SPOTLIGHT ON LASER ETCHING

19th September, 2023

We provide a range of laser engraving and etching sub-contract services which are used to accurately and permanently mark the surface of materials with high-quality text, lines and logos.

Laser engraving and laser etching are both increasingly popular processes which provide a permanent form of technical or decorative distinction to products and parts.

Laser etching is a simple, robust method of marking metallic parts. It can be useful for different applications such as marking the part name, serial numbers, data matrix codes, logos, barcodes, QR, 2D, 3D codes and scales. It is also a versatile process ideal for a wide range of metals, including aluminium, lead, steel, magnesium, stainless steel, etc.

Laser marking is a permanent process that uses a beam of concentrated light to create a lasting mark on a surface.

There is a different effect for different metals; using lasers on stainless steel achieves a ‘dark mark’ whereas aluminium achieves a ‘white mark’. Using stainless steel, the darkness can be controlled by the amount of power and the number of times you go over the mark. Aluminium is used to be more visible and is more attractive when anodised. The colour can be very slightly altered by adjusting certain parameters and this gives a metallic colour.

Our Foba and Coherent Rofin machines allow us to create better, darker and sharper simple black line markings or varied colour markings (depending on the material). High-quality text down to a height of 0.6mm can be applied to products and parts and it offers better durability than other marking services which are applied with ink or paint.

Here at Micrometric, we also have laser welding experts who are equipped with a range of lasers and can weld a wide range of parts to form high-quality welds. We specialise in minimal distortion and minimum heat input welding for parts which contain some temperature-sensitive items inside them. A variety of materials can be laser-welded dependent on the metal composition and design of the product. In our next blog we will be sharing everything laser welding so make sure to keep an eye out!

To find out more about all our services and how we can help your business, **get in touch** with our expert team.