CLEAR WRAP TUTORIAL
Transparent or clear wraps are often thought to be difficult to execute. However, with proper preparation and care in execution they are quite simple. Transparent wraps can be achieved with any color of silk thread with the exception of black. The choices are nearly endless and all easily executed.

To begin with you will need to assemble the supplies listed in the checklist. All are easily obtained or made, however, the most important to me is an optical aid. As most of us age our eyesight becomes a little less clear when working up close and hav-
ing the ability to see clearly what you are working on is critical. Because of that I would recommend that whether or not you think you need anything, you buy a pair of reading glasses or a similar aide. I prefer to use an OptiVisor with 3x lens. The OptiVisor is a binocular headband magnifier which leaves both of your hands free and allows for close accurate work. Adjustable pivots allow the visor to be tilted out of the way when not needed and quickly available when you need magnification. Good vision is necessary when doing finishing work. Regardless of what you decide to use be sure that you can see clearly.

The next thing on the checklist that you will need is the Walnut Oil and Varnish sealant that is necessary to treat the wraps with prior to varnishing. The instructions below were first shared by Mike Brooks on the rodmakers listserv several years ago. To make the Walnut Oil Varnish you will need both Spar Varnish and Walnut Alkyd Medium. Make sure you purchase the Walnut Alkyd Medium and not Walnut Oil. They are packaged in a very similar manner but are very different in nature. The Walnut Alkyd Medium is available from dickblick.com or other art supply stores.

To create the mix you will need a small glass bottle, the supplies above, and a pan of boiling water. Be careful to ensure that the water in the pan is sufficiently below the level of the jar lid. The jar does not need to be large as a little goes a long way, so an old baby food jar is ideal. To make the sealant combine 50% Spar Varnish and 50% Walnut Alkyd Medium in the jar. Securely cap the jar and place it in a pot of boiling water that you have just removed from the burner and allow it to cool to room temperature. Remove from the water bath and store for a day or two. You can then simply shake the mixture and put it to use.

After preparing the Walnut Varnish medium you will want to ensure that you have some thinned varnish to use to finish the wraps. Depending on the brand of varnish you are using the amount of thinning will vary. For very viscous varnishes such as Epifanes you will want to thin the varnish by 50% with a good artist grade turpentine. There are impurities in low grade solvent that you do not want mixed into your
varnish. For that reason it is worth the extra expense to use the best grade turpentine that you can find. For varnishes other than Epifanes, thinning 25% is adequate. If you think your finish is too thin, or too thick, you can simply add more varnish or thinner to the mix until you have the consistency of maple syrup.

Another choice you will need to make prior to beginning the finishing process is choosing the silk thread. There is a common misconception that for wraps to be truly clear or translucent that you need to use the thinnest silk available. This is simply not true. While there are benefits from using thinner thread, you can obtain excellent results with almost any size thread. It has been popularized that you need to use Pearsall’s silk when doing clear or translucent wraps. While a good choice Pearsall’s is often difficult for some people to work with. In addition, if you are doing clear wraps you can use YLI 212 (Natural) silk and avoid using a thread that has been optically whitened. These optically enhanced threads can often have a blue cast to them in direct sunlight. I prefer YLI 100 silk as it is still a fine denier thread and is easier to work with than others.

You now need to select a burnisher. The burnisher can be anything from a simple plastic burnisher sold through most rod building supply houses to an agate burnisher which accomplishes the exact same thing. The choice is yours, either can be used successfully to close any small gaps that may exist in the thread after wrapping. In addition to closing gaps in the thread, the burnisher will be used to tighten, and square the wraps to the blank. Just one word of caution, you want your burnisher to have an edge to pack the threads and many of the agate burnishers do not have a defined edge so their use may be limited.

The next tool needed is a brush to apply both the walnut varnish mix and the varnish itself. You can use almost any brush but having one that is squared at the ends is quite helpful when applying the varnish to the ends of the wraps. I typically use a size 2 sable brush which is about 3 mm (1/8”) wide. Using a small brush allows me to accurately apply the varnish. While a you can apply varnish with everything from a bodkin to a toothpick, you will need a brush as you will
want to wick away walnut varnish as part of the process.

The final tool needed to complete the process is a rod turner. The turner can be purchased or made with a little effort. I have had and used a Rodsmith Quad Drying Machine for several years and enjoy it as it allows me to work on multiple sections simultaneously. However, a simple cardboard box with a couple of v notches cut in to it will work equally as well, albeit with a little more effort as you will need to rotate the rod section 180° every 5 minutes until the varnish has set. The choice is yours, use whatever you might have available.

