

Basics; - Wax Carving

Wax carving is a way of creating designs or shapes - either entire pieces of jewellery, or small elements that can then be used or combined in different ways - by modelling the shape in wax before using this as a master to create a mould or to cast directly into metal.

Wax is a soft material, making it easy to shape, carve and form by hand, to pour into moulds and to mill with a lathe, router or milling machine.

Many different types of wax are available through jewellery suppliers, as well as through fine art or sculpting suppliers. Most are made to have specific properties that will enhance its use in different ways.

Benefits

- Wax carving is an inexpensive way to experiment with shape and form
- It can be done with minimal tools and without the need for a full workshop
- Wax can take very fine detail and allow intricate shapes to be made
- Modelling or sculpting can allow you to create much more three dimensional and sculptural forms than could be achieved from sheet metal and wire
- Completed waxes can be used for lost wax casting, as mandrels for electroforming, and for making moulds for mixed media work such as resin casting

How it Works

Draw out your design on paper - draw it from different views - front, top and side so that you know what it will look like from every angle. This helps you during the carving process, but also helps you to think about how the shape works, and how elements fit together for more complex forms.

Once you know what you plan to create, cut off a section of wax to the right size. Ensure it is large enough to fit your whole design. Mark out the external boundaries of your shape on each side of the wax, and then either cut or file off the excess to block out your basic shape. Re-mark your design onto the wax with the next level of details and use files and needle files to create the main shapes of your piece.



Tip - Plan your design in advance - it's very hard to start carving away without a clear idea of what you want to achieve first - at the very least you need to know measurements so that you can start with an appropriate sized piece of wax.



Keep repeating - marking out your design and the next level of details, then using a combination of carving tools, scalpel and burrs to bring the shape to life and further refine it.

Each stage working around the piece focussing on one side, then the next will bring a further level of detail to the shape - don't worry if it looks lumpy and unexciting to start with - the more you work at it - the finer and more precise your shape will start to be.



Once you have the overall shape and details that you planned - use either a fine cloth, paper towel, or emery paper to smooth out marks left by your tools. You can also use heat to gently soften and melt the surface of your wax to give it a smooth finish, but use this with care - especially on fine areas and detail, as this can easily melt the whole area, instead of just the surface!

A completed wax can then be used its intended purpose. For casting, unless it has a flat back where material can be poured into a mould, it will need a sprue adding to create a pathway through the mould to allow the molten metal or other material to reach the shape - complex shapes may need several sprues. If you are using a casting service - they can do this for you to ensure it will be effective.

More Information

Many general jewellery technique books have a section on wax and casting - including;

- Encyclopedia of Contemporary Jewellery Making Techniques - Vannetta Seecharran
- The Complete Metalsmith - Tim McCreight

Wax and casting specific books include;

- Wax Carving for Jewellers - Russell Lownsborough and Danila Tarcinale
- Creative Wax Carving - Ruth Pierce
- Jewelry Wax Modelling - Adolfo Mattiello
- Modelling in Wax for Jewellery & Sculpture - Lawrence Kallenberg

Other information;

- www.interweavestore.com/carve-a-wax-model-for-a-pendant-with-travis-ogden-grouped
- [www.ganoksin.com/benchtube/search_result.php?search_id=wax carving](http://www.ganoksin.com/benchtube/search_result.php?search_id=wax%20carving)

Suppliers

HSWalsh - www.hswalsh.com

Cooksons - www.cooksongold.com

Cousins - www.cousinsuk.com

Suttons - www.bettsmetalsales.com

Proops - www.proopsbrothers.com

Tiranti - www.tiranti.co.uk

Casting Services

Just Castings - www.justcastings.co.uk - West One Casting

- www.west1castings.co.uk

AA Fine Casting - www.aafinecastings.co.uk - Quality Casting - www.quality-castings.co.uk

Weston Beamor - www.westonbeamor.com - JewelCast - www.jewelcast.co.uk

