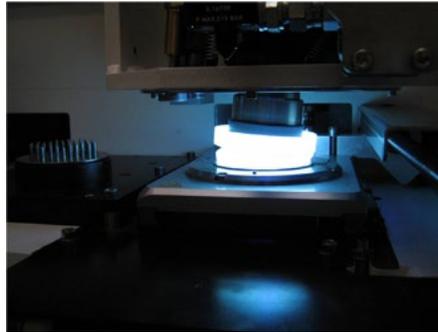


# Case Study

## Application: Adhesive Curing For Optical Manufacturing



Satisloh's Nucleo-Blocker



Satisloh's On-Block Technology with Phoseon's UV LED Curing Light Source

- Proven Reliability
- Superior Performance
- Innovative Technology

### Satisloh's Nucleo System Cures Up to 100 Lenses Per Hour

*Satisloh's Nucleo-Blocker system offers a new technique for optical manufacturing that utilizes Phoseon's UV LED curing lamps for adhesive curing of lenses. This new On-Block technique allows for a more environmentally friendly and highly efficient manufacturing process.*

#### Nucleo-Blocker

The Nucleo system automatically removes semi-finished lenses from a tray, recognizes the type and position of the blank, measures the front curve, chooses the best fitting block piece out of a magazine and applies this clear plastic block to the front by using the patented spatial blocking technique with an organic adhesive UV-light curable media. It then cures the adhesive within seconds and replaces the lenses in the original tray at a rate of up to 100 lenses per hour. The new system meets the

long demanded full support and environmentally-friendly blocking solution.

The organic block and adhesive protects the lens front surface which eliminates the need for taping. Nucleo-Blocker probes the exact geometry of the front curve, which allows the system to accurately position the lenses on the block piece and in addition offers the possibility to detect front curve errors on spherical blanks. The machinable organic block offers the possibility of full surface support. This provides increased accuracy when direct surfacing complex lens designs - especially with knife edge lenses or plus lenses with oval shapes. Phoseon's UV light curing method is used to cure the adhesive layer. The Nucleo blocking system is paired with a matching automated de-blocking system, thus enabling a lab to fully automate its surfacing

operation. The de-blocking system will separate block piece, adhesive and lens and cleans the lens afterwards.

Nucleo is not only a new, full support and environmentally friendly blocking and de-blocking technique superior to alloy blocking. It is also the first step into Satisloh's "On-Block Manufacturing" concept, where the lens will stay on the Nucleo-block through all manufacturing steps including coating and edging, hence allowing for ultimate process integration with full automation.

#### About Satisloh

Satisloh offers a complete line of hardware and software dedicated to ophthalmic and precision optics lens production.

For more information on Satisloh, visit [www.satisloh.com](http://www.satisloh.com)

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