



**LASER BEAM PRODUCTS**

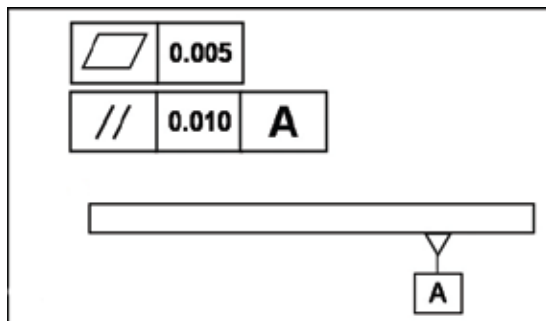
**NEWSLETTER July 2011**



## Simplifying alignment, de-skilling assembly, easier replacement

**N**obody likes wasting time aligning optical systems, or increasing exposure time to the hazards of high power laser systems. That's why we are responding to an increase in requests for mirrors that have extremely parallel front and back surfaces.

Extreme parallelism means when replacing a used mirror with a new one, there can be little or no adjustment needed, depending on the mount design. Our electronic autocollimator can measure parallelism to an accuracy of 2 arc seconds, and gives a hard copy report of the results, complete with statistical analysis.



Specifying parallelism



Autocollimator

We can also offer high angular accuracy, and mirror to mirror repeatability on "lipstick" type mirrors. So assembly of new systems is faster and simpler, and needs less skilled staff, or specialised production equipment.

## Laser World of Photonics, Munich

**I**t's always good to meet customers old and new, and the city of Munich is a perfect location.

Thanks to everyone who paid us a visit, especially those customers working with our mirrors with Fibre Laser applications and Terahertz imaging.

We are listening to feedback about how our products perform in these new technologies, and how we can make them better.

Please contact us if there is anything you can share with us, details below.



Copper 'lipstick' mirror ready for reworking

## How to contact us:

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Email: [sales@lbp.co.uk](mailto:sales@lbp.co.uk) Web: [www.lbp.co.uk](http://www.lbp.co.uk)

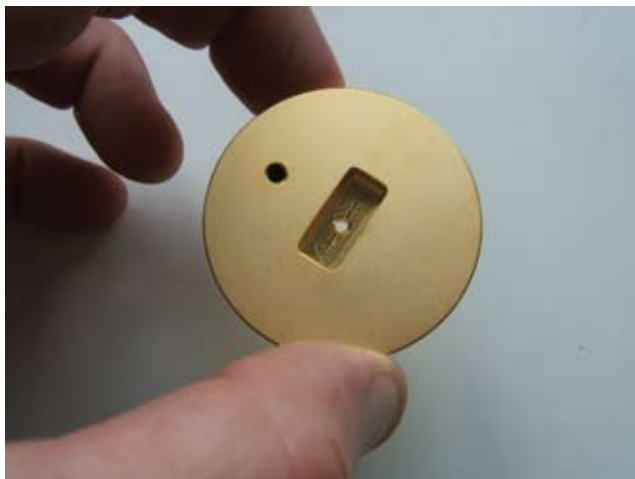
Laser Beam Products Ltd, Units B&C Stratton Park, Dunton Lane,  
Biggleswade, Bedfordshire SG18 8QS, United Kingdom



## Metal Mirrors with through holes

Mirrors with through holes in them are easy to make from metals, and our polishing technique keeps the surface accuracy right up to the hole. Our Gold coating also uniformly covers the sides and internal surfaces of through holes.

The mirror below has a slot in the rear to accept a solid state laser bar that injects light into a resonant cavity. Equally the hole could be for in line monitoring.



Mirror with central through hole

## Metal Mirrors for the UV and Visible

Glass mirrors are widely used for UV & visible applications, but the same coatings that give glass mirrors their reflective properties can also be deposited on all our metal mirrors.

This means that we can produce metal mirrors that can be used across the UV and visible as well as the infra red. The added convenience of using metal mirrors is that we can incorporate features such as tapped holes, mounting flanges, alignment dowels and O ring grooves to create a single monolithic mirror.



Mirror with mounting holes and O ring groove

Our customers are finding that when they add up the total cost of a mirror, including its mount, adjuster and support it can be cheaper, and easier, just to use one monolithic mirror.

## **DON'T FORGET For Infrared mirrors, think Laser Beam Products**

We can supply mirrors in many materials including Copper, Aluminium, Silicon, Nickel, Brass and Molybdenum and with a variety of optical coatings including Gold, MaxR, Protected Silver and 1/4 wave phase retarder.

For more information or for a quotation, contact us on:

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