



# PHOTO ETCHING SERVICE

- The photo etching process allows us to replicate your artwork in sheet brass, copper or nickel silver
- The etching can go all the way through the metal or half way on either side
- The depth of half etching can be controlled and also in-filled in various ways
- Best to contact us before you start your etching project as we may be able to offer advise that could save you time

### HOW TO PREPARE YOUR ARTWORK







BLACK metal

RED

half etch into front of metal

WHITE through etch

CYAN

half etch into back of metal (text reversed)

Please note: Red (front etch) and cyan (back etch) must not touch or cross over each other.

Artwork can sent in any windows format, ideally as an EPS, DWG, CDR, DFX or Ai file. We do accept image files such as JPG, TIFF, GIF, BMP but you must make sure that these images are at a resolution that makes them crisp (i.e. 300dpi for JPG). MAC users should save artwork as an EPS, AI, freehand or Photoshop files.



reference line next to the artwork, a scale in various formats can be downloaded website or copy this scale.

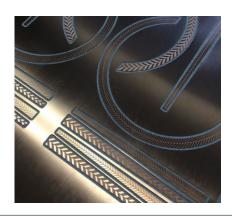
Please include a 100mm

Wherever possible:

- Embed fonts and convert to paths.
- For any special fonts, include the font suitcase with your order.
- It is useful to include notes with your artwork with any relevant info i.e. final size, colour, whether you are repeating an image, etc.



If you do not wish to prepare your artwork, we do offer an artwork preparation service.



#### THICKNESS AND METAL OPTIONS

We can etch in brass, copper and nickel silver in the range of thicknesses below.

BRASS 0.15, 0.2, 0.25, 0.3, 0.38, 0.45, 0.7 and 0.9mm NICKEL SILVER 0.25 and 0.45mm COPPER 0.3mm, 0.5mm and 1.0mm

We can etch brass & nickel silver to a maximum of 297 x 490mm (although we recommended an A3/A4 size for speed and economy) and copper to 243 x 493mm. Finer detailing can be achieved with thinner thicknesses of metal. The chart below shows the minimum line width and minimum gaps between those lines that can be etched with the range of metal thicknesses.



| THICKNESS | HALF ETCH DEPTH | MIN. LINE WIDTH | MIN. GAP WIDTH |
|-----------|-----------------|-----------------|----------------|
| 0.15mm    | 0.08mm          | 0.18mm          | 0.20mm         |
| 0.20mm    | 0.10mm          | 0.25mm          | 0.28mm         |
| 0.25mm    | 0.13mm          | 0.30mm          | 0.35mm         |
| 0.30mm    | 0.15mm          | 0.36mm          | 0.42mm         |
| 0.38mm    | 0.19mm          | 0.45mm          | 0.53mm         |
| 0.45mm    | 0.23mm          | 0.55mm          | 0.64mm         |
| 0.70mm    | 0.36mm          | 0.85mm          | 0.98mm         |
| 0.90mm    | 0.45mm          | 1.08mm          | 1.26mm         |

E.g. For 0.25mm brass the minimum line width is 0.30mm and the minimum spacing between those lines is 0.35mm.

## **CONTROLLED ETCHING TECHNIQUE**

Iain and his team in our Photo Etching Workshop have developed a way of controlling the depth of etching. This means we can achieve a much higher definition even on the thicker gauges of metal, where over etching is an intrinsic problem.



Left & top is a traditional etching on 0.90mm brass whilst the right & bottom is an etching using the new Controlled Etching Technique.

This level of definition was only achievable on the thinnest of metals before.

We can also produce etchings without the need for tabbing, especially useful for small and intricate elements.

#### IN-FILLING HALF ETCHED AREAS

We have developed several methods of in-filling and marking surfaces. This means we can offer you the best solution whether it be for quality, scale, turnaround or economy.





For advice on which method might be best for your project and for any etching enquiry, please contact Iain (Workshop Manager): 020 7264 1295 / artwork@modelshop.co.uk