

A large industrial cleaning machine, the LCU modulo, is shown in a factory setting. The machine is composed of several interconnected modules, including a control cabinet on the left, a main processing unit with a conveyor belt, and a final cleaning station on the right. Above the machine, several robotic arms with red and blue components are suspended. The background is a blurred industrial environment with blue lighting.

Cleaning

# LCU modulo

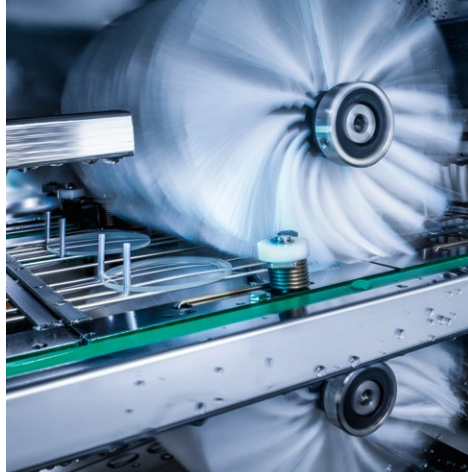
AUTOMATED CLEANING,  
INTELLIGENTLY COMBINED



Fascination for Innovation



The optional loading robot HRA feeds the system fully automated.



Every 24 seconds a pair of lenses is cleaned and prepared for coating.



The PRA robot places the lenses back in the job tray fully-automated.

### Benefits

- Fully automated in-line process
- In-line brush cleaning of up to 300 lenses/hour
- Additional impulse drying option for drying process
- Automated loading and unloading option
- No pre-cleaning needed
- Low cleaning costs per lens
- Short ROI periods



**High throughput**  
In-line cleaning of up to  
300 lenses/h.



**Very economical**  
Low cleaning costs  
per lens.



**Best cleaning results,**  
no contaminations left.

## LCU modulo

The LCU Modulo is a fully automated and integrated brush cleaning system. The powerful and efficient in-line system removes contaminations like adhesive residues or fingerprints and prepares all different kinds of lenses for subsequent coating.

To enable a fully automated lens production the LCU Modulo can be extended with the loading robot HRA. After transferring the lenses, they are pre-centered and a sensor scans the edges. Following this, the lens orientation is determined in order to load the lenses in the optimal clamping position.

During the first cleaning step the lenses are cleaned gently using brushes as well as suitable chemicals. Afterwards, the lenses are cleaned in a DI-water cascade removing the chemicals and contaminations before they are dried in a final step. After drying, the PRA unloading robot takes the lenses and transfers them to the coating job tray.

### technical data

lens diameter	from 40 to 80 mm
lens material	all organic and mineral materials
option	HRA for automated loading Flow heater for DI-Water
power consumption	35 kVA
air requirement	min. 6 bar (87 psi)
water requirement	DI-water conductivity < 1 µS/cm, 1,5 l/min
weight machine	approx. 1800 kg (3968 lb.)
dimensions (width x depth x height)	approx. 2000 x 1615 x 1930 mm (79 x 64 x 76 inches)
	with automation: approx. 8530 x 3384 x 2860 mm (336 x 133 x 113 inches)

All data subject to change without notice. Please verify details with SCHNEIDER.

**SCHNEIDER GmbH & Co. KG**  
Biegenstrasse 8-12  
35112 Fronhausen  
Germany  
Phone: +49 (64 26) 96 96-0  
Fax: +49 (64 26) 96 96-100  
www.schneider-om.com  
info@schneider-om.com

SCHNEIDER Optical Machines Inc.  
6644 All Stars Avenue, Suite 100  
Frisco, TX 75033, USA  
Phone: +1 