



Week 5, The Sandblaster

- What is sand blasting and how does it work?
- How to make a mask.
- **BLAST IT!**



What is sand blasting?

Sand blasting (or bead blasting) uses small beads made of glass or other non-metal materials and pressurized air to create a uniformly matte surface finish on raw metals. The results, from coarse to fine matte, are determined by the type and size of bead, as well as the metal being blasted. Bead blasting may also be used to selectively remove a patina from masked finishes to reveal the raw metal beneath.

How does the blaster work?

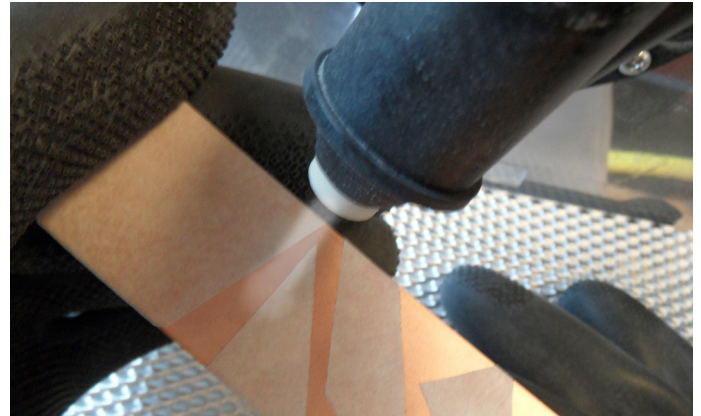
An air compressor pressurizes the blaster. Then when you turn it on that pressure circulates the glass beads through the unit, enabling a "blast". When the pressure runs out the air compressor will come back on and repressurize the unit.

Tips for success:

- well prepared metal (item should be finished and polished)
- mask should be thick enough to withstand the blast
- mask should adhere well
- the design of the mask should be clear and cut cleanly
- sand blaster needs to be set at an appropriate pressure (65-80)

STEPS:

1. make object
2. polish it
3. mask it
4. blast it



this is what the blasting nozzle looks like

Polishing For a High Mirror Finish:

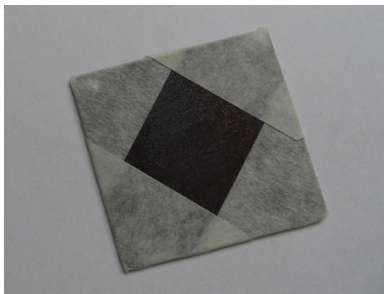
1. buff with blue universal compound.
2. wash piece with detergent.
3. buff with orange high luster compound.
4. wash piece with detergent.

Making a mask:

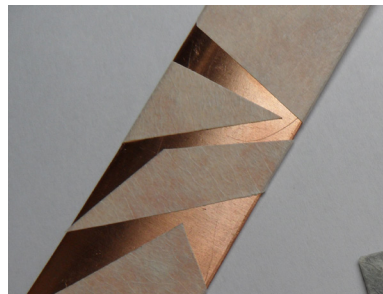
If there are areas that you do not want to have blasted (matte finish) then you have to mask them. Many things can work for this.

- Masking tape is fine for simple lines.
- Adhesive vinyl is good for more detailed designs cut with an X-acto knife.
- Paper shaped punches can also be adhered into place with spray adhesive
- Pin striping tape also works.
- Nail polish.

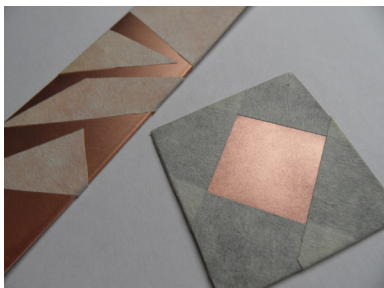
DO NOT overblast!
you will warp the piece
(yea, its that strong!)



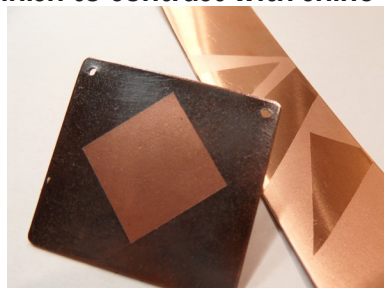
masked to remove a patina



masked to create a matte finish to contrast with shine



after blasting before removing mask



after removing mask

Blasting

1. open the cover of the unit (3 clamps).
2. put your piece in the unit.
3. close the unit (make sure 3 clamps are secured).
4. put hands inside the rubber gloves.
5. grasp your work with one hand.
6. hold it directly under the nozzle.
7. flip the ON switch to activate the blaster.
8. move your work under the nozzle where you want it blasted. This takes only a few seconds.