



Polishing Metal Clay

Whether you want to finish your metal clay the good-old-fashioned way of doing it by hand, or you prefer the speed and ease of a tumbler, we can help.

I'm sure the first time you fired silver clay, you were quite surprised when you picked up your piece after cooling it down - it looked as if it was covered in something white? That isn't a coating of anything that has to be removed, it isn't fire scale, nor is it some sort of oxidation. It is actually the true silver you are seeing. The surface has a very fine crystalline structure, and what you need to do now is flatten and smooth it out to close the surface, and get the colour and silver shine we are used to seeing. This is called finishing or burnishing. Usually the first step in finishing metal clay is brushing it.

BRUSHING:

Depending on what finish you are after - matte or satin, mirror shine, antiqued - there are different tools to use. The first step is to use a stainless steel or brass brush. These can be used dry or with a little soapy water. Just keep brushing and within seconds the white disappears, and you'll see the silver. For a satin finish, just leave the silver like this, or, you can continue with other polishing techniques to give the silver a higher shine.

Personally we use a soft (jewellery quality) brass brush, as this leaves a beautiful satin finish. Very often, we leave our silver just like that, and don't do any further polishing. We love that satin look. Using a steel brush leaves a more scratched surface, which can actually be a nice finish in itself.

BURNISHING:

Burnishing means to rub your piece with the side of a very smooth metal or stone burnisher (could also be the back of a spoon or similar smooth surface). This will also harden the surface of the piece slightly. It really brings out the shine, and is a great way to create a really nice shiny sparkly effect, super-fast. Keep your burnisher smooth - any scratches on the surface will create scratches on your piece. Sandpaper and polish your burnisher if it looks like it needs it.

Only burnish on surfaces which are smooth, with no scratches or marks. Burnishing won't remove scratches, it will only flatten them slightly, so use abrasive paper first if your surface needs smoothing out. We would usually only burnish the edges of a piece, or a highly textured surface, where we want the contrast between the raised parts of the texture burnished (nice and shiny) with the lower parts matte. On larger areas, burnishing will leave little marks; you can definitely not create a mirror-polish with a burnisher.

HAND POLISHING:

Hand polishing is extremely satisfying! Yes, it takes time, but is quite relaxing - and it gives you a real mirror shine. You'll need a set of fine grit (from 600 to 1200 or 2000 grit) sanding pads or polishing papers. If you use wet&dry paper, or our sanding sponges, you can work wet if you wish.

The 3M polishing papers works best dry.

1. Start with the coarsest grit, probably something like a 600 grit, and rub the surface evenly in one direction, like left to right only. When the surface is evenly polished with this paper, and you can't see any sharp scratches or marks, apart from the marks from your sanding, it is time for the next step. This first step is where you want to remove surface marks, so make sure you use a grit abrasive enough to clean up the surface.
2. Rinse the piece to remove any left over grit. Now start sanding with your next step, 800 or 1200. This time, sand across the direction you used for the previous grit (like, in this example, now go up and down). The reason to do each paper in different directions is so you can see when you have removed all the marks of the previous grit. Keep polishing until the marks from the previous grit have disappeared. Now move on to the final paper.
3. Again, we recommend you rinse the piece - if you're using fine polishing paper you might not need this, but cheaper abrasive papers can often leave grit behind. With the 1200 or 2000 paper or pad, now sand the piece in small circles. Keep sanding until the surface looks smooth.
4. Rinse the piece well and dry it. To finish, put a small amount of silver polish on a polishing cloth and buff up the piece. Rub, rub and rub. Finish with a clean, dry cloth. Your piece should now have a stunning mirror finish.

TUMBLE FINISHING:

Tumble finishing, also known as **tumbling** or **rumbling**, **barreling**, or **barrel finishing**, is a technique for smoothing and polishing a rough surface on relatively small parts.

The easiest way to finish your metal clay (which requires the minimal elbow grease), is to use a tumbler with mixed shape steel shot, water and a burnishing fluid. Just brush your pieces quickly after firing, pop them in, and tumble for anything between 30 minutes to 6 hours, depending on your tumbler. Check your pieces every 30 minutes or so to see if you have reached the shine you are after. Done. Couldn't be easier!

TUMBLING SILVER:

Silver jewellery is usually tumbled in stainless steel shot and a little bit of barrelling compound, lubricant, or barreling soap is added to aid the finishing process, prevent rusting, and to clean parts.

Tumbling is a fast and economical finishing process as large batches can be finished in one go, whilst you do something else! Barrel polishing takes between 30 minutes and 6-10 hours depending on what you're doing, what media you use, and which tumbler you choose. Tumbling is usually most efficient with the barrel half or three-quarters full.

ROCK POLISHING AND OTHER METALS:

Whilst we mainly use our tumblers for polishing silver, they can also be used for rock polishing, making faux-beach glass, and polishing other metals. For these techniques you might need to change the media you tumble with - for instance, whilst you use stainless steel shot for silver, you would use abrasive grit for tumbling stones.

If you have any questions at all or are searching for a specific tool or product - please feel free to give us a call at 01929 554771 or email support@metalclay.co.uk.

Happy Making!

The Metal Clay Team x