



## Selective reflection

Peter Röhlen

With automatic traffic surveillance, license plates are photographed from a mirror image. PRINZ OPTICS has developed a mirror that reflects only a defined wavelength range and thus prevents unclear ghost images.

The customer's satisfaction with a delivered product or service is usually the determining factor when starting a long-term customer relationship. With our customer VITRONIC, it was our anti-reflective laminated safety glass for camera modules that impressed. Nowadays, we are not only a supplier, but also a “problem-solving partner”.

VITRONIC develops and produces systems in the field of industrial image processing for manufacturing and logistics automation as well as for traffic surveillance. In traffic surveillance, the latest technologies are used for automated speed and red light monitoring. When it comes to the necessary visual documentation of the recorded vehicles, the legibility of the registration

plates is of particular importance. This topic is now the subject of close cooperation between VITRONIC and Prinz Optics.

The latest success: the development of a mirror that reflects only a defined wavelength range when hit by light radiation, while absorbing the remaining radiation. As the camera captures the image via the reflection, an unclear ghost image must be avoided; the reflected image – i.e. the license plate – must be clear or legible.

In a series of laboratory tests, glass surfaces were metallised on both sides in a dip process. To avoid a ghost image, the coating on the back was initially etched away, and later sandblasted to allow the subsequent blackening to work optimally.

The result of the extensive test series: the useful wavelength is optimally reflected, while the unused radiation is almost completely absorbed. A development success that not only improves automated traffic surveillance, but can also be transferred to control systems in logistics.

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More information:

**Prinz Optics**

Peter Röhlen  
Managing Director  
PRINZ OPTICS GmbH

Simmerner Strasse 7  
D-55442 Stromberg

Phone: +49 6724 / 601 93 - 16

Fax: +49 6724 / 601 93 - 11

[peter.roehlen@prinzoptics.de](mailto:peter.roehlen@prinzoptics.de)

[www.prinzoptics.de](http://www.prinzoptics.de)