

SINGLE TURN INLAY

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Single turn bands have proven difficult for some to master. Most people assume that the inlaid band is a separate thread of a different color, however, they are mistaken. The secret behind this process is to use ink in place of thread to create the band. Once complete, the inlay appears to be a single floating band but in reality is simply a continuation of the actual main wrap. In this tutorial I will demonstrate the process on a fiberglass blank. The exact same process is used for working with bamboo, however, the finishing process in the accompanying clear wrap tutorial should be followed.

CHAPTER 2

WRAPPING THE GUIDE

To begin the process you need to assemble the appropriate materials.

1. YLI 100 White Silk
2. YLI 100 Black Silk
3. Pearsall's Gossamer Black Silk (To be used later for 3 turn trim bands.)
4. Masking Tape
5. Scalpel



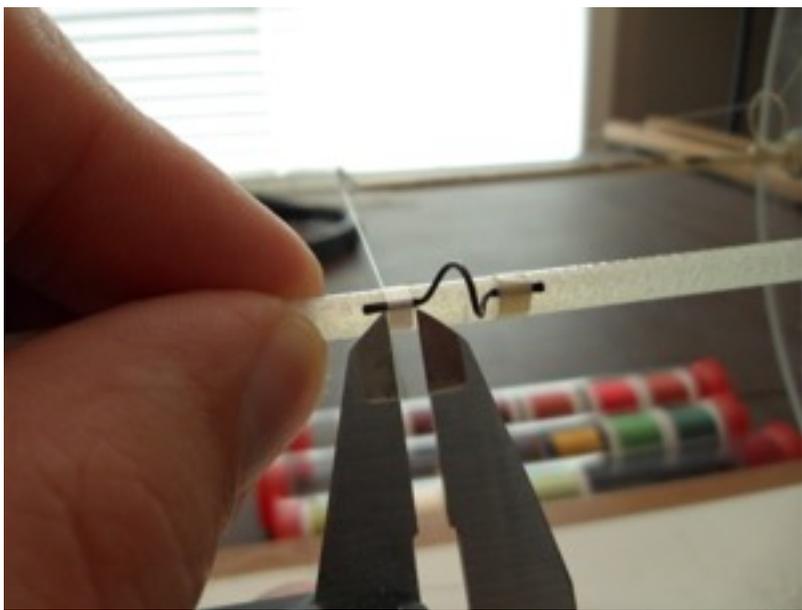
6. Burnishing Tool
7. Rod Wrapper
8. OptiVisor
9. Guides
10. Scissors
11. Water (Will be used when doing the 3 turn trim bands)
12. Caliper
13. Pigma Micron or India Ink Pen (This ink will not fade, be careful when using other types of pens.)

Clear vision is critical when executing the inlaid band as you will have to start and stop the process at exact points. I prefer to use an OptiVisor as my eyesight does not allow me to see clearly enough at very close distances. Another option is reading glasses. They are readily available and can be purchased at numerous places.

To begin the guide is taped on the blank and the wrap is started. I prefer to wrap down the guide, other's prefer to wrap up the guide. By wrapping down the guide I can keep the number of turns of silk on the blank prior to the foot very consistent as I just count them at the transition point. When wrapping up the guide you have to worry a



little more about getting the placement of the start of the wrap in the right place. This probably wouldn't be an issue, however, I prefer to keep only three turns of silk between the guide and start of the trim band.



The wrap progresses down the blank and is measured to ensure consistency in spacing of the inlaid single thread. Here I need about two more wraps of thread.



Now the single turn of black is made. This is actually done using ink to change the color of the thread. A pigma micron or india ink pen is used to color the thread black. First, a spot of ink is placed on the starting point of the colored wrap. Here I am placing it to start on top of the guide. Since the guides are black if there is a slight overlap of color, it will blend in with the black nickel of the guide below it. Remember that the ink will act as a wick, so you need to account for that when placing the

initial mark on the silk.



