## **SOLDERING SILVER**

Soldering silver takes practice and once you have followed the following basic instructions you will have mastered it in no time. By making a link chain you can get plenty of practice soldering fine joints together. Once you've mastered this you'll be right to tackle most jobs thereafter.

## PROJECT MATERIALS

1 Non asbestos soldering board.

1 Pair pin point tweezers for picking up solder.

1 Gas blow torch with pin point flame.

Silver solder flux.

Pickling compound and beaker.

Plastic tweezers.

2 Pair of flat nosed pliers.

Side cutters.

Safety glasses.

Silver jump rings of any size to suit you. 1mm dia. wire.

Hard, medium and easy silver solder.

- 1/. Always wear safety glasses and be careful with your gas torch. Depending on what type of gas and torch you have chosen, you must be careful not to overheat your work or it will melt.
- 2/. Using your pair of pliers first line up the ends of a jump ring so they are touching and there is a perfect join with no gaps. I suggest you use a jump ring with a wire diameter of at least 1 mm round. We've used a ring here in the picture because it's a little easier for you to see.

NOTE: Soldering is with the inner most blue tip of the flame making sure the joins are touching end to end. Flux and solder has to placed on the join. Take care just to applying only a small piece of solder or it will be more work to finish off later.

Whenever soldering keep in mind that all the joins must be flush along the entire surface. The solder will flow along the surface and is attracted along the joins but will not fill up gaps. Trying to fill up gaps with solder isn't a good idea.

- 3/. Place a link on your heating pad and apply a small amount of flux over the area to be soldered. (Practice with links first!).
- 4/. You have three grades of solder and it is necessary that you experience the difference in the various different melting temperatures.

So initially cut a piece of solder wire about 1 mm long with your side cutters. Cut a piece off each grade. If you cut the solder too long it will show on the finished work and be very difficult to remove.

If you solder larger joins increase the size of the piece of solder slightly and place about 3mm apart along the join.

If the solder is too large it will not melt properly and gives poor results. Never forget to use flux or the solder will not flow properly and also put flux on the solder as well.

- 5/. Light your torch and reduce the flame till you get a fine blue pin point flame.
- 6/. After you have applied the flux and solder allow it to dry for a moment so the solder doesn't move when you apply the flame.
- 7/. Now apply the heat to the area to be soldered and carefully watch the solder. Use the inner light blue tip for soldering as this is where the hottest concentrated part of the flame is. First the solder will form a globule and then it will flow into the join. Move the flame over the entire area to be soldered. Remove the heat and inspect the work with a pair of soldering tweezers.

## **MORE SOLDERING**

Repeat the soldering technique several times with each group of solder until you feel that you have experienced for yourself the outcome of soldering jewelry.

Unless you see the results for yourself you will not be able to judge the outcome.

Be critical of your work and inspect each piece closely.

Check to see that you never used too much solder.

If you strike problems like the solder isn't flowing clean your jewelry in pickle and start again. Explained under cleaning.

It's better to experience soldering on some cheap little jump rings rather than on a larger piece of jewelry later on.

The jump rings you have soldered can be kept for future jewelry jobs. Anything that is damaged keep for scrap.

Make sure that you keep your hard, medium and easy solder in separate containers for future use.

If you do very delicate soldering you must use a solder with a lower melting temperature to suit.

As you will have probably experienced that difference while soldering your jump rings.

Easy solder is best suited where you intend to use a fine silver wire or on joins where several joints must be made.

In most cases medium solder can be used for general purpose individual soldering jobs or in multiple joints. And hard solder in areas where you think an extra strong joint is required or the first of a multiple of solders.

Use your own discretion and think about how many soldering joins you have to make and the distance between them. Think about the delicacy of the individual piece and the areas to be soldered. These are all factors to consider.



Soldering showing the use of the inner blue flame tip for maximum heat.

This topic was taken off my Ebook CD: Jewelry Making For Beginners. \$29.95 (US) ea. More Details: http://www.stwsales.com/chgc5.html