

The Penturner's Corner

Pen Turning News: The Utah Woodturning Symposium and the 2009 Penturner's Rendezvous are both now history. I was not able to attend but friends who attended reported that the penturning demonstrations were well attended. The demonstrators who did the pen demos had excellent sessions, topics, and information, as I knew they would. The Rendezvous was also well attended with close 150 in attendance.

I will be attending the AAW Symposium which will be happening about the time this issue is available. Barry Gross will be doing several demonstrations related to penturning. That is great news! I will give a full report as soon as I can after the symposium.

The Southwest Association of Turners, aka SWAT, will be having their annual symposium this fall. The dates are October 16-18, 2009. The symposium location will be Wichita Falls, Tx....yea, no travel expenses for me! More information can be found at <http://www.swaturners.org>

I will be doing a demo about making closed end pens. We will also have a special hands on area for pen making. Here is the info from the SWAT website: *There will be two hands-on-areas at the SWAT Symposium this year. In addition to the regular hands-on-area where new turners can get some pointers or non-turners can get a first lesson, we will also have a hands-on-area for turning pens . Penturning is growing in popularity and the quality of the kits and the pens being made with them are reaching new plateaus. Because of the growing popularity of making pens on the wood lathe the penturning hands-on-area will allow new or wannabe penturners to make a first pen or seasoned turners to make a pen or to get invaluable information on kits and making pen on the wood lathe. We will have pen blanks ready to mount on the lathe and turn. Two different kits will be available from various vendors and prepared blanks will be available in the penturning hands-on-area along with any needed tooling. The area will be open during regular demonstration times and also during any free time during the symposium's regular hours. Experienced penturners will be available to assist and answer questions. Don Ward of Wichita Falls will be in charge of the penturning hands-on-area and will be assisted by several competent and knowledgeable penturners. Come by and make a pen or just stop and visit.*

Don Ward,

Hands On Penturning Coordinator

I will be giving more information on the SWAT Symposium in later issues. Come by and visit if you are in attendance. I think it will be fun.

This month's pen: Since I've been writing the Penturner's Corner I've tried to introduce the readers to new techniques, kits, and material. This month I've chosen to focus on materials and the material that rose to the top was **solid surface counter top**

material. Solid surface counter tops are available in several brand names. The most notorious would have to be Corian by DuPont. Wilsonart has a couple of solid surface materials. One is Gibraltar and the other is Earthstone. Others include Avonite, Topstone, Formica solid surface, Gemstone, Trillium and the list goes on. All are 100% acrylic, solid with no voids and are available in several colors and patterns.

Where to get solid surface material? I'm sure that an internet search would yield several sources for small amounts of solid surface material. Most manufactures only sell to certified and trained counter top installers. But, finding out that solid surface material is quite versatile in the art and crafts area there are several sources for solid surface material in small quantities. So, yes, it can be purchased.

How about getting it for free! Find counter top contractors in your area and make a visit. These guys toss lots of scrap material in the trash...scrap to them but not to us. Show your pens to these guys. Tell them you can make pens from solid surface material. Offer to trade a few pens made from solid surface in return of scraps. Your chances are quite good to land some free pen making material. Visit after hours and go dumpster diving...the day before the collection truck will arrive. I've know several penturners who have approached counter top shops and know of none that were refused. Maybe a sale or two will be made. I make solid surface pens for one installer who gives them to his customers...made from the pattern of their new counter top.

Ebay is another source for small pieces of solid surface material. An eBay search will most always yield several options for purchasing small quantities.

Another source is the counter top showrooms. Ask for the 4" square samples of discontinued patterns. Sometimes this works and sometimes not. My best luck has been from local independent dealers and not from the national chain home centers.

NOTE: Stay away from the real stone counter tops, those man made stone counter tops and man made marble. These are either real stone or contain a very high percentage of stone material in acrylic but are way too hard to turn with wood turning tools. Be sure the material is 100% acrylic solid surface material.

