

Finishing the Links

The necklace in the photo was done without texturing, and the following finishing steps were performed on both the front and back of the links. The front of textured links should not be sanded.

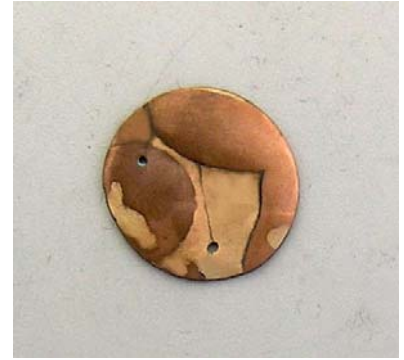


1. After firing, the copper will not be flush with the bronze due to the copper's lower shrinkage ratio. If you want the links to look like one continuous surface, as in married metals, you will need to grind the copper down.
2. You will need a drum mandrel and sanding bands. The sanding bands usually come in 80 and 110 grit.
3. When the band is worn out, replace it with a new one. Use a small screwdriver to loosen the screw at the top of the mandrel.
4. Slide the sanding drum onto the mandrel, and tighten the screw.
5. If there is a lot of copper to grind, start with 80 grit. Otherwise start with 110 grit.



6. Mount the drum mandrel on a rotary tool and grind the copper flush with the bronze.

If you don't want the look of married metals skip this step. The photo on the right shows a non-flush surface.



7. Sand the surface using a slotted mandrel wrapped with wet/dry sandpaper, 180 grit.
8. Continue with 220 grit.



9. Continue with 400 grit. The contrast will almost disappear; don't panic.



10. Buff the surface lightly with a matting buff, also called extra-fine mini-fiber wheel.



Skipping step 6 will result in a different design that has some depth.

You can find instructions for using the slotted mandrel in my book: *The Handbook of Metal Clay: Textures and Forms*, p. 11.

11. To recover the contrast you will need Baldwin's patina. This patina is a must when working with mixed metals.



12. Wet a cotton swab or sponge with a drop of the patina. Rub the surface of the link. Keep rubbing until you reach the desired contrast. Wash the link.



13. Assemble the links with jump rings or with balled-up wire. For instructions on balling up wire see my book: *The Handbook of Metal Clay: Textures and Forms*, p. 21-22 and my video clip at <http://artinsilver.com/whatsnew.htm>.

Finishing Tools

Availability

All finishing tools can be found at local hardware stores. They usually come in kits for rotary tools such as Dremel or Black & Decker. However, it may be cheaper to buy them online in bulk.

Rotary tool. My favorite is Black & Decker, 3 speed, model RTX-BVA.

Amazon, for \$35. Cheapest source.

Dremel chuck 4486

Amazon, for \$6.

Drum mandrel

Rio Grande, item # 333-015 and 333-016.

Sanding bands

Rio Grande, item # 333-500, 333-501, 333-502, 333-503.

Slotted mandrels, square edge

Rio Grande, item # 333-130 (set of 6).

3M wet/dry sand paper, 180, 220, and 400 grit.

Local hardware store.

Extra fine mini fiber wheel

Rio Grande, item # 338-123 (set of 5).

Baldwin's patina

<http://www.reactivemetals.com>.

Suggested Two-day Workshop

Day One

Introduction and discussion.

Mixing the clay, demonstration. Then students mix their clay.

Project demonstration.

Students work on their own.

Firing demonstration.

Day Two

Finishing and assembling.

Show and tell.

Discussion.

On every day of the workshop there is enough work for at least 4-5 hours. It would be best to spread it over 2 weekends to give you enough time for firing. If students want to make more pieces they will need to fire them in their own kilns.

From the beginning of my teaching career, the second session has always been dedicated to finishing work. It may seem intimidating at first, but at the end students are happy with their creations.