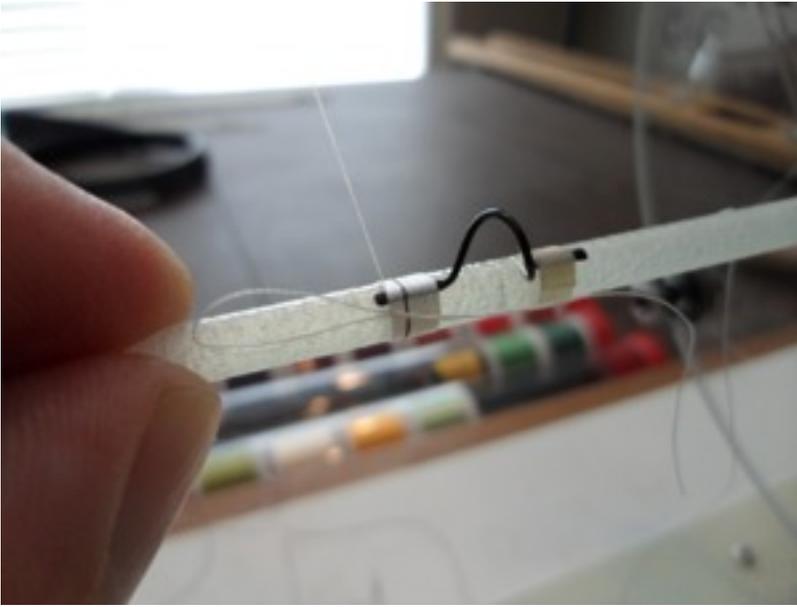
The dot is allowed to dry for a moment and a turn of thread is made and another dot of ink is carefully placed to meet the first at the end of the wrap. Care needs to be taken and you can work your way slowly toward the exact point where the beginning and end of the wrap meet. (This is where the optivisor or reading glasses come in handy.)



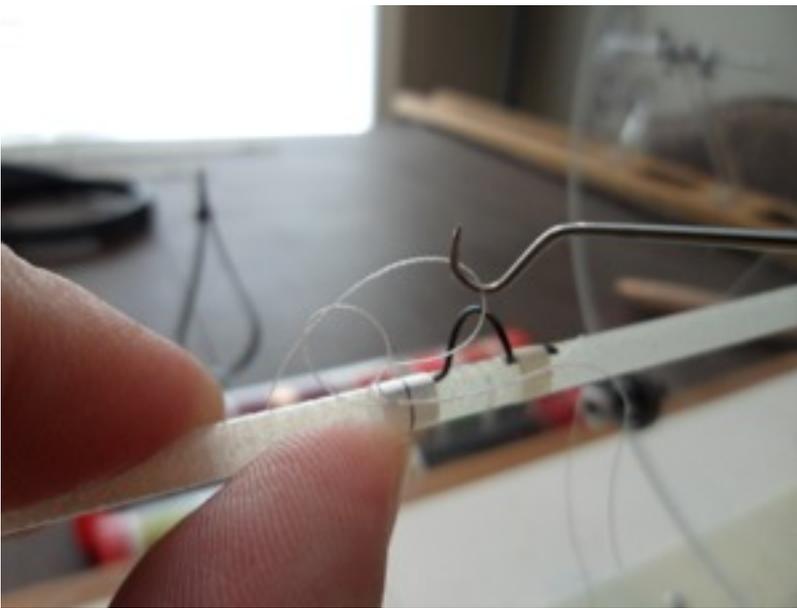
The wrap is backed off the blank and the space in between the two dots is “colored in”.



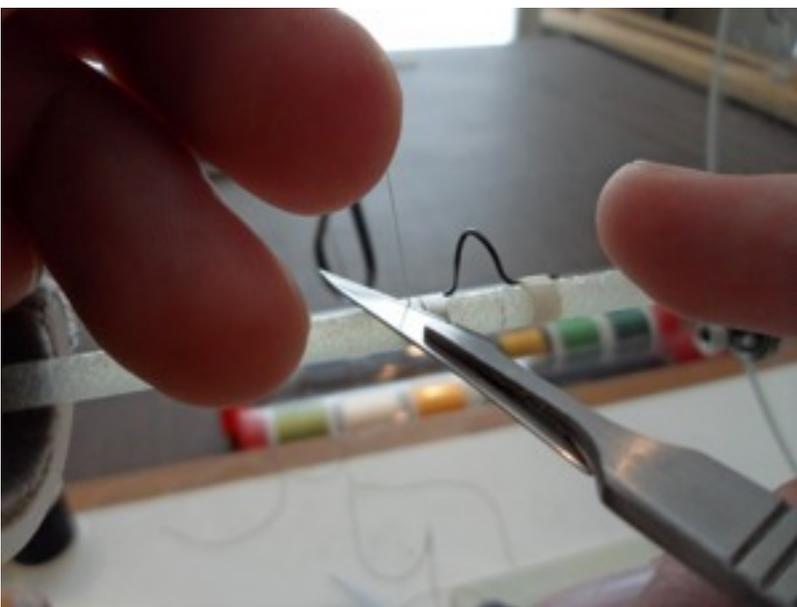
The ink is left to dry for a few seconds, and then the wrap is continued.



A pull loop is inserted a little ways away from the end of the wrap. I simply use a scrap of thread, others may use a threader or something similar.



The thread is cut and pulled through the loop.



