

Engraving

Stainless Steel Engraving with 500ns pulses

Our redENERGY EP-Z Laser benefits from having longer duration pulses which can have significant benefits in engraving applications.

For this application WF 39 which is a 500ns pulse (full width) was used to achieve 0.2mm depth on this logo in a time of 195s using a multi pass engraving technique. A high quality finish was achieved through the use of periodic interpass cleaning with WF25 which has a shorter 20ns duration pulse. This less intense pulse removes debris and oxide from the surface which can accumulate and have a detrimental effect on engrave quality.

500ns pulse material removal rates of up to 5.25mm³/min can be achieved which compared with the traditional 200ns pulses (which give removal rates of 4.25mm³/min) offers a 25% increase in productivity.

Related Product



Visit our website to view the full product datasheet
redENERGY G4



Application Parameters

| | |
|----------------|---|
| Type | G4 20W EP-Z |
| Power | 20W |
| M ² | <1.6 |
| Beam Ø | 8mm |
| Scanner/Lens | 10mm/163mm F-theta |
| Energy | WF39 1mJ @ 45kHz + (others for etching) |

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