

Engraving

Silver Engraving Options

Our range of redENERGY Pulsed Fiber Lasers can be used to mark a variety of etching textures and oxide colours on to Sterling Silver Jewellery. This mark is possible over a large focal range with a working distance of over 1mm.

The butterfly design pictured was made in less than 3 minutes (approx height 30mm).

The process uses a fast scanner based beam delivery with a standard F-Theta lens F163 lens and requires no processing gas. The use of small mirror galvo is possible using the F75 Beam Expansion Collimator. The redENERGY S-Type Single Mode beam creates an intense hot spot that is able to couple with reflective silver over the complex curved surfaces of silver jewellery.

Coupling this small spot size ~30 microns, and a wide variety of wave forms with different pulse durations, enables various oxide colours and textures for a pleasing visual effect. A key processing ability of our redENERGY Laser enables the switch between wave forms to occur seamlessly between each of the complex sections of the design. This is a significant advantage where multiple passes of different wave forms are required to create the different oxide effects.

Related Product



Visit our website to view the full product datasheet
redENERGY G4



Application Parameters

| | |
|----------------|---|
| Type | G4 30W HS-H |
| Power | 30W |
| M ² | <1.3 |
| Beam Ø | 8mm |
| Scanner/Lens | 10mm/163mm F-theta |
| Energy | WF0 0.68mJ @ 45kHz + (others for etching) |

Postcard Archive



To browse though SPI's entire library of application postcards, visit the postcard archive:

spilasers.com/appscards