Finally it is pulled taunt and trimmed flush to the wrap.



That leaves the wrap ready for burnishing and a trim wrap.

CHAPTER 3

FINISHING THE WRAP

“The method here is shown using epoxy that will yield clear wraps for use on fiberglass or graphite rods. On bamboo wraps I recommend using a varnish based finishing method described in the “Clear and Translucent wrap tutorial”

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To begin the finishing process first assemble the following items:



1. ThreadMaster Lite
2. Acetone
3. Alcohol Lamp
4. Syringes
5. Mixing Bowl
6. Brushes



To begin the wraps are passed over an alcohol torch to singe away any "fuzzies" in the silk. Denatured alcohol burns at somewhat low temperatures which allows the wrap to be rotated quickly in the flame without scorching. You'll notice in the pictures that the torch doesn't even appear to be lit. The flame is "blue" and doesn't show in the pictures.



Next you will need to mix the epoxy. For the first coat I am going to use 1 part



resin, 1 part hardener, and 1 part acetone. (All by volume) The acetone thins the mix and allows for quick and thorough penetration of the wraps. This is critical for the first stage as you want to eliminate any chance of getting bubbles, or micro bubbles, in the finished wrap.



Mix everything thoroughly for about 3 minutes with a darning needle. Stir 10 revolutions clockwise, and then 10 counter clockwise until the epoxy is clear and you stop seeing "marbling". Some people ask why I use the darning needle and mix in that fashion. I have found that mixing with a needle reduces the amount of bubbling introduced into the epoxy.

Some people like to pour the epoxy on a piece of foil at this point to let the air bubble escape. This isn't critical for me as the epoxy had been thinned quite nicely and the introduction of air was minimized in the mixing process. Now the brush is inserted in the epoxy and then wicked on the side of the mixing bowl to let any air escape from the bristles in the brush. This might take a little while to get all the air out, but it is critical.

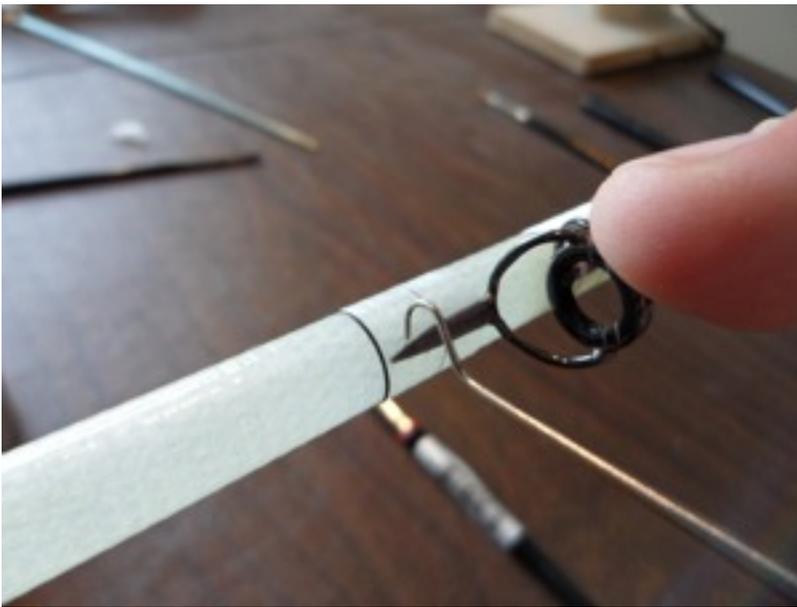


Now the finishing of the wrap begins. A large drop of epoxy is placed on top of the guide foot and then worked around the wrap, thoroughly coating everything but done with care so as not to spill onto the blank at this point.





As you can see (sorry the picture is a little fuzzy on this one) on this foot a bubble formed on the side of the guide foot.



To remedy the problem I simply use a pick and gently move the threads apart to release the bubble.



At this point as much epoxy as possible is wicked away leaving the wraps just appearing damp.



The balance of the wraps and trim bands are completed in the same manner and the rod is placed in the dryer.

Subsequent very thin layers of epoxy are added to the wraps. Typically 4 - 6 applications of epoxy are used. Each additional layer should be placed on the wrap in a very thin layer, using an unloaded brush to remove excess epoxy so as not to create a “football” effect on the wrap. The number of layers is more related to personal preference than a set number. Some individuals will use as few as 2, others as many as 6-8. As additional layers are added I use the following ratios of epoxy to acetone.

First Coat: 1 part resin, 1 part hardener, 1 part acetone

Second - Fifth Coats: 1 part resin, 1 part hardener, 1/2 part acetone

Final Coat: 1 part resin, 1 part hardener, 1/4 part acetone

