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www.WoodTurningz.com

## **COMBZ PEN BLANKS**

# **Assembly Instructions**

#### Step 1: Always wear a Mask

Always wear a dust mask when working with this product so you don't breathe in metal particles that could get in the air.

#### Step 2: Drilling the Blanks

Drilling Combz blanks is easily accomplished if a few simple steps are followed. Start by cutting the blank allowing a little extra length on each piece. Often when drilling plastic, the drill bit can catch, cracking the blank as it exits. Avoid this by not drilling through the bottom of the blank, then cut off the excess at the end. Be sure to clear the flute every 1/8" to 1/4" as you drill.

# Step 3: Gluing the Tubes into the Blanks

Sand the outside of your brass tubes. Sanding cleans the tubes and provides the glue a better grip. CA glue and Epoxy are the most popular choices. When turning plastics in general, some blanks are more opaque than others. You may want to paint your tubes to keep the brass tubes from showing through, thus giving an unwanted brassy glow on parts of your project that are turned closer to the tube.

Use a small amount of the thick CA glue (GTHICK2) on the outside of the tube or the inside of the hole. Use enough glue to coat the entire surface. If you use too much glue, it will get inside the tube. Glue inside the tube needs to be removed and is most easily done before the glue sets up. After the glue sets up, use a box knife, Dremel tool, or similar device to remove it. The fit of a pressed-in part with the tube is very tight, and any excess glue is likely to cause cracking during final assembly.

#### Step 4: Turning the Blanks

We recommend carbide turning tools when turning these blanks. These blanks are slightly more brittle than acrylic acetate but turn easily with sharp tools. Cutting the Combz material properly will cause less impact to the blank and require less sanding. Be certain to keep your tools sharp and use light cuts. If the blank is turned too aggressively, then your blank could chip or blow out. If pitting is an issue, then stop turning before reaching your final dimension as you will need to sand the pits out. If you have pitting that is too deep, you may use a drop of thick CA glue to seamlessly fill the voids. You will then want to turn the CA glue back flush...

## Step 5: Polishing

Sand to 600-grit using WoodTurningz' fiveroll sandpaper kit (SP5ROLL), then switch to Micro-mesh (MMESH) or the plastic pen finishing kit (PKFINKIT2X) and polish through all the grades. You may wish to stop the lathe once in a while and use your sandpaper or Micro-mesh (depending at what step you are) to sand the length of the blank to remove rotational scratches in the blank. If you get scratches that don't come out, drop back a step or two in the process and start there. With these blanks, we recommend finishing with CA so any exposed metal is sealed. It will also help fill any pucks or holes. If you need CA glue finishing instructions, please contact WoodTurningz, and we will provide these for you.

**Note:** Be careful not to overheat the blank by sanding or cutting too aggressively. This can cause the blank to melt.