## **Borealis Twist pen by Dayacom**





## Needed:

Mandrel A/7mm; bushing BOR-DAY-BU; drill 27/64

## **Preparing the blank**

- 1. Only one blank (half of a standard length pen blank) is required for this pen. Cut the material blank 1/4" longer than the brass tube so you can square the ends off once the tube is glued in.
- **2.** Drill the blank through the center, lengthwise, with a 27/64" bit.
- **3.** Scuff the brass tubes 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.** Prepare your glue. We recommend two part epoxy glue use a fast drying type, one hour or less. You can also use thick CA glue.
- 6. Roll the tube in the glue then insert it into

the blank using a twisting motion until the tube is equidistant between both ends of the blank.

- **7.** Set aside until the glue has had time to reach its maximum strength.
- **8.** When the glue has cured, remove the plugs from the ends.
- 9. Using a barrel trimmer of the proper size, square off the ends of the blank until you can see bright brass tube. STOP at this point. This can also be done with the proper jig and a disk sander. Not having the proper tube length is another major cause of kit failure.

## **Turning the blank**



- **1.** Assemble the blank on the mandrel using the BOR-DAY-BU bushings and following the diagram above.
- 2. Lightly tighten the mandrel and secure. Do not over-tighten the brass nut this can bend the mandrel which will result in an oval pen.

- **3.** Turn the pen blank to the desired shape using the bushings as a sizing guide.
- **4.** After turning, sand the surface in progressive steps until you get to 400 or 600 grit. For a smooth finish, continue sanding with Micro Mesh from 1,500 to 12,000 grit.
- **5.** Apply a finish of your choice and remove the blank from the mandrel.

Assembling the pen

- **1.** Press the finial/clip assembly into one end of your finished blank.
- **2.** Insert the refill into the nib assembly making sure that the spring is in place.
- **3.** Screw the twist mechanism over the refill and into the nib assembly.
- 4. Slide the blank/finial/clip assembly over

the twist mechanism.

