This file contains short tips and tricks contributed by the members of the penturners group, so the 1st person is not always the same. The techniques work for the contributor, and are not universally accepted or endorsed in any way. Please contribute your own ideas, or if you see a post that you think has a really neat idea, by sending an email to <u>Rich Kleinhenz</u> Newest updates are shown in a different color

| acrylics – painting tubes | .1 |
|-----------------------------------|----|
| applying finish | .1 |
| blackening brass tubes | .1 |
| CA finish | |
| deburring | |
| disassembly | .2 |
| disassembly drilling long hole | .2 |
| finishing | .2 |
| fix for loose 7mm transmission | |
| glue removal | |
| glue removal from fingers | |
| aluina | 3 |
| gluing tubes | .3 |
| kit notes | |
| lasting finish | |
| longwood pen | .4 |
| preventing blowouts | |
| roundtop euro (Berea) | .4 |
| sanding light woods | |
| straighten a bowed mandrel | .4 |
| drilling antler | |

acrylics - painting tubes

There's an <u>article</u> in the files area about painting brass tubes to prevent them from showing though some acrylics. Rudy Vey and Chris Hunt discovered that a sharpie works perfectly well for this, has no build-up, and is compatible with polyurethane glue. Might not be compatible with CA

applying finish

Shotgun cleaning patches are precut soft cotton patches, pretty inexpensive and available in the gun section of sporting-goods stores or even Walmart

blackening brass tubes

Jay Pickens found a product called <u>Blackit</u> that chemically blackens brass tubes – great for use with translucent acrylic blanks, e.g. The process he uses is described <u>here</u>

CA finish

After using a CA finish, often pen blanks are glued to the bushings. Hard to avoid... Steve uses the sharp narrow tip of a utility knife to separate the bushing from the blank. (If you rock the bushing, on burls or crosscuts, you easily tear out small pieces)

When Ernie does a CA finish on a pen, he removes the bushings and either uses old tubes or smaller used bushings to hold the piece in place. This avoids gluing the barrels to the bushings.

If you do a build-up CA finish, and the surface is bumpy after it dries, don't start sanding. Use a skew laid on its side to quickly level he surface then start sanding

To avoid gluing blanks to bushings, coat the bushings with vaseline or wax.

Christopher Hunt uses a product called Breakfree CLP in liquid form to coat bushings and mandrel so no CA will stick to them. The product is said to be available in most gun shops.

deburring

To debur the ends of tubes after you square them with a pen mill or sander, use a deburring tool available very inexpensively at any machineshop supply house. This removes the bur and adds a little chamfer making assembly easier. An example is Enco item <u>380-1527</u>

You can use a tapered reamer to put a little chamfer at the end of the brass tube to ease assembly.

Bill Baumbeck sells a chamfering tool used by reloaders that many find very useful

disassembly

To disassemble pens, you often have to hold one barrel while striking a knock-out rod with a hammer. Steve wraps some router mat around the barrel and holds it in a selfcentering drill jig (4 point clamp).

To make a cheap disassembly tool grind the head of a large nail to the desired diameter.

To disassemble a cushion grip pen, see <u>Jim Lane's instructions</u>

drilling long hole

John Grounds found <u>this reference</u> on the internet to drill a long straight hole using a "D bit". To avoid a dead link, Frank Hasieber ported the text (with author's permission) into the <u>files area</u> and added an <u>article</u> on making your own D bit.

finishing

Pat summarized her finishing techniques in this post

fix for loose 7mm transmission

Sometimes when assemble a 7mm pen, the upper barrel doesn't grab the transmission. I use an automatic centerpunch to make a series of dimples around the circumference of the transmission. To avoid distorting the transmission I insert a #2 drill bit (transmission is advanced forward, of course). Make as many as necessary. Each dimple raises a little crater around it. See it <u>here</u>

If the transmission on a Slimline is loose in the lower tube and simply pushes in, one solution is to carefully glue the centerband in place in the right location so the transmission can't slide in.

glue removal

I was trying to remove some glue (polyurethane) that had gotten inside the tube. My craft knife would not reach into the tube. Looking around I spied a one quarter inch bolt. The bolt was just the right size to reach inside the tube. Later I made a handle and cut the head of the bolt off. I glued the handle on the bolt and now I use it like a file to remove glue from the inside of the tube.

To remove glue from inside a '7mm tube', use a 'D' drill bit. For '8mm' tubes an L bit works.

