Guide prep and positioning on the blank

Guide prep was one of my least favorite tasks until I found my 3.5" bench grinder. As with all our steps, there are several ways to skin this cat. I'll discuss a couple.

Guide prep is important and the leading edge of the guide should be thin and the angle shallow up to the guide foot. If the end is too large, it will be difficult to get the thread to climb over the end of the foot smoothly. Also, if the end of the foot is too abrupt, it will create a spot where the finish will crack and it just doesn't look very good. We'll also look at a couple ways to hold the guides on the blank to start wrapping.

Safety.

Safety Glasses should always be worn when using the power tools shown below. Pieces of guide foot or the grinding wheel can fly off at any time and become dangerous projectiles. I can't stress this enough.

Guide prep using a bench grinder.

I found this small bench grinder at harbor freight. It is adjustable and the slowest speed is good for grinding guides. Don't use a fast speed for grinding as it will over heat the guide and will affect the temper of the material and could also lead to the ring popping out if overheated. Notice I use a pair of locking forceps to hold the guide while grinding. Use the heavy wheel for shaping, making sure the end is thin and the angle is shallow to the main part of the guide foot.



Once the desired shape is achieved, use the fiber wheel to polish and smooth both the underside and the top side of the guide. In most cases, the guide will be resting on the blank so if the foot is not flat, or there are burrs on the bottom, it could create a wear point for the blank to fail. Having personal experience here, I can tell you it will happen. Also ensure that the feet are bent so it all lays flat on the blank. Note the prepped and unprepped pictures below.



The guide with one wrap above has been prepped properly. Note the smooth transition from the blank to the guide foot. The guide with both feet wrapped above was not prepped. Note the bumps at the end of the guide foot. This will cause a finish crack over time.

If you don't have a bench grinder, a dremel tool is a good substitute. Use a cutoff wheel (the reinforced ones are best) and grind as shown. Use a piece of sandpaper to finish and smooth.



Depending on the brand of guides you use, some have excess plating on the bottom and they don't lay very flat on the blank. You can use a chain saw file in various sizes to shape the bottom of the guide so it makes good contact with the blank surface.



Holding the guide to the blank

There are several ways to do this.

Flexcoat makes a guide holding glue that makes this a slick task and is my primary method these days. Do not use the tip top glue for this, the adhesive is too strong. You want to be able to reposition the guides to line them up after the wrap is done so the bond should break fairly easily. This allows for an obstruction-free wrap.

Simply heat the guide foot over a flame, drag the bottom of the foot over the glue stick and place the guide on the blank. Use the forceps or a pair of small pliers to heat the guide foot and place the guide to prevent burning your fingers. This works for even the smallest guides as shown on this single foot fly guide below.



The other ways to hold guides are with tape or rubber bands. Tape works if you have your guide position set and are ready to wrap. Use 1/8" or 1/4" tape strips to hold the guide on the blank. Position the tape or the band near the guide frame so you can wrap the foot of the guide with thread to hold it, and then remove the tape or the bands. Just cut the band or unwrap the tape when you run out of room.



Good sources of rubber bands are the ones used in braces or strips of surgical tubing cut to width. The surgical tubing is better for larger guides as you can cut it wider as needed.

