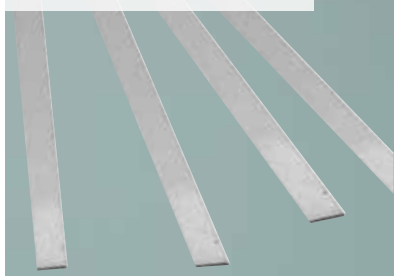
10 ESSENTIAL SOLDERING TOOLS

Soldering is the process that most jewellers use to join pieces of metal together to form a permanent, invisible bond. Once mastered, it's one of the most satisfying jewellery techniques you can learn, allowing you to create professional, beautifully finished pieces of jewellery.

Many people are nervous of soldering metal jewellery at first and choose to 'cold fix' their jewellery using pliers and wire. However, with a little practice and just a simple selection of inexpensive tools, soldering can become a very versatile technique which can be incorporated into any work space.

For beginners and more advanced jewellers alike, here is a list of what should be found in your basic soldering tool kit:

Hard Silver Solder Strip
CTD 500



3: SOLDER

There are various types of solder to choose from, although most jewellers use Gold or Silver solders which are sold in strips or panels in Hard, Medium, Easy or Extra Easy. This relates to the melting point. Hard has the highest melting point and is what you will use most of. Solder must be clean and cut into tiny pieces as required.

1: SOLDERING TORCH

There are torches available to suit all skill levels and all types of work. For most beginners, a hand held butane torch will provide enough heat to complete most small scale jewellery jobs. For larger scale work and for silversmiths, a bigger flame will be needed.

Max Flame Butane Torch
999 955C

Sievert Professional Torch Kit
999 AKZ1

2: FLUX AND BRUSH

When metal is heated, a dirty oxide layer forms which, left untreated, will inhibit the flow of solder. To prevent this from happening, the pieces of metal to be joined, must be cleaned. You do this firstly by degreasing using emery paper and secondly by applying flux. Flux seals the surface of the metal, creating an airtight layer, which in turn allows the solder to run. (Note: Only apply flux where you want your solder to run). A range of fluxes are available to suit all requirements but if you are unsure, start with a borax dish and cone.

Borax Dried Flux Bar and Ceramic Dish
1VP 001

Flux Soldering Liquid
997 6418

Flux Brush
946 010

Emery Paper:
Grade 150 | 973 030
Grade 180 | 973 050
Grade 240 | 973 040
Grade 500 | 973 070
Grade 1200 | 973 090
Grade 2000 | 973 110

Xuron High Durability Non-Serrated Shears
997 XU11

4: SHEARS

Shears are needed to cut your solder strip into small pieces, and for bending sheet metal and wire into shapes.

5: HEATPROOF SURFACE

Preparation is key when soldering metal jewellery and ensuring you have a safe, clean area to work is essential. Most people like to create a designated soldering area using heat-resistant blocks which are usually made from charcoal, ceramic or asbestos substitute.

Soldering Block
999 968

6: REVERSE ACTION TWEEZERS

These tweezers are essential for holding and positioning work whilst soldering.

Reverse Action Tweezers
999 987A

7: PICKLE

This solution is made from sulphuric acid and is used warm or cold to remove the build-up of oxide produced during soldering. Pickle should be kept in a ceramic, glass or acid proof plastic container – NEVER STEEL!

Pickling Powder
855 1060

8: PRECISION AND PLASTIC TWEEZERS

When flux is heated, it bubbles and moves. Pieces of solder in turn jump and move out of position which can be immensely frustrating. Precision steel or titanium tweezers will allow you to accurately position solder and pieces of work. Plastic or brass tweezers should be used to place and remove items from your pickle. Anything containing steel will contaminate the pickle and produce copper plating all over your work.

Stainless Steel Tweezers
999 985

Plastic Tweezers
999 3060

9: STEEL PLATE/BLOCK

A steel plate or block is used after soldering is complete, to gently cool work down before cleaning.

Steel Block
999 791

10: BRASS BRUSH OR PUMICE POWDER

After cleaning, jewellery will need to be rinsed and scrubbed to remove any traces of dirt. A small brass brush or toothbrush dipped in pumice powder will reveal a clean bright surface ready for polishing.

Brass Brush
999 173

Pumice Powder 1kg
998 224

You'll notice that many of these soldering tools are actually for the preparation and cleaning processes, not the actual soldering process itself, but all are of equal importance.

If you approach each stage in a measured and methodical way, you'll be ensured some good results. And if, for some reason things don't work first time, don't be disheartened; Clean your work thoroughly and start again.

Remember practice makes it perfect, so why not start today? You'll be enjoying the results in no time!

For more information about soldering visit our blog: cooksongold.com/blog