



LBP Optics

Mirrors for Industrial and Scientific applications



Lipstick mirrors

High Quality Mirrors for Medical & Dental Lasers

Why choose LBP Optics?

LBP Optics is well-known for its gold coated solid metal laser mirrors. We've been manufacturing since 1990 and our mirrors are widely used and well-proven in the medical and dental laser field.

Renowned for their durability, consistent performance and fitness for purpose, our mirrors can be produced to a wide variety of sizes and specifications making them ideal for use with medical and dental laser systems.

We make mirrors as small as 5mm diameter, 1mm thick, with full optical specifications. These are used as mirrors in dental laser hand pieces.

High laser damage resistance

Our electroplated gold coating is proven with high power CO₂ lasers both 10.6um and 9.3um wavelength, and with Er:YAG lasers. Even at the focal point of a lens the mirror won't damage. We offer gold coated copper mirrors, gold coated aluminium mirrors and even gold coated stainless steel mirrors.

Integrated mirrors and mounts

Our solid metal mirrors can be drilled, threaded, tapped, and have alignment dowels and grooves made in them. This often works out to be cheaper for customers than buying a simple round mirror and separate mount, adjusters etc. Thoughtful mechanical design can speed alignment during assembly and makes field replacement and servicing more consistent. In general, if it can be machined we can make a mirror from it.

One mirror for multiple wavelengths – including visible light

Electroplated gold is 90%+ reflective in the visible, and 99% reflective in the infrared. The same mirror can be used with CO₂ sources, both 9.3um and 10.6um, and with Er:YAG lasers. Alignment of hand pieces and articulated arms is simplified by being able to use red or green alignment lasers during assembly.

Long operating lifetimes

Even when dirty or dusty the base metal of the mirror will sink locally absorbed heat away from surface hot spots. Our mirrors never crack or break. They are widely used in high power metal cutting and welding where long up times are needed. The adhesion of gold plating exceeds that of any vacuum deposited thin film mirror coating.

For more information and examples visit our website: www.lbp.co.uk



Er:YAG mirror



Dental mirrors



Flat mirror handpiece



Working with LBP Optics

- We are a well-established, friendly business with over 28 years' experience and expertise.
- Fabrication, polishing and coating is performed in-house ensuring consistent high-quality products.
- Unique manufacturing methods allow us to give outstanding service and prices on small volume custom mirrors, as well as large volumes.
- We will meet your shipping dates and we regularly export all over the world.
- Our rigorous packing procedures ensure all products arrive in perfect condition for immediate use or storage.
- We supply standard production parts as well as prototypes for research and development.
- We have extensive in-house testing and measurement capabilities including phase shifting interferometry, measuring microscopy and laser calorimetry.
- LBP Optics is an ISO 9001 registered company, underlining our commitment to quality and customer service.

How to contact us:

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