Guide to FASTfire BRONZclay™!

FASTfire BRONZclay™ is easily sculpted, molded, carved and formed, and becomes solid bronze when fired. Your imagination and just a few simple tools will allow you to create solid bronze pieces—from jewelry to sculpture and everything in between!

Working with FASTfire BRONZclay™

Metal Adventures Presents

FASTfire BRONZclay™

FASTfire BRONZclay™ is just that: a clay. Like clay, it's highly workable but it also dries quickly. You'll notice the clay stiffening and cracking when it begins to dry. Some tips to keep in mind:

- Rub a dab of olive oil on your hands before you begin working with the clay.
- While working the clay, refresh it periodically with a small amount of water using a spray bottle or brush.
- Avoid using tools that absorb water.
- Wrap any pieces that you are not currently working with in plastic and place to the side.
- When not in use, keep the clay tightly wrapped in plastic and place the wrapped piece in a sealed plastic bag for added protection.

Making Slip

Slip will quickly become one of your favorite tools for working with FASTfire BRONZclay™, and it's easy to make. Simply mix tiny pieces of clay (filings, small dried or wet pieces, etc.) with water (we recommend distilled water for a longer shelf-life) until you reach a yogurt consistency. Keep your slip stored in a sealed container.

Drying the Clay

Once you've finished your piece, you will need to dry the clay before firing it. Gently place the piece on a warming surface such as a coffee mug warmer or the top of a kiln (be careful to keep pieces away from the kiln's vents); an inexpensive vegetable dehydrator works well, too. Once dry, you'll notice the clay is leather hard, making it very easy to add finishing touches such as filing, drilling, sanding and carving. Once FASTfire BRONZclay ™ is fired, it's much more difficult to finish, so take advantage of this pre-fired stage to do as much of your finishing work as possible.

Firing

TIP: It is recommended that you fire a test piece (at least 11/2" x 1/2" x 4 cards thick) at 1525°F/830°C (the recommended temperature). If the test piece blisters, lower the temperature to 1500°F/816°C. If the test piece breaks when you try to bend it, raise the temperature to 1550°F/843°C.

To reduce oxidation, piece(s) must be surrounded by coconut shell–based activated carbon

1) Spread 1" of activated carbon granules on the bottom of a stainless steel firing container

   Note: Most kilns are cooler in the front, near the door, so the front of your firing container will be cooler than the other sides. Compensate for this possibility by placing the pieces closer to the sides and back of the firing container. If you have a top-loading kiln, there's no need to adjust.

2) Place the piece on top of the layer; if firing two or more pieces, leave at least 1/2" between pieces, more if the pieces are large.

3) Pour more activated carbon granules on top of the pieces until the container is full, making sure there is a 1/2" layer of granules on top of each piece. If you are firing many pieces in layers, make sure there is at least 1/2" of space between the vertical layers as well.

4) Put a slotted stainless steel lid on the firing container (or offset your solid lid to create a gap) and set it in the kiln on stilts to allow good heat circulation.

5) Ramp at full speed to 1525°F, and hold for 2 hours.

Please Note: After firing, a residue will be left on the fired pieces. This residue is easy to remove with running water and must be washed off prior to finishing.

Finishing

Once fired, the FASTfire BRONZclay™ piece is solid metal. As with other metals, it can be sawn, drilled, sanded, patinaed or soldered using traditional jewelry tools and materials. Keep in mind that many finishing techniques will be easier to perform at the dried, pre-fired stage. Repairs can be made by adding fresh clay and re-firing.

Safety

The binder in FASTfire BRONZclay™ is non-toxic, and no toxic fumes will be present during firing. Though rare, it is possible for some individuals to experience a sensitivity to FASTfire BRONZclay. We recommend wearing a dust mask while working with activated carbon.