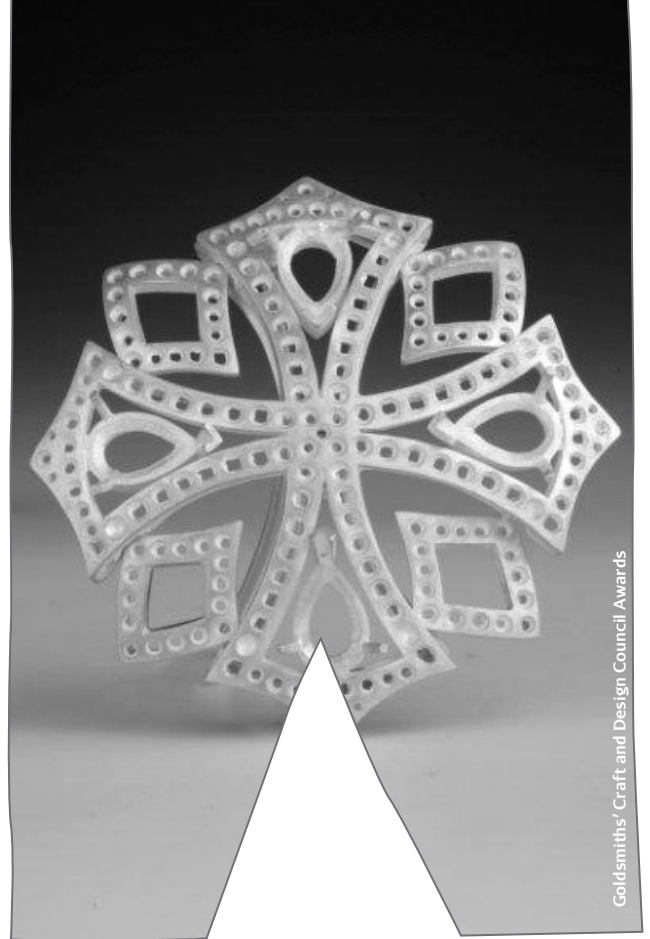


Fact Sheet 4: master pattern making



Introduction

A master pattern maker is a professional and highly skilled craftsman who specialises in the production of a master model for a client which will typically go on to be cast and put in to production. Regarded as one of the most technically skilled bench jewellers in the trade, the master pattern maker has usually had training as an apprentice and lots of experience making models for major jewellery houses, bespoke and production pieces and small businesses alike.

You would approach a master pattern maker to make you a metal model of a piece you want to put in to production. Models are commonly made using sterling silver and the pattern maker will take a lot of time making and refining the model to the highest possible standards. This is because the quality of the resulting castings will depend entirely on the quality of the original model. They will also make the piece slightly larger than if it were being made to be worn straight away. This is because the model needs to compensate for the shrinkage that occurs during the casting process so bear this in mind when discussing your designs and make sure you make it clear that the final casting should be to your design measurements.

Finding a professional master pattern maker

As with all bench jewellers, master pattern makers can be

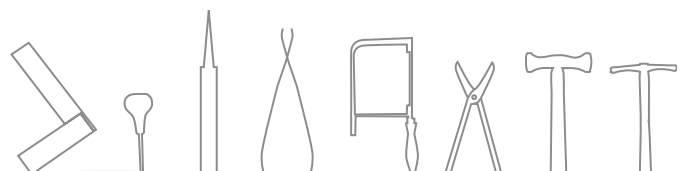
hard to find as generally speaking, they are not short of work and don't always advertise. Ask for recommendations; look at the trade databases listed at the end of this fact sheet and on notice boards in the areas a bench jeweller might frequent such as tool shops in the jewellery centres around the country.

How to prepare your design for master pattern making

Try and have as much information to hand as possible on your design, including accurate measurements. Your drawing may be used as a template to create the work so supplying a drawing to scale is always helpful.

It is good practice to provide the master pattern maker with any elements or components that are integral to the success of the piece. For example, if you are designing a pendant, a chain sample is useful to the model maker so he can check the dimensions of the hole. Make sure you indicate where stones are going to be positioned and ideally send the stones along with the design so the model maker can see the dimensions of the stone for themselves. Make sure you include all these items and any precious metal on your purchase order so there is a record for both parties.

Be prepared for your drawing to be scrutinised. Model makers



have lots of experience and may ask you questions about how you want the piece to work. A good craftsman will do their homework about the job first so they can be sure they understand what is being presented and can be true to your design.

Don't forget to clearly mark the package you give to the master pattern maker with your business details, a contact telephone number and the address the pattern should be returned to if you can't collect it in person.

More information about dealing with manufacturers can be found on **Fact Sheet 02: approaching a manufacturer.**

Costing and pricing

A master pattern maker usually charges by the hour. Bear in mind when you approach a maker that they have to spend a lot of time making sure the model is correct. They will usually estimate how long the job will take up front so you have an idea and other costs to consider will be metal costs, findings and any other extra processes you would like included.

Master pattern making FAQ

Q: What sort of finish should I leave or expect on a metal master pattern?

A: A master model is made to the highest possible standards – the quality of it will dictate the quality of the resulting castings so any scratches or imperfections, however small will be replicated.

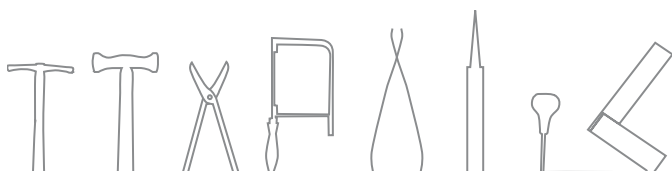
Q: Will the master pattern maker be able to tell me if my design won't work?

A: Usually yes, they usually have many years' experience and will be able to spot potential issues at the design stage and help you make alterations. Your casting company should also be able to advise you on any potential issues with your design from a casting perspective.

Q: Will the model maker place the sprue on my piece?

A: Usually yes, but make sure you confirm this in your initial meeting. Otherwise you can add yourself or ask your caster to do it for you, although they will charge for this service.

"We thought we had to do everything ourselves, but linked up with people it feels easier now."



Glossary

Master pattern

A model of a piece of work that is to be put in to production – commonly made out of sterling silver or wax.

Wax pattern

Wax replica of a master model, produced by injecting molten wax into a rubber mould.

Further reading

Handbook on Investment Casting – the lost wax casting process for carat gold jewellery manufacture, Publ World Gold Council 2003, Valerio Faccenda

Databases of industry specific trade services

The following websites hold information about trade services, equipment suppliers, products and educational courses:

benchpeg: www.benchpeg.com

The jewellery industry's leading creative and digital communications network

British Jewellers' Association Trade

Product Search: www.bja.org.uk

A membership organisation that represents the jewellery industry

Ganoksin: www.ganoksin.com

An international online resource for the jewellery industry

The Goldsmiths' Company Technical Portal:

www.thegoldsmiths.co.uk

A supplier database of trade-to-trade services and suppliers

"It is easy to say you want to outsource but it's a huge step change in reality. You need to present someone with detailed instruction, simplify the making process, the communication has to be spot on and intellectual property issues need to be in place. There are very few role models to look at in terms of the design and production route and it is very difficult and challenging to make the jump."