Let's make a pen: Figure 1 shows several pieces of solid surface material. Blanks can be made from the same pattern or from two or more patterns. Use your imagination...do some segmenting with solid surface pieces. I've not tried this, but I've read that solid surface material can be heated to soften it. Just think, glue two different colors together, heat it and twist the blank to produce a pattern similar to a candy cane.



Figure 1

The possibilities are limited only by one's imagination. For the pen in this issue I chose the red piece with black spots. I hope the completed pen looks as nice as I think it will. See **figure 2** for the piece I used to make this blank.

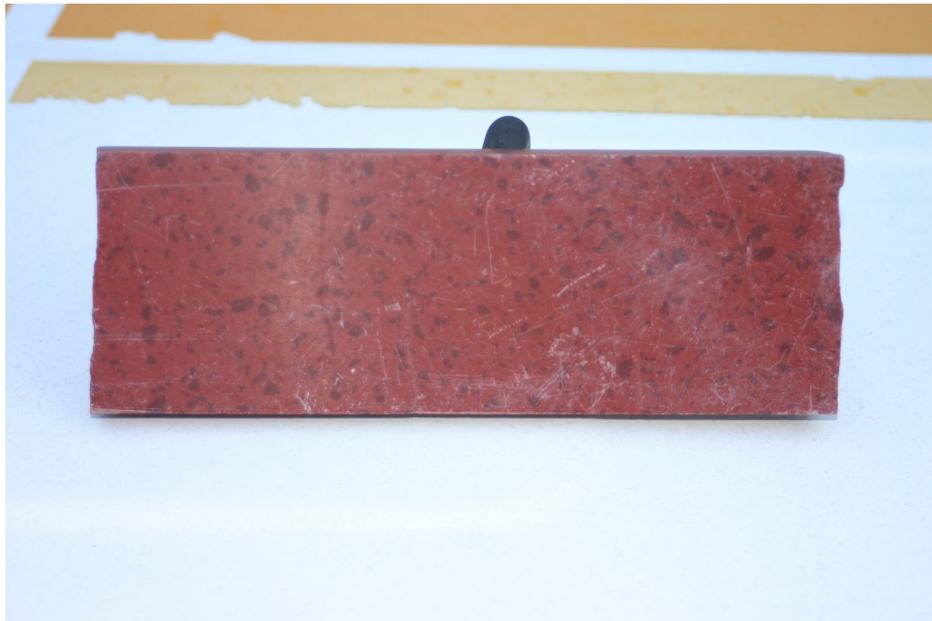


Figure 2

Make the blank: Most solid surface that I've used was 1/2 inch thick. I cut two 5.5 inch long strips 1" wide. I use my band saw but I've used a table saw also. When glued together you will have a blank that is 1" square and 5.5 inches long. Solid surface material has an "up" surface and a "down" surface. The two "up" surfaces should be glued together. Deciding which surface is the "up" surface is not difficult. The "up" surface will be the nicer one, the slickest, the shiniest, and if the material has a pattern, it will be the surface with the best pattern. Lightly sand the two "up" surfaces on sandpaper on a FLAT surface. Sand just enough to break the shine and give the glue some teeth. I use thick CA to give me more working time. Place CA on one surface and then mate the two surfaces. Move them back and forth to ensure good glue coverage. All of both surfaces should have CA on them. Place the two pieces together and clamp tightly. I use hand pistol grip clamps, but any clamping system will work. Be sure to clamp along the entire 5.5 inches....clamp tightly! Use some accelerator but it is not necessary. If the glue coverage is correct and the clamping is sufficient, there will be no visible seam when the pen is turned and polished. I do not like epoxy for this. It will get hot when drilling and the glue joint will fail. Special solid surface glue is available, but only for those who install the material. I've used it but can't tell any difference between it and CA. **Figure 3** shows the two halves clamped together into the blank.