I keep my cheapie flea market 64 piece drill bit set next to my lathe I have been able to find one to fit every tube except the Havana Pen upper Barrel

I keep a pistol cleaning rod with an assortment of wire brushes in the shop to clean the inside of my tubes. Works like a champ for Poly or CA glue

glue removal from fingers

Here's a pretty amazing product that cleans glue from fingers.

<u>http://www.greatplanes.com/accys/gpmr6041.html</u>, they don't sell direct, check 'where to buy'. An online source is <u>Hobbylinc</u>. I have personal experience with CA and polyurethane, don't know what else it can do, these are the only problematic ones for me anyway.

Bill Jackman noticed that pumice stone from the pharmacy or grocery store works very well also. Just rub it back and forth gently on the glue covered area, and you essentially "sand" it away.

gluing

To prevent glue from entering a brass tube while inserting it into the barrel (especially if you have applied glue to the inside of the drilled hole) use the tube like a cookie cutter to punch a plug out of a slice of potato or apple or playdo. Insert that plugged end first. Then while the glue is still wet push the plug through from the other end.

<u>Bill Baumbeck</u> distributes <u>wax sheets</u> (baseplate wax) used by dentists to do the same. This wax is so sticky it's best to wait until the glue has dried to remove it.

gluing tubes

I use a Q-Tip to apply the glue in the hole of a pen blank. I put a small amount in the hole and use the Q-Tip to coat the inside of the hole. Works like a champ!

Chuck Davis uses a piece of Styrofoam, stuffed in a ziplock bag, with pins to keep tubes from shifting, when using polyurethane glue for tubes. PU glue won't stick to the ziplock bag



kit notes

Berea cushion grip (or HUT comfort grip): To get this pen to work more reliably, be very careful when trimming the barrel, and shorten the internal brass tube slightly to gain some tolerance. Details <u>here</u>

lasting finish

My best finish uses a coat of Minwax sanding sealer. When that is dry I sand it with 600 grit and give it a coat of Deft lacquer. Deft dries quickly and is available in spray cans or pints. You can apply 3 or 4 coats a day depending on how deep you want the finish. Another light sanding and then polish with Novis polish. That will give you a lacquer finish that will last for years and not dull form skin oils. It does take more time than friction polish.

longwood pen

When you press the cap and clip into the end of a longwood pen, stick a loose 7mm tube into the lower barrel so that it sticks half out. This takes the stress of the unsupported wood in that section which can crack otherwise (especially if the wood is a burl or cut diagonal to the grain)

preventing blowouts

Instead of cutting your blanks longer than needed, then drilling deeper and cutting off the excess, you can glue some of those cutoffs to the bottom of your blanks, and drill into the glued cutoff. It will be easy to tell when you've drilled into it, if you use a contrasting wood. This helps to keep from blowing out those expensive blanks, especially if your blanks are already too short to leave longer for drilling.

roundtop euro (Berea)

To make sure a roundtop Euro mechanism works Pat reams out the brass tub which may have collapsed during assembly with a drill bit to make sure there is clearance

To make sure the mechanism works, make sure, when you turn the 'tenon' to the brass tube, that there is no glue left. The CB should slide on easily, it's better to glue it on if it's too lose rather than force a fit. You should also make sure the mechanism has clearance by dropping it through the upper barrel - it should not hang up

sanding light woods

To avoid dragging metal particles from the bushings into light colored woods during sanding thus staining the ends dark, Ron Frame makes up sacrificial bushings from another light wood, glued onto a 7mm tube, turned to the right diameter, and cut into sections.

Glenn McCullough turns the barrels, then adds a thin 'wall' made from a trimmed slide between barrel and bushing as a stop for the sand paper.

straighten a bowed mandrel

Mount the mandrel and bring up the tailstock to support it as in normal use, not too tight. Check that the mandrel is true at both ends (fingernail against spinning mandrel is a decent qualitative indicator). In most cases, runout is in the center. Use a dial indicator to find the high spot, and gradually pull against that high spot. Check often. Anything less than say .003" in the center is usable for most people.

Instead of a dial indicator, Greg Wilson uses a pencil (on the toolrest) to mark the high spot!

drilling antler

Antler is hard to hold for drilling. Cris Nirenberg puts an antler section between centers, turns a rough dowel which is then easier to grip by most drilling jigs. See <u>this post</u> and subsequent thread.

I use the belt sander to sand a couple of 90 deg flats on antler sections which makes it easy to hold them in my drill jig. You have to eyeball the orientation of the flats to make the best use of the piece.