

Getting Started with Creative Metal Clay...

Essential Tools

- Teflon or Work mat
- Acrylic spacers and rollers
- Olive oil dispenser or spray bottle
- Clayshaper (silicone tipped sculpting tool)
- Paintbrush and water
- Small pot for creating paste
- Professional Hand held Torch- Please note a kitchen torch will not be strong enough for firing this type of clay, Torch Block and Kiln Pillow OR
- Kiln and Kiln Pillow
- Pyrex dish with 200ml of hot water
- Picklean granules (Safety Pickle)
- Brass Brush

Tools and Equipment

You can use the same NON-POROUS tools and equipment with Creative Metal Clays as you would use with Precious Metal Clay. When switching between the two types of metal clay it is best to clean tools with warm soapy water and a soft brush.

However, we recommend you use a **stainless steel brush for Precious Metal Clay** and a separate **Brass brush for Creative Metal Clays**. When using a barrel polisher you must use a separate barrel for the Creative Metal Clays.

Working with Metal Clay

Before opening the pack apply a minimal amount of olive oil to your fingers, remove the clay from the pack and kneed it together. If needed, add a few drops of water until the consistency of the clay is malleable and similar to Blu-Tack.

Create your designs using moulds, templates, cutters or brass plates. Smooth out and remove any fine cracks with water as these may open up during firing through the addition of fire-scale. This is particularly important with Creative Bronze Clay.

To join pieces together add water to both parts and join using a generous amount of thick, custard like paste made from the clay.

Items should be at least 1mm thick throughout. If your piece is in parts thinner than 1mm there is a good chance that it will break after firing.

Torch Firing Copper Clay

For best results always Kiln fire.

Items the size and thickness of a 50P coin can be fired with a torch.

Place the item on a piece of Kiln Pillow to allow the binder to burn off without staining the underside of the piece. Heat the piece and let the binder burn off. You should be able to observe what appears to be a 'liquid heat' on the piece as you move the torch over the surface of it. When you see this 'liquid heat' on the surface you have achieved the desired temperature for torch firing and should now begin timing for a **minimum of 7 minutes**. It is also worth noting that it is very hard to melt Creative Metal Clays.

Kiln Firing Copper Clay

Always **Preheat** you kiln to 920 C. Place your pieces into the kiln and fire for 30 minutes. It is important to wrap or cover your pieces in kiln pillow tightly prior to firing.

Kiln Firing Bronze Clay

Preheat the kiln to 800 C. It is important to wrap or cover your pieces in **Kiln Pillow** tightly prior to firing. Fire for 30 minutes.

After Care

Pickle all pieces immediately in Picklean solution after firing - **do not allow them to cool** in the kiln unless gemstones are present - following the steps below:

1. Mix 1 tablespoon of Picklean granules with 200ml of warm/hot water.
2. Place the piece into the solution immediately after quenching and leave in the solution for 10 minutes.
3. After a minimum of 10 minutes remove the piece from the solution and brush with a brass brush under warm water.
4. To remove stubborn fire-scale, place your pieces in a tumbler barrel with mixed stainless steel shot. Add half a tablespoon of Picklean granules and top up the barrel with warm water. The water should cover the shot and be approximately 1cm in depth. Leave to polish for 30 minutes. You may need to repeat this last step depending on the results of your piece.

Kiln Firing Service

For piece of mind or if you are having difficulty firing your copper and bronze clays, The PMC Studio offers a quick and inexpensive Kiln Firing Service. Full details, costs and the Kiln Firing Form can be found under 'firing' on our website www.thepmcstudio.com.