

Creating Crochet Hooks

Katherine Kowalski

As a crocheter, I was often disappointed when I bought wooden crochet hooks from independent woodturners—it quickly became clear to me that those woodturners had never crocheted! With few exceptions, their tools were completely unusable; the hook shapes were wrong or fragile, the decoration hurt my hand, and the ergonomics were unspeakable.

Interest in crocheting is booming, especially among young people. With the “green” and handmade movements that are taking place, fine, one-of-a-kind craftsman-produced tools are especially valued. There is much more to creating crochet hooks, however, than turning a simple spindle and carving a notch in the end. This article is about creating a comfortable, beautiful, usable crochet hook that will be treasured by its user for years to come.

Wood selection

An excellent measuring device (and reference) is Susan Bates’ Knit-Chek, which

can be purchased online or at any craft store that sells yarn. (The Knit-Chek tool features holes for sizing crochet hooks.) In order to determine the size of the crochet hook you decide to make, the measurement of the hook is taken at the cylindrical section right where the hook is carved.

The shaft and hook should be one piece of wood, straight grained. Hard, dense, and fine-grained woods look and perform best. If you use burl or cross-grain wood for the shaft, the hook will break. Match the wood type to the size of the hook you will be creating:

- Hooks size D–7 (3.25 mm to 4.5 mm) are extremely tiny, and should be made out of wood that is both strong and flexible, such as true rosewoods (*Dalbergia* genus), olivewood, and other oily species.
- Sizes H–K (5 mm to 6.5 mm) are in the middle size range, and may be made from any number of materials, including Dymondwood, domestic hardwoods (maple, cherry, walnut), or colorful exotics.

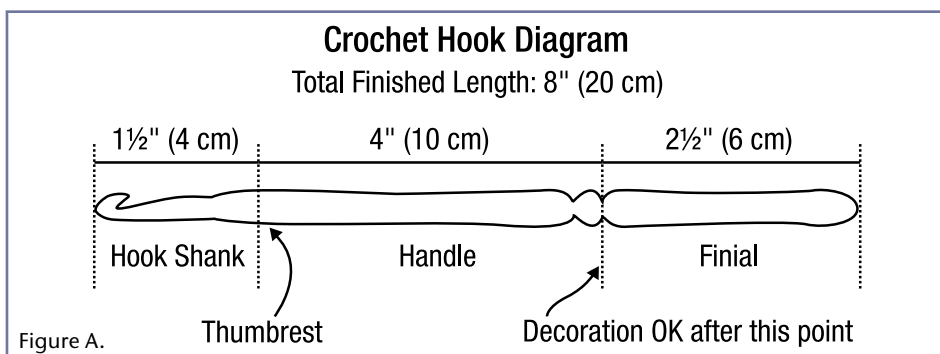
- With the largest sizes (8 mm and above), even softwoods such as pine may be used. I prefer to choose lightweight woods rather than heavier-weight exotics because they cause less stress on the hand for those crocheters with arthritis.

Segmentation

Here is your chance to add artistic flair to your crochet hook! Thin bands of dyed hardwood, burl, figured woods, and unusual materials (antler, bone, acrylic) can be added to accent the primary wood and make your crochet hook one of a kind. The crochet hook I turned for this article is made up of three parts: a shaft of Aqua Dymondwood, an accent band of Fuchsia Dymondwood, topped off by a finial of spalted tamarind.

When you use two or more segments for a crochet hook, make sure that the glue line occurs at a place where there is little or no stress on the crochet hook. All materials should be segmented with the grain going in the same direction, parallel to the primary wood you will use, which should be parallel to the bed of the lathe. Cut the pieces on a clean-cutting saw such as a tiny miter saw or a table saw. The finished blank should be $\frac{3}{4}$ " (20 mm) square by about $8\frac{3}{4}$ " (225 mm) long (Figure A).

Because this is an endgrain joint, the connection must be strengthened with the use of a tenon. I use $\frac{3}{16}$ " (1.6 mm) brass tubing (which can be purchased in a hobby shop that sells model airplane supplies), lightly roughed with sandpaper. After marking the centers of each



piece, drill a hole with a $\frac{3}{16}$ " (1.6 mm) drill bit about $\frac{1}{2}$ " (13 mm) deep (*Photo 1*).

I recommend using polyurethane glue such as Gorilla glue to bond the pieces together; it is known to be more archival than CA glue. It is also more flexible and better able to withstand turning forces than epoxy.

Follow the directions to apply the glue, making sure to spread it inside the hole and around the brass tube. Cut the tubing with a small metal saw, and clamp the wood pieces together (*Photo 2*). Give the glue a day to cure.

Turn the shape

Mark the center on each end of the blank. Mount the wood onto the lathe using a Steb or small cone-and-ring center. (Traditional spur centers tend to crack exotics, Dymondwood, and brittle acrylics.) Turn a tenon on the finial-end of the hook. Remove the blank from the lathe and reverse chuck it with the tenon held in 1" (25 mm) jaws. Support the other end with a Steb or small cone-and-ring live center.

Do not seat the base of the tenon against the jaws; wood attached this way often results in the piece flexing excessively as it gets thinner. Leaving a $\frac{1}{4}$ " (6 mm) gap allows the wood to move just slightly (*Photo 3*). If turning a nonsegmented, solid-wood hook, the blank may be mounted between centers, preferably Steb centers.

As you turn, start at the midway-point, turning the hook to final diameter, and work toward the tailstock. My favorite



Domestics, exotics, acrylics, burls, and dyed hardwoods can be combined to make truly unique crochet hooks.



1 Drill the hole where the brass tube will be inserted. The brass tube strengthens the endgrain-to-endgrain joint.



2 Use Gorilla polyurethane glue to secure the brass rod into the holes. There are three sections to this crochet hook.

tool to use is a fingernail spindle gouge, using light cuts to turn the shape. The part of the blank that vibrates the most is in the center, so work from the center toward the ends.

Turn the hook section, and make sure you end up with a cylinder of the size appropriate to the hook you want to make (*Photo 4*). A true, straight-sided *cylinder* is necessary—this is the section on which crocheters measure their stitches to make them consistent. Use your Knit-Chek for reference, and use calipers to measure, making sure you leave allowance for sanding.

Ergonomic concerns

As you are turning, make sure that any ornamentation (beads, coves, grooves) is added well beyond the part of the hook that will be held, otherwise the design will irritate the user's hand. An easy reference guide is to stop the lathe and place your own hand around the hook, and take note of where the side of your hand touches the hook—beyond that area is where you can freely apply design elements (*Photo 5*).

I often extend the decoration beyond the magic cut-off point; however, I do so using soft shapes. I turn elongated beads and use v-grooves or coves in between the beads to avoid sharp elements. When designing a crochet hook, make sure the hook is well balanced. Bulbous, heavy shapes on the finial end are not only less aesthetically pleasing,



Carved basket, hand-spun alpaca yarn, and a flurry of colorful, elegant crochet hooks

they often make the hook unbalanced, resulting in hand fatigue when the hook is used for long periods of time.

As part of my signature style, I curve the shaft because it adds a feminine touch (*Photo 6*). On larger hooks, I shave off even more in this middle section to reduce the weight of the tool.

Finishing

Crochet hooks are held sometimes up to eight hours at a time. Their surface must be smooth. Precise tool technique will help you turn refined shapes and allow you to start sanding at a higher grit. Start with the grit appropriate to ▶

your technique, and progress through all the grits, ending with 4000.

Apply sanding sealer (if appropriate), then buff with EEE Ultra-Shine. I then apply a coat of Myland's Friction Polish, followed by Renaissance Wax. Because these tools are handled so frequently, use a finish that will age gracefully and is easily touched up by the user.

Cut the hook

The easiest way to cut the hook is to use a fiber cut-off wheel held in a rotary tool (*Photo 7*), making sure the hook is aligned on the true side grain (*Figure B*). Make the cut at about a 40° angle, cutting a slope into the shaft, no more than halfway into the wood. Then, gently curve the edges and blend them

together with cylinder-shaped diamond carving bits, making sure you remove all burn marks (*Photo 8*). Smooth with 320 grit sanding discs. Hand-sand the hook to perfect smoothness, all the way to 4000 grit. (There's nothing worse than a hook that catches in the yarn!) Painter's sanding sponges, and flexible Abranet abrasive work well to get into the hook groove. Apply the same finishes mentioned previously (omitting the sanding sealer and EEE).

Design considerations

Crochet hooks are easy to customize. Almost any type of wood, acrylic, or other material that can be turned can be used in a variety of combinations. The coloration possibilities are limitless! If

you need ideas, ask your intended recipient what her (or his) favorite colors are, or take a cue from their personal space.

Turquoise, coral, copper, and brass inlays (among many other materials) add an extra flair. Hooks may also be pyrographed, painted, dyed, or inset with precious stones. (Again, take care that your decoration is well away from where any skin will be touching.)

When gluing different kinds of wood together, I find it aesthetically pleasing to use a plain wood for the shaft (such as cherry) and combine it with a wild wood for the finial (perhaps burl). I usually add coordinating bands between the two primary sections. Burls, spalted, figured woods, magical acrylics, dyed hardwoods, exotics, domestics, birds-eye, wavy, curly, sunflower seeds, coffee beans, banksia pods, tagua nuts—all can be utilized in the very tiniest pieces to create fabulous crochet hooks.

Tips

- Dymondwood is very abrasive and dulls tools quickly; sharpen your turning tools often. I recommend using powdered metal tools. A carbide-tipped bandsaw blade is worth buying if you resaw a quantity of Dymondwood or other hard exotics.
- An easy way to find the true side-grain is hold the piece in the light, and look for outlines (*Figure C*). Turn the hook 90° and you have the true sidegrain.
- Anything with corners, such as simple parting cuts or fillets, are sharp enough to be bothersome to the user's hand—don't include them on the working part of the crochet hook.
- As you are turning, be aware of the internal tenon—it rarely ends up exactly on center. Take care cutting coves and v-grooves near the segmentation points.
- Tenons may be made from wooden dowels, aluminum rods, brass tubes, or other materials.



3 Leave a ¼" (6 mm) gap between the shoulder of the turning blank and the shoulder of the chuck jaw.



4 Measure the diameter of the crochet hook to achieve the correct size. Use a Knit-Chek and calipers.



5 Use your hand as a guide to determine where to place design elements on the crochet hook.



6 The author turns a gentle curve on her crochet hooks to add a feminine touch.



7 Cut the hook part of the crochet hook using a fiber cut-off wheel held in a rotary device.



8 Use a cylinder-shaped diamond carving bit to make sure the burn marks are removed from the hook area.

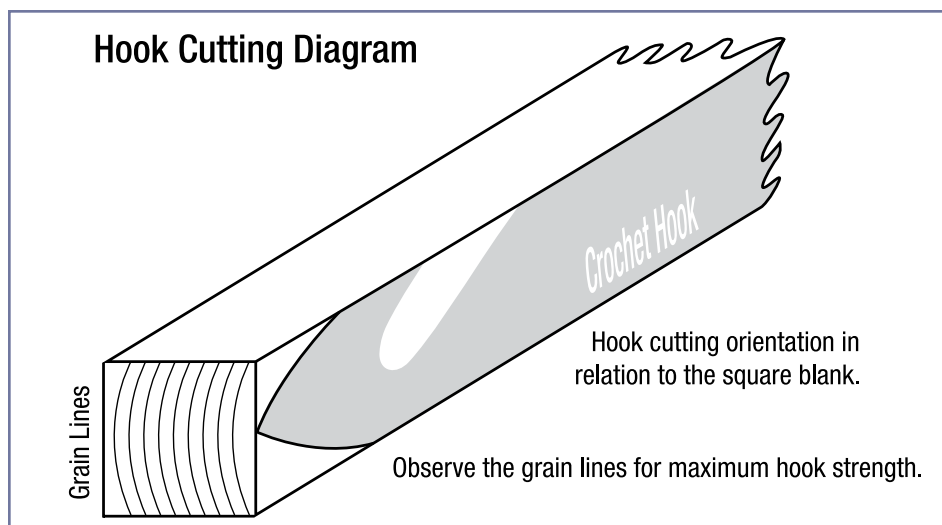


Figure B.

- When you have wild wood such as spalted maple or burl wood, simple shapes look elegant. For finely grained exotics or multi-ply dyed hardwood, beads, coves, and fillets accentuate the coloration and make for a lively design. ■

Katherine Kowalski is a full-time professional woodturner known for her luxury fiber arts tools and her unique contemporary artwork. She teaches and demonstrates around the country. For more information, visit her website at KatherineKowalski.com, or email katherine@daystarhandworks.com.

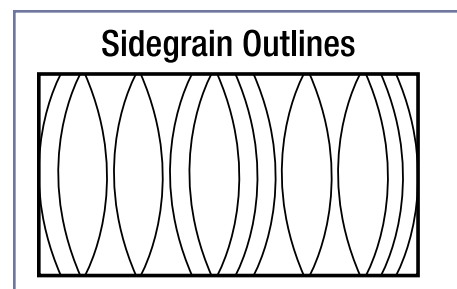


Figure C.



Let your imagination run wild with the vast array of materials available; develop a signature style with your own decorative techniques.

The Fiber Arts Connection

Katherine Kowalski

As a fiber artist, I derive immense enjoyment from using finely crafted crochet hooks to create my signature free-form designs. As a professional woodturner, I strive to create those unique tools. I believe in using art to create art, and I have combined my knowledge of fiber arts with my passion for woodturning to create functional, ergonomically delightful, and stylish tools for fiber artists.

Since the first day when fiber artists required precision tools to create their work they have relied on woodturning craftsmen to create them. After that first lathe-turned tool was delivered, whittled twigs just did not measure up!

Turners create knitting needles for knitters; crochet hooks for crocheters; nostepindes, spinning wheels, and drop spindles for weavers and spinners; lace bobbins for lace makers; and awls, needle cases, and pin boxes for other needle workers. From the bowls that Russian spindles rest within to shuttle bobbins for tating, wooden and bone tools have been turned for fiber artists for hundreds (if not thousands) of years.

Over time, these tools evolved from being strictly utilitarian to highly embellished works of art. Woodturners design beautiful knitting needles and carve on fine bone crochet hooks. They texture and paint lace bobbins and make extraordinarily beautiful spinning wheels. Tools for fiber artists have moved into the realm of artwork and are coveted and collected. In some cases, toolmakers are better known than the fiber artists themselves!

Several prominent fiber artists use my tools in their daily work, and my tools are in art collections worldwide. What gives me most honor and satisfaction, however, is that I have created special hooks for fiber artists with disabilities, allowing them to pursue their craft beyond what the commercial enterprises allowed, enabling them to create their special works for years longer than they dared hope.

Custom-made fiber art tools are warm to the touch and much lighter-weight than their commercially produced counterparts. They can also

be made with wider shafts for easier holding. Although these qualities may seem trivial, they are very important to our friends and spouses who have arthritis or other limitations.

Best of all, wooden tools show off the beauty of natural wood. With plastics abounding and cast resin mimicking wood grain, much of the public has forgotten what real wood is like. Jog their memories! Show off your fine woodworking! These spindles offer an excellent canvas for experimenting with the variety of techniques we learn at our local clubs and symposiums: carving, texturing, airbrushing, painting, pyrography, stone inlay, and segmentation. There is nothing quite so personal as creating something that is touched all the time. It is wonderful to utilize tools that are handmade; the maker's heart, mind, and soul seems to multiply creativity, and ease the art-making process.

The link between fiber artists and woodturners is strong and alive. I challenge you to create that connection with someone you know.