

Budget Round Top European pen

william wood-write

penblanks.ca



Needed:

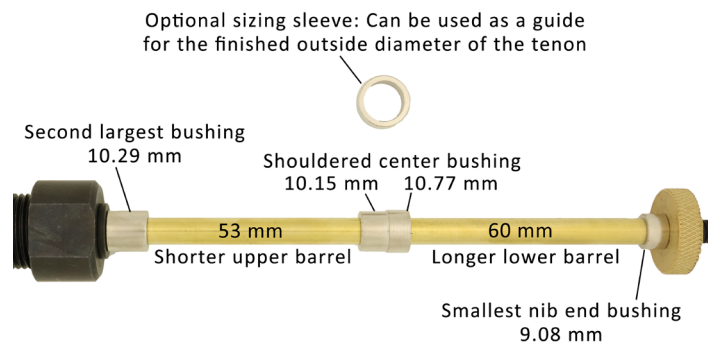
Mandrel A, drill 7 mm, bushing 107A

Preparing the blanks

1. Cut the blanks 1/4" longer than each brass tube so you can square off the blanks after the tubes have been glued in.
2. Drill each blank length wise with the 7 mm drill bit.
3. Scuff the brass tube with sandpaper to clean off the oxidation and give the glue a better adhesion surface.
4. Plug the ends of the tube with a material of your choice – we recommend base plate wax – to keep the glue from getting into the tube. Push the tube ends into a thin section of the material to form a plug. *This is important – glue inside the tubes is a common cause of kit failure.*
5. Roll one of the tubes in glue and insert it into the blank with a twisting motion until it is equidistant between both ends of the blank. Repeat with the other tube.
6. Set aside until glue is dried. Then, use a hobby knife to remove the plugs from the ends.
7. Use a pen mill or disc sander to square off the blanks until you can see bright brass tube.

STOP at this point. *Not having the proper tube length is another popular cause of kit failure.*

Turning the blanks



1. Assemble the bushings and barrels onto the mandrel referring to the diagram above.
2. Turn the upper (shorter) barrel to a diameter of 13.08mm, which is the outside diameter of the centre band.
3. Taper the finial end of the upper barrel down to the bushing (10.29mm - the second largest of the three bushings).
4. On the centre band end of the upper barrel, measure 6.09mm from the edge and make a mark.
5. Turn a tenon on this end, up to your mark, to a diameter of 10.25mm. Take cuts a little at a time, making sure not to make the tenon too small. We recommend using the centre band as a guide when you get close to the finished diameter of the tenon. The sizing sleeve,

included with the bushing set, can be used for this instead if you wish (don't use the sizing sleeve as a guide for the outside diameter of the upper barrel).

6. Turn the lower (longer) barrel to the desired shape using the bushings as a sizing guide.
7. Sand the surface in progressive steps until you get to 400 or 600 grit. For a high polish finish, continue sanding with Micro Mesh through 12,000 then apply the finish of your choice.
8. Remove the blanks from the mandrel.

Assembling the pen

1. Apply a small amount of glue (CA or epoxy) to the tenon and push the centre band onto the tenon. Allow glue to dry.
2. Unscrew the finial bushing from the finial. Press it into the other end of the upper barrel.

3. Attach the clip to this end by threading the finial stud through the hole in the clip and into the finial bushing.
4. Press the nib into the small end of the long barrel.
5. Press the transmission into the other end until about 20.6mm remain exposed. It is best to "sneak" up on this, trying the refill in the mechanism until the appropriate amount (about 3 mm) of the tip is exposed when the transmission is twisted open and fully covered when the transmission is closed.
6. Install the refill.
7. Slide the upper barrel over the transmission, aligning the grain or pattern as desired.

