followed by Boiled Linseed Oil in three layers. My final step was to use 2 coats of HUT Crystal Coat. And this is the finished product.



Lee Biggers 2004