

Jim McLain's Chaco Process

The process used to create these pieces is as follows:

1. The wood is first harvested from the green wood cutting area outside of Datil, New Mexico. Because I am able to hand pick my trees, I can select the wood with the most character. Once cut the pieces are put into large plastic bags to keep the wood fresh/moist until I can turn it.
2. The wood is then mounted on the lathe and turned into a form that will take advantage of the grain of the wood. The pieces are turned down to a fairly thick wall, and then soaked in a solution of Pentacryl for one week to help stabilize the wood.
3. When the soaking is complete the piece is stored in a sealed cardboard box for six months to one year. Keeping the piece in the box allows it to dry slowly reducing any cracking that might occur.
4. Once dry the piece is returned to the lathe and returned to a wall thickness of between one half inch to three quarters of one inch depending on the type of passages the piece has.
5. The piece is then sanded to 150 grit. And sealed with shellac but you could use lacquer or oil. This sealer will prevent the CA glue from staining the wood.
6. Any voids or cracks in the piece are then carved to prepare them for inlay. The voids are then inlaid with turquoise and superglue. The seal coat that was put on the piece in step 5 prevents the superglue from discoloring the wood when it runs into areas it is not intended to be.
7. The piece is then returned to get the inlays flush with the surrounding wood. Some chip out will occur during this step but it is easily repaired. The piece is then re-sanded to 150 grit and the lines for the bricks and windows are laid out on the piece.
8. All of the lines are then carved into the piece one eighth inch deep with the exception of the passages. The carving is done with a Vortex air turbine carver operating at 400,000 rpm and requires two passes for each brick to achieve the one eighth inch depth. The passage lines are carved one quarter inch deep to prepare for the hand carving.
9. The piece is then sanded to 400 grit. The passages are then relief carved with gouges down one quarter inch, then the next step in the passage is carved one quarter inch deep, then the final step is carved causing an opening in the last passage.
10. The brick pattern in the passages is then burnt into the passage. I outline the passage first then do the bricks.
11. The area of the piece that will be left with a fine finish is then sanded to 1000 grit. I know finish the piece with one coat Parfix CA glue. Once cured the piece is sanded to 2000 then buffed out.
12. The area of the piece that will be left finely finished is then taped off with four layers of tape. Once taped off the turquoise bricks are carved in and any other stone bricks are added. Each stone brick is sized to fit into the brick pattern using a stone trim saw and a flat lap machine.
13. The piece is then sand blasted to help soften the bricks.
14. After sandblasting the sandblast stones that are stuck in the brick pattern are removed using dental picks.
15. After sandblasting and clean up the passages are once again burnt it very lightly to enhance the brick pattern and the passage.
16. The piece is then colored with artist pigments that I have color blended to enhance the brick pattern on the piece.
17. After coloring the piece is then wire brushed with a soft brass brush.
18. The piece is then sprayed with a coating of UV Flat Acrylic finish before removing the sandblasting tape.