Figure 3

Prep the blank: Cutting and drilling the blank is pretty straight forward. I mark off the tube lengths and indicate the two ends that were once together. **Figure 4** shows the blank marked and then cut. Drilling was uneventful. Drill a little, back out and clean out, drill a little, back out and clean out...well you know the routine. I try to really get the drill bit centered on the glue joint although I don't think it is really that critical. Glue in the tubes as usual. I use two part epoxy for all tubes. Square the ends using your favorite method.



Figure 4

NOTE: Sometimes when the drill bit exits the blank some chipping around the hole takes place. A solution, which I now use routinely, is to cut the blanks long and drill short of the exit end. I then trim the blank to the correct length by cutting off the blind end (the end with no exit hole). This will cure the chipping that often takes place on acrylics, stabilized wood blanks and sometimes other materials. Mount the blanks and bushings and get ready to turn the pen. Figure 5 shows the blanks on the mandrel. Can you guess what pen I'm making from looking at the bushings? No, No, don't peek ahead. Baron? Jr Gent? If your guess was a cigar pen then you are correct.



Figure 5

Turn the pen: Solid surface material is quite hard and somewhat dense. It turns nicely but lighter than your normal cuts will be necessary. I use a skew from start to finish but a rough out gouge will work just fine. Small chips will come off until the corners are knocked down. Then, long ribbons of material may wrap around the mandrel. Stopping often to clear the mandrel may be necessary. The solid surface material I used for this pen did not peel off long ribbons. Keep your tools sharp. I turn the pen to almost finished diameter then finish the turning with a round nose scraper. **Figure 6 and 7** shows this pen being turned with both a rough out gouge and a skew. You should have no problems turning this material. It is close to antler in hardness and turns quite the same as other acrylics.



Figure 6



Figure 7

Sand and polish: Sanding is done starting at 320 and progressing to 800. I sand length wise using each grade of sandpaper before moving on to the next. Cleaning off the sanding dust after each grade of sandpaper is also a good habit. This will remove not only the dust, but any loose grit that would contaminate the next sanding. After sandpaper I use micromesh 1500 to 12000 followed by tripoli and white diamond. I apply the buffing compounds on the late by touching the bar to the spinning blank and polishing with a soft cloth. **Figure 8** shows how I apply the buffing compound to the spinning blank.



Figure 8

I use HUT Ultra Gloss Plastic Polish followed by Flitz and then McGuire's Scratch-X Swirl and Scratch Remover. Several plastic polishes and scratch removers are available and my experience has been that they all work. Several turners of solid surface material and other acrylics use Novus Plastic polishes. I have become a real fan of Flitz and another product called MAAS Metal Polish. **Figure 9** shows the finished and polished blanks still on the lathe. The seam is down the center of the blanks...see if you can see it. I had a hard time finding the seams...but there are a few indicators that the blank is made from two parts. I'll show them in a close up next month and you can see if you found the seam signals.



Figure 9

Assembly: Again, assembly was uneventful. Be sure to clean out the ends of the tubes to remove glue. Clean tubes will make assembly much smoother. The finished and assembled pen is shown in **Figure 10**. Solid surface material polishes to a very high shine.



Figure 10

Go out and find some solid surface material. It is a fun material to use for pens and the colors and patterns are numerous. Do some google searching and you may even find some offers for free samples. Pay close attention...some samples are 1" squares. But, these are useful for accent bands or for making your own pen parts. Most samples are 4" squares and one square will easily yield blanks for one pen.

I hope to hear from those who try a pen made from solid surface material. Emails with comments or questions are welcome. Email me at don@RedRiverPens.com

I hope to meet several new friends in Albuquerque. I will definitely be at the pen turning demos and will be on the panel for the pen turning discussion on Friday evening at the special interest group meeting for pen turners. Check the AAW website for more information.

Do a good turn daily!

Don