You have now assembled all the tools necessary and can begin the process of finishing the wrap.
To begin the process you will need to wrap the guide on the blank. While we will not cover in detail how to wrap a guide, there are advantages in my opinion in wrapping the guide from the top down onto the blank. When wrapping this way it is easier to ensure that you have the exact same number of wraps of thread below the foot on the blank. All you have to do is count the number of wraps after reaching the blank when wrapping down. When wrapping up the guide you need to ensure that you have the spacing right when beginning the wrap which can be frustrating at times to make sure everything is exactly symmetrical.

Step 1: Burnish the Wrap

After wrapping the guide you will want to ensure there are no “fuzzies” or stray threads of silk present and burnish it. To remove the fuzzies or stray filaments quickly run your wrap over an alcohol flame or use the blue flame on the edge of a cigarette lighter. You want to have as brief of contact as possible to burn away the stray filaments without burning or scorching the wrap. Once complete you are ready to burnish the wrap. Careful burnishing will remove slight gaps in the thread, pack the threads, and square the ends. To begin carefully examine your wrap. Look for gaps in the thread and any point where the thread may have crossed over another in error. If you have a crossed thread you will want to rewrap the guide as it will create a ridge or hump in the finish when completed.

After examining the thread begin the process as follows. Run your burnishing tool across the wrap moving from the outside to the center. This will pack the threads and close any gaps that exist. Examine the wrap closely to ensure all gaps are closed. Once you are satisfied there are no gaps in the thread then use the edge of the burnishing tool to square the ends of the wraps to the rod.

Step 2: Applying the Walnut Varnish
To apply the Walnut Varnish take your brush and dip it in the Walnut Varnish. You will want to apply a fairly heavy coat but be careful to not overload the wrap with the mixture. If you do it will spill over onto the rod and will lengthen the amount of time necessary to clean up the rod prior to final finishing. I like to place a small to medium size drop of the mix directly on the foot of the guide and then carefully work it around the wrap. You can do this to all the wraps on the section and then will proceed to remove as much of the walnut varnish as possible. To do this clean your brush and then wick away as much of the varnish as possible. I use a paper towel to wipe my brush on to keep it from loading with varnish. Get as much off as possible, leaving your wraps just barely damp.

Repeat the process in 1-2 hours and then allow the rod to sit overnight. The next day repeat the process. When completed you will have applied the mixture and wicked it away four times. You are now ready to move onto the varnishing stage.

Step 3: Varnishing the Wraps

To apply the thinned varnish take your brush and load it sparingly with varnish as a little goes a long way. Again make the initial contact with the wrap on top of the guide foot and then carefully work it around the wrap. As the wraps get smaller the amount of varnish required will be less and less. As a result you will want to wick away some if not most of the varnish on the side of your bottle or container so you do not overload the wrap. The coats should be very thin, if you see a good deal of sagging in the varnish on the wrap you know that you have applied too much and will want to wick some away.

Note: Ideally you don’t want any of the varnish to spill onto the rod itself as this can show under the final coat of varnish and will need to be removed. If you do have some incidental spill over you can take a piece of thread or small strip of paper towel and carefully wick it away. Get as much off of the blank as possible, but don’t be too concerned as we will do a final clean up.

Place the rod in a rod turner and allow to turn for a few hours until the varnish has set. If you don’t have a rod turner you can place a couple of v notches in a cardboard box and use it to place your rod section in. Simply turn the section 180 degrees
every five minutes for a couple of hours. It is easier to use a rod turner, but great results can be achieved either way.

Repeat the process after 24 hours of drying time. You will normally need 2 - 3 coats of thinned varnish to fill the gaps in the thread in preparation for final varnishing.

Step 4: Final Varnish Preparation

If you have been careful with your work there will be very little preparation to do prior to final varnishing. You will, however, want to check on two things. First if you do have any uneven surfaces on your wrap they can be gently sanded away as this point. Simply use 600 - 1000 grit sand paper and work it gently across the wrap. (Note: You will need to let the varnish cure prior to sanding or this can turn into a big mess)

After sanding is completed you will want to remove any varnish that has spilled onto the rod. To do this take an exacto knife and place the blade adjacent to the wrap. Turn the blade perpendicular to the rod (90°) push down gently and pull away from the wrap. This will scrape any spilled varnish off the blank without damaging the wrap. Work carefully when doing this so you do not cut the wrap itself. The objective is to remove only the spilled varnish in order to create a smooth transition from the wrap to the varnish.

With a little time and careful work anyone can wrap a rod as well as the finest craftsman. This method will leave no micro bubbles or shimmers in the wraps. Patience and a close eye for detail is the key.

Note: You will no doubt have noticed that in many of the pictures you see a single turn trim band inserted into the clear wraps. This technique will be covered in the second tutorial in this series “Executing the Single Thread Inlay”

If you have any questions or need further advise, please feel free to contact me through my contact page at www.splittingcane.com