## Marking

## **Brass Colour Marking**

The technique of colour marking has been applied across jewellery, metal work and consumer product sectors. Manufacturers are greatly interested in this process, looking for new methods and finishes to provide product customisation. Brass is one of the few materials, along with Stainless Steel and Titanium, that can be colour marked and a select few colours can be marked with very high contrast.

As well as a pallet of colours, high contrast black marks can be achieved with great viewing angles as shown on the brass strip to the right.

The technique for this application is to apply variations of low pulse energy and high pulse overlapping to control the amount of thermal energy supplied to the substrate.

SPI's G4 20W EP-Z laser is able to produce high quality colour marks on CZ108L grade of brass in a variety of colours including white, yellow, purple, and two different shades of orange. The differing colour finishes are a result of varying pulse durations, power, frequency, scanning speed and number of passes. This is an example of the flexibility of the G4 platform.

This is an SPI patented process.

## **Application Parameters**

Туре	G4 20W EP-Z
Power	20W
M <sup>2</sup>	<1.6
Beam Ø	8mm
Scanner/Lens	>8mm/163mm F-Theta
Energy	Various waveforms, frequencies and speeds for each colour





## Postcard Archive

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

spilasers.com/appscards

