

## How to square pen blanks using a pen mill

### *A William Wood-Write how-to guide*

Properly squared pen blanks are essential for a professional-looking finished pen. A pen mill removes excess glue from inside the brass tube and trims the ends of your blank so they sit flush against the pen components during assembly.

#### What you'll need

- Pen mill with the appropriate cutter head and shaft
- Drill press
- Drilling vise
- Pen blank with brass tube already glued in place



#### Step 1: Prepare your pen mill

Choose a pen mill shaft that fits inside the brass tube of your pen blank. The shaft helps clear away any glue or debris inside the tube, while the cutter head trims the end of the blank square to the tube. Install the pen mill in your drill press, leaving the flat portion of the shaft exposed between the chuck jaws.

#### Step 2: Secure and align the blank

Secure your pen blank in a drilling vise. Line up the brass tube with the pen mill shaft and check that everything fits and is properly aligned before cutting.

#### Step 3: Square the first end

Begin trimming the end of the blank, removing only a small amount of material at a time. Stop frequently to check your progress.

**Important:** Stop cutting as soon as you see the brass tube begin to shine. Cutting beyond this point can shorten the tube and affect how your pen fits together.

#### Step 4: Square the opposite end

Turn the blank around and repeat the process on the other end. Again, remove material gradually and stop as soon as the brass tube becomes visible.

#### Step 5: Check your work

Both ends of your blank should now be square and flush with the brass tube. When properly squared, the blank will fit snugly against the pen bushings without gaps. This also ensures the ends will sit squarely against the pen components during final assembly.

#### A final tip

Take your time and check your progress often. It's better to remove a little material at a time than to accidentally shorten the brass tube.

Proper blank preparation is a small step that makes a big difference in the fit and appearance of your finished pen.