FILING, POLISHING AND FINISHING

ATERIALS:
- Unfinished piece of work

TOOLS
- Files
- Emery papers of different grades
- Buffing wheel
- Rotary polishers
- Polishing cloths

Filing and finishing can be as long or as short a process as you want it to be. The level of finish you choose needs to be appropriate for the design and style of your work. There are three basic steps to finishing a piece – filing, sanding and polishing. Each step is finer than the last and each should remove the marks from the previous one. Within each step different grades of tool or media can be used.

Step one: Filing. Rough file > smooth file

Step two: Sanding. Rough grit > medium grit > fine grit

Step three: Polishing. Hard polish > medium polish > fine polish

Step three could be also be a burnished, hammered, oxidised, matt or satin finish. Or no final finish at all.

Work up through the stages in order – always rough to fine but at any point you can go back a a stage or two if you need to.

FILING

Filing will remove excess metal or solder, evening out surfaces, smoothing and shaping form and texture.
Files come in a variety of shapes, grades/cuts and sizes. The shape of the file you choose will depend on the job you are completing i.e. flat files are used for straight edges or convex curves e.g. the outer edge of a disc, and half round files are used on concave curves – e.g. inside of rings.

If you have a lot of metal to remove start with a coarse file and then move to a smoother file. For most jewellery you would only need to use a smooth file. Needle files are most commonly used for jewellery.

When filing a straight line use long strokes, applying gentle pressure on the forward stroke. You can secure your piece in the vice if necessary. Make sure that the file is level and that you watch the metal to ensure accuracy and allow you to continually assess the pressure/placement of your next stroke.

When filing you should work at a steady pace, as an aggressive technique increases the chance of inaccuracy. Rest your work against the bench peg to hold it steady as you work. Don't use too much pressure – if you press to hard it becomes more difficult to control the file.

SANDING

Sanding uses emery cloths or papers to further smooth the surface. Emery papers are embedded with grit to wear away the surface of the metals. The grit is graded by number – the higher the number the finer the grit. Always work your way from a low number to a high one. The number you begin with depends on how rough the surface is before you start. A basic finish can be achieved in just one or two steps, perhaps a 600 and then a 1000 but you can move up in stages of 200 to get a really high finish.

Emery paper or cloth can be used as a sheet, cut to size and buffed against the surface of the metal by hand. It can be wrapped around wooden dowels, often known as buff sticks, or around needle files to support the paper as you sand. It can be cut into strips and used in a rotary tool in a split mandrel.

HAND POLISHING

Hand polishing is easy, quick and good for a low sheen polish. Use a polishing compound such as Silvo and a soft cloth. Keep at it until you are happy with the finish.

BARREL POLISHING

Also know as tumble polishing, it is an efficient way of polishing precious metal pieces when you have a lot of small pieces to get through, saving you time and effort polishing intricate pieces by hand. The machine consists of a pair of electric rollers with a rubber barrel containing steel shots(small, round and pointed steel pieces) to reach every surface of your metal pieces while tumbling in the machine. Add a spoonful of barrelbrite powder and enough water to cover the shot, place your wok in the barrel and put the lid on tight. Pieces need to be in the polisher for at least 2 – 3 hours. As well as polishing the shot also harden the work so is particularly good for small items such as studs or rings.

MOP POLISHING – BENCH POLISHER OR ROTARY TOOLS

For a high shine use A polishing motor. The bench polisher and rotary tools work in the same way just in different sizes.
They are used with interchangeable grades of polishing mops made with different materials such as felt, calico, wool, and swansdown. A denser mop made from felt or calico should be used in the first stages of polishing. You should then move onto using a softer mop made from wool or swansdown for the final buffing stages. Make sure you apply the right polish to the right wheel, the polishes are kept separate so they don't contaminate each other.
Most commonly used are tripoli for a first polish and jewellers rouge for the final polish and buff. There are many different types of polishing compounds but they are all used in the same way. Switch on the wheel, making sure you are wearing eye protection and a apron, with all loose hair, jewellery and clothes out of the way. When the wheel is spinning hold it against the compound block to load it up. Hold you work against the wheel, if
you are polishing something small then hold it in pliers or grips. Pieces can heat up quickly from the polish friction so you can bring the work to and from the wheel to protect your fingers