

Laser Leftovers

by:

Don Ward
A.K.A “[its_virgil](#)”

This tutorial was downloaded from

<http://www.penturners.org>

The International Association of Penturners



“Laser Leftovers”

Just what are “Laser Leftovers?” They are exactly what the name implies. They are the unused pieces from laser inlay kits. I've written about the laser inlay kits from Kallenshaan Woods which are made by Ken Nelsen and his son Colin. If you've not seen the laser inlay kits then take a look at his unique kits and you will understand what they are. The website address is <http://www.kallenshaanwoods.com> .

I'll try to explain what laser leftovers are. One of Ken's many kits is the fish kit. The parts that come in kit include a turned pen barrel for a sierra kit made from Africa blackwood. The barrel has fish “holes”, or cut out spaces in the shape of fish. Also included in the kit are fish cut out from a similar blank made from olive wood. The olive wood fish are glued into the fish shaped “holes” and the pen barrel is turned and finished. The olive wood barrel from which the fish were cut and the fish cut from the African blackwood barrel are not used. These are now “laser leftovers”. Now, consider the 62 total laser inlay kits that Ken makes and the number of laser leftovers he accumulates is quite large...several boxes full each month.

Ken and I started discussing what could be done with them. He sent me a large box for me to use and see what could be done with them. The small pieces proved to not be very conducive to pen making but Ken has found another artist that is using them in his art work. The barrels from which the smaller pieces were cut were the focus of our experimenting. My first thought was to cast the barrels in colored acrylic. The acrylic fills the voids and then the barrel would be turned. This was an involved project and I really wanted to find something that any penturner could do without having to learn how to cast or purchasing equipment needed to cast. I must confess that what I am reporting here was thought of by Ken. The voids are filled with colored two part epoxy and then turned. I had filled the voids of cholla cactus with colored epoxy but using it for these laser leftovers never crossed my mind. So, this article will outline how the laser leftover voids can be filled with colored epoxy. . **Figure 1** shows an assortment of both types of laser leftovers.



Figure 1: A collection of laser leftovers.

The materials needed for making these pens are as follows. Laser leftovers need to be acquired. There are two ways to get them. One way, which is not really very handy, is to buy them from Ken Nelsen, aka Kallenshaan Woods, They can be purchased from Ken ONLY at shows he is attending as a vendor. This includes various woodworking shows and woodturning symposiums. He does not sell them from his website. The other way to get them is to purchase them from the only other outlet that sells them. This other outlet is <http://www.exoticblanks.com> . You will not be able to pick the ones you get but will be

sent an assortment put together by the owners of Exotic Blanks. Exotics buys them from Ken and sells them via their website. I think they offer two packages of 5 or 12 and they do an excellent job of picking out the laser leftovers that will be the best for making these unique pen blanks. I also think they only have the leftovers for sierra kits, but I may be incorrect on that. So, for most of us purchasing them will be best done purchasing from Exotic Blanks. Tell them Don sent you! The owners of Exotic Blanks are Dawn Kizer and Ed Brown. Check out their other blank offerings. They have blanks that no one carries. **Figure 2** shows the laser leftovers I have chosen to use for this article.



Figure 2: A few laser leftovers that work nicely for laser leftover pens.

Other materials include the two part epoxy. I use 5 minute since only a portion of the voids can be filled at one time. A dye or coloring agent will also be needed. Most any kind of paint or pigment can be used to color epoxy. My favorite has proved to be PearlEx powder which is a mica powder. I get it a Hobby Lobby but any good craft store should carry PearlEx powder of some kind. I use toothpicks to mix the powder into the epoxy and mix in small plastic cups used in food service. I have found mixing on a pad of paper to work just as well as using the small plastic cups unless several are being made at one time and larger amounts of epoxy is used. **Figure 3** shows the epoxy, laser left overs and mixing cups. Bottles of PearlEx powders are shown in **figure 4**. The amount of resin I mix for making single blank is shown in **figure 5** with a dime added for reference.



Figure 3: Epoxy glue and other essentials.



Figure 4: A selection of Pearl Ex powders.



Figure 5: Glue and powder ready to mix.

Let's make a blank. Choose the laser leftover blank to use. Insert a brass tube and center is between the ends. One drop of thin CA on each end is used to lock the tube into place inside the blank. See **figure 6**.



Figure 6: One drop of CA locks the tube in place.

The ends of the blank can now be milled as usual. Even if this is normally done with a pen mill I would suggest using a different method. These laser leftovers have a lot of wood removed and the amount of wood holding the blank together can be quite thin and fragile. One catch with the pen mill can twist the blank into two pieces. Guess how I know this. A disk sander or similar method will be best for squaring the ends of these blanks. The blank is chosen, the tube is glued into place and the ends are squared. It is now time to start filling the voids.

Mix a little of the PearlEx powder into two small equal parts of two part epoxy. Be sure to mix well. I use a toothpick to pick up a little of the colored epoxy and place it into the void on the laser leftover. Be sure to fill the void and stir it around a little to expel any air. We do not want any air bubbles. If an air bubble is found when turning then just mix a little more of the colored epoxy and fill it. **Figure 7** shows the colored epoxy being applied to the void in the laser leftover.



Figure 7: Begin filling the voids with epoxy-powder mix.

Keep the filled void on top until the epoxy has dried then move to the next void to be filled. Some of the various designs will require different amount of epoxy for each filling. **Figure 8** shows the complete void filled and curing. If the blank is turned the epoxy will run...gravity, you know.



Figure 8: One void filled and a few more to go.

As soon as the epoxy has cured enough to turn without the epoxy running the next void can be filled. Continue this process until all voids are filled. Be creative and experiment using the same color on all voids or mix and match with several colors. Two colors can even be swirled together in the same void.

When turning the blank if voids are found or if the void spaces were not completely filled more epoxy can be mixed and added to the blank to correct the mistake. Turning the blank proved to be uneventful with no particular problems. The epoxy turned nicely as did the blackwood. I did not notice much difference between the epoxy and the wood. The blank turned as though it were all wood. I don't foresee any problems turning these blanks. Colored epoxy is very popular as a filler for voids in large turnings such as bowls and other vessels. I wrote about doing something similar with cholla cactus awhile back.

The epoxy is actually much much easier to turn than powdered stone or sand I used to fill the cholla cactus voids. My cholla cactus blanks are now being filled with colored epoxy.

I did not take any pictures of the turning of this blank since the turning was not difficult and really needs no further discussion. The blank was turned with a skew sanded with 320 and 400 sandpaper followed with micromesh. The blank was finished with a CA and boiled linseed oil finish then buffed with NOVUS 3 and 2. **Figure 9** shows the blank after finishing.



Figure 9: All voids filled. The blank has been turned and sanded.

Figure 10 shows a couple of other laser leftovers with different design slots or voids than the one in figure 9. There are several different ones.



Figure 10: A couple of other laser leftovers.

Figure 11 shows the completed pen using the blank I made for this article.



Figure 10: A completed pen using a laser leftover.

Once again, the laser leftovers are only available from Ken Nelsen at <http://www.kallenshaanwoods.com> but he only sells them at the shows he attends as a vendor. They cannot be ordered from the website. The only other source for laser leftovers is from <http://www.exoticblanks.com>. These make nice unique pens and are easy and fun to make. Order a few and make them into pens and take them to the next club meeting and wow your woodturning friends with them.

Comments welcome. Email comments or questions to me at don@RedRiverPens.com

Do a good turn daily!

Don