Wave Pen Creation and Variations
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My purpose in putting this document together is to describe my process for creating what I call my wave pens. The wave pen, like segmented pens, is another method for adding color, texture and visual interest. While I still love making single material pens I also like to "mix it up" a bit with different turning material. My hope is to demonstrate that we only limit ourselves if we are not willing to try things that are different.

This tutorial is really centered on the creation of the blank. The turning, finishing, and hardware installation is the same. At least I haven't changed the things that I do. The pictures and blank preparation that are shown here are for the more complex "web wave" design. Here are some of the wave variations that I have played with

	Web Wave
	Single Color Wave With veneer layers
	Duel Color Wave w/o veneer
	Duel Color Wave with veneer
	Duel Color Wave with veneer layers

# Blank Creation Process

Step1: Asses Your Options

OK, I'm not trying to be funny here (well maybe a little☺). Of course we start with a blank. This point with this step is to asses the size of the blank to the size of the pen you are creating. At this point I try to visualize and decide on tight or loose waves and the amplitude of the wave. Once I do this I go on to Step 2.

Step 2: Draw Your Pattern

Here you can see that I make my center line, amplitude lines and the basic wave pattern. For a normal single wave pattern there is, of course, only one wave drawn. For this "Web Wave" I have crossing wave patterns on this face and draw another set on the adjoining face.

Step 3: First Cut. Cut Your Design
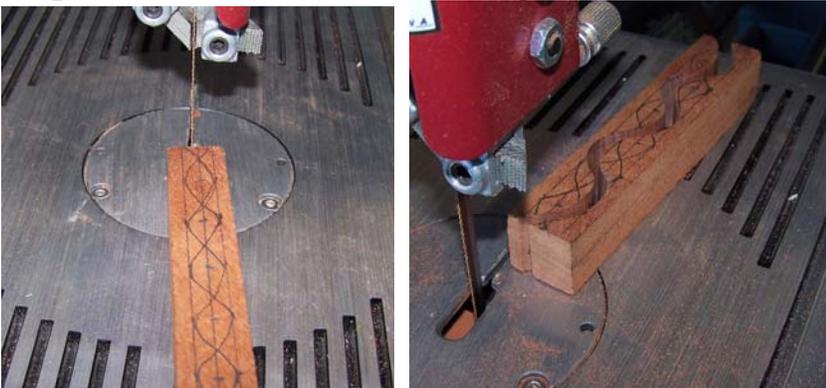
As you see I use my band saw for my cuts. Currently I have a ¼ blade mounted. While I have ground the back side of the blade for smoother movement, the control of tight patterns leaves a little to be desired. Future cuts will either involve mounting a 1/16 inch blade or going to a scroll saw.

Note: If you are going for a single wave, you can stop here and go on to gluing in your veneer, clamping then drilling and turning.

Step 4: Veneer Glue-up and ready to clamp
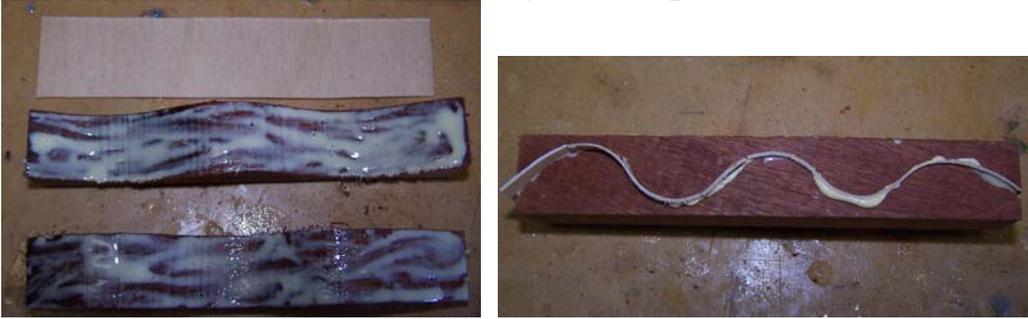
I'm pretty liberal with the glue here. I'll then clamp the entire blank. If this was my only cut I will leave this clamped for 24 hours. If I am making additional cuts I will clamp for 2 – 3 hours before going back to the band saw.

Step 5: Second Cut

Here I am making my second cut on this side. Again the ¼ inch blade is limiting my pattern a bit here.

Step 6: (Repeat Step 4)

Step 7: (Repeat Steps 3 – 6 on adjoining side)

Finished Blanks

I have prepared two "Web Wave" blanks. I am experimenting with different wave amplitudes and tightness of the wave.

Ready to Turn

Turned down to Size

Finished Pens

Hopefully I have given you enough detail to see how I have created these visually interesting designs. While it may not be everyone's cup of tea it does demonstrate how interesting pen design can be. Experiment, have fun, it has been personally rewarding to me and I hope to you also.