

Hollow Copper Bangle

By Jeff Fulkerson

This sleek little bangle with a dangling charm is easy, fun and very inexpensive. The results are stunning. Make a whole armful of them, each with a different charm and patina some with liver of sulfur and maybe that gorgeous green patina for another. Make one shiny and put a sandpaper finish on another. Each one will look different. Have fun!



Materials List

- 1 – roll of 1/4" soft copper tubing
- 1 – 14 gauge – 4 mm copper jump ring
- 1 – 20 gauge copper x 5/8" disc
- Extra easy solder

Tool List – Don't forget Safety Glasses!

- Jeweler's saw
- Saw blades 1/0
- 2" PVC pipe coupling
- Soldering setup
- Files
- Bur-Life or lubricant
- Prip's flux
- Polishing station
- Flex shaft with drill bits
- WUBBERS Classic Chain Nose Pliers, 2 pairs
- 320 grit sandpaper
- X-acto® knife

Step One

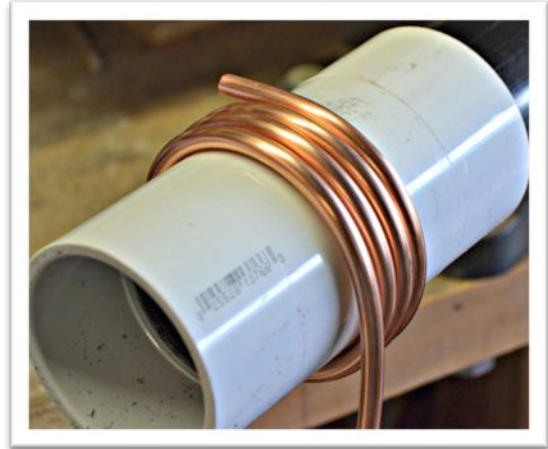
Buy a roll of 1/4" soft copper tubing from your local hardware store. Although the price of copper fluctuates, at the time of the writing of this tutorial, it costs less than \$20.00 for 20 feet. What a great deal!



TIP: For a bracelet mandrel, I used a 2" PVC pipe coupling and put the pipe in a bench vise to hold it firmly while I bent the tubing. This will give you a bangle that is about 8 1/2" long. Most bangle sizes are 8 to 8 1/2 inches.

Step Two

You will have to determine what size you want and find a pipe that will give you your length. Lay the roll on the ground and take one end and gently start to round it around the mandrel (pipe). When making jump rings, you turn the mandrel; here we turn the tubing around a stationary mandrel. Make at least three complete turns on your mandrel. Try to keep the loops as close together as possible, just as you would when making jump rings. Slide the copper tubing coil off the PVC mandrel.



Step Three

Cut off the bangles as if you were cutting giant jump rings. Bur-Life will make it easier to cut thru the copper tubing. Try to saw straight and evenly as this will make for less work later.



Step Four

If you want to add a charm/tag on your bangle, now's the time. Drill a hole in the disc, stamp anything on the disc that you want, polish now, if you want. Using Wubbers Classic Chain Nose Pliers in each hand, open the jump ring sideways and slip the charm/tag onto the jump ring.

Close with the Wubbers, making sure the joint is tight, and solder the joint with extra easy solder. Extra easy solder will turn yellowish as it oxidizes, and it will blend easily with copper. Slide the jump ring with your tag onto the hollow bangle. You'll close the bangle just like you would a jump ring. Being careful not to collapse the tubing, push the ends a little past each other before you put them together.



(view of tag on finished bangle)

TIP: Now, here's a great little tip to get a perfectly fitting joint to solder—once the two ends are lined up, saw right through the joint with your jeweler's saw. This will take a little metal off each side and give you a perfect joint. If the original fit isn't very close, you may have to do this a couple of times, but you should then have a great fitting joint to solder.

Step Five

Make sure you have on your safety glasses. I know you've all been told that you can't solder an enclosed area because the piece will collapse in on itself when it cools. Well, there are a few exceptions to that rule. First, if you have a large enough cavity, your piece won't collapse because there is enough volume inside to keep the pressure low enough when it cools that it won't collapse. Second, don't get the piece too hot. Solder your joint using Prip's flux and extra easy solder. Make sure your solder flows on all sides of your joint.



SAFETY WARNING: It may be a good idea to drill a small hole on the inside of the bangle. If the bangle overheats the inside air may cause the solder may blow off the joint or the bangle may pop open. Wear safety glasses.

Step Six

Here's our finished solder joint. Using a file, clean up the joint to get rid of any excess solder. Sand the joint with 320 grit sandpaper. You should now only see a tiny seam of silver solder.

Notice that the bangle didn't collapse!



Step Seven

Here's our joint ready to polish. Carefully polish the bangle on your polishing machine, both inside and out.



Here's our finished bangle.



Review Questions

- 1) The copper tubing used for this project is found at...
 - a) Jewelry supply stores.
 - b) Hardware stores.
 - c) Auto supply shops.

- 2) You can use PVC pipe as a mandrel...
 - a) if you don't have a 2 inch round mandrel.
 - b) because the copper will slip off easily.
 - c) because it bends easily.

- 3) Extra easy solder is used with copper because...
 - a) it's a high temperature solder.
 - b) it's a standard for plumbers, who use it on copper pipes.
 - c) because it will match the color of the copper as it oxidizes.

- 4) You cut the tubing as if they were giant jump rings using...
 - a) scissors.
 - b) a jeweler's saw.
 - c) an X-acto knife.