



# laserlines

## Press Release

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### Laser Marking Painted Stainless Steel Bottles Using Synrad CO2 Lasers

Stainless steel water bottles are growing in popularity due to environmental and health concerns about certain chemicals in plastic bottles. Stainless bottles are both sturdy and lightweight because of their thin walls. In addition, these stainless bottles are painted to provide a smooth, attractive finish and added protection. While direct stainless steel marking typically requires CO<sub>2</sub> power levels of at least 60 W to 100 W, paint ablation is easily done with powers as low as 25 watts.

For this application, a black painted stainless steel water bottle was marked with a complex company logo. The marking setup consisted of a Synrad *FH Flyer* marking head and a 25 W laser controlled by Synrad's *WinMark Pro* laser marking software. The *Flyer* head was equipped with a 125 mm focal length lens that provided a 180 µm (0.007") spot size. This small spot size was required to mark the fine detail in the company logo.

The resulting mark exposed the stainless steel underneath to create a high-contrast, shiny mark that was completed in a cycle time of 7.56 seconds per bottle.

Laser Lines offers the complete range of Synrad lasers including the FH Flyer Marking head and WinMark Pro laser marking software. For further information please contact Gary Broadhead on 01295 672500 or email [garyb@laserlines.co.uk](mailto:garyb@laserlines.co.uk).



***25W Synrad laser was used to ablate the black paint on this bottle, exposing the stainless steel underneath to produce this high-contrast logo.***

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