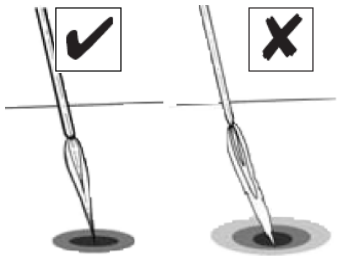
# General Rules about and Useful Advice on Soldering

## Working with the girdler's substance

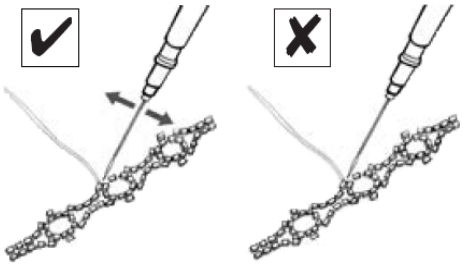
The girdler's substance must be plastic and workable and mustn't dry out. Its function is to transfer the heat from the soldered product.

## Working with the blowpipe

- Always select the solder's diameter depending on the product's thickness and dimensions.
- You can reduce the probability of damaging the stones by using a blowpipe with an accurately pointed flame that can be aimed at the smallest area of the soldered joint with pinpoint accuracy.
- When soldering, don't aim the flame's point at the same place of the joint area motionless. Rather, the flame should be fluttered gently from side to side.



*Correct and incorrect shape of the flame*



*Correct and incorrect use of the blowpipe*

## Working with the solder (soldering wire)

The amount of the solder used when soldering fashion jewellery components (chain cups) must be proportional to the soldered components' size. Too large or too small an amount of the solder may adversely influence the final quality of the product.

- A disproportionately large amount of the solder may cause it to run into the cups with set stones. This causes damage to the foil's protective layer on the stones' backs, resulting in an irreversible change to the stones' appearance.
- Too small an amount of the solder results in a weakened soldered joint.
- The recommended gap width between the soldered components is 0,1 - 0,3 mm.
- The recommended diameter of the soldering wire is up to 1mm max.
- The solder's recommended melting point is 190°C/374°F max.

When soldering, care should be taken to only heat the immediate neighbourhood of the soldered parts, allowing the solder to run into the gap between them. As a matter of principle, we do not recommend heating the entire surface of the product with the solder pre-applied to it.

## Troubleshooting

| Problem | Solution |
|---|---|
| Faulty imprints. | Re-imprint the sample product. |
| The solder didn't melt – the solder as well as the substance were not heated up sufficiently. | Clean the solder as well as the soldered joint mechanically and start soldering again; check that the type of the solder used is suitable for soldering, if not, replace it. |
| Too large an amount of molten solder – caused by repeated soldering or by using an unsuitable solder. | Remove the solder mechanically and clean the joint, e.g. using fine abrasive paper. |
| Stones flooded by the molten solder – caused by the girdler's inattention, usually heating up the joint for too long. | Remove the solder mechanically, sort out the affected stones, replace them with new ones and reset. |
| Yellow or cracked stones – caused by overheating the stones for an excessively long time. | Replace the damaged stones with new ones and set them |

**By following the above rules and suggestions and using stones and components from Preciosa, excellent results are guaranteed.**

**For more information, please visit www.preciosa.com or contact us at info@preciosa.com**