

Sanding & Polishing

STAGE 1 - FILING



Remember you can place the file on emery paper on a flat surface and draw your work along it.

Always try to use the largest files you can so that it's a quicker more effective job and you are less likely to accidentally take small nicks and marks in your work.

Use files to remove excess solder, straighten and tidy up edges including internal pierced sections, remove bur and when needed increase a bezel setting size.

Choose the most appropriate file as each shape will help you file different areas of your work. Files have forward-facing teeth, so it's important that you use your file on a forward stroke with gently pressure, ensuring the whole file comes into contact with your piece. You can use a backward stroke to reposition the file in place to continue with the filing process. One thing to remember is to only use needle files on areas that need it, otherwise, you will be spending longer with cleaning up your piece.

Try to always support your work (on the peg, bench, stake or in a vice or clamp) - No illegal free filing in mid air please unless there is no other way of supporting the piece.

The smallest file you have access to is using a saw blade very gently like a file.

Gently tap the file to remove any materials that have caught in the teeth to keep them clean or you can use a dry brush to sweep them clean.

Files come in different sizes and levels of coarseness, similar to saw blades. Choose a coarser file to remove large amounts quickly and finer file to leave a better finish to start sanding.

Many jewellers turn their peg over so that they use it at an angle - see if it works for you.

STEP 2 - SANDING



If you want a really decent professional finish you can't really avoid this step. The secret to a really high shine is all in the pre-polish. The more time and effort you put into this stage the better the results will be.

After construction, your design has been through a lot - fire scale, pickle residue, large scratches and fire stain.

There are several tools that you can use to create a pre-polished state. Depending on the severity of the clean up you can use coarse papers, wet and dry or emery papers. These can be wrapped around files to create support but they can also be bought ready made as emery boards. You can also find sanding papers attached to foam in sheet or stick form.

Papers start around 120grit and go all the way to 1200. You can test the piece in the barrel polisher at this point but for a beautiful finish use the polishing papers first. The papers and sticks then become more for polishing sticks such as 2000 (2/0) - 6000 (6/0).

For speed and accuracy you can use Eveflex rubber burrs from coarse to fine that fit in the pendant motor. There are also carborundum stones in handheld form or small various shaped burr attachments (see also silicone carbide polishers) for the pendant motor.

STEP 3 - POLISHING



Use a combination of hand, pendant motor and barrel polishing methods to create the perfect finish. Depending on your item and what you have access to you can find various ways to create the shine you are looking for.

By hand - use polishing papers, cloths and creams such as car paint polish. There are also liquid polishes, cotton wool soaked products (silvo) and Renaissance wax to retain a polished finish. A buffing block for nails is a great product for polishing work by hand.

Pendant motor - mops and wheels in various materials including felt, nylon, wool and calico. Hard blocks of polishing compound are used with the mops. Tripoli is used for a pre-polish or use the coarse polish block in the 'Luxi' set. Rouge is used for a high polish. To remove the polish afterwards use warm soapy water and a soft clean brush (toothbrushes are perfect) and rinse.

The barrel polisher is the easiest and fastest way to 'work harden' and polish items. A barrel polisher is essentially a barrel filled with polish stainless steel shot which come in various shapes. Water and polishing powder (Barrelbrite) is mixed as the barrel rotates the steel and work. The steel shot knocks against the metal, burnishing and polishing as it turns. A magnetic polisher with tiny steel pins get into the hard to reach areas.

As with the steel shot rubbing against the surface of the metal, the same can be achieved with burnishing tools. Remember the surface texture of the tool is transferred to the metal so it is essential to polish your burnishers and hammers when needed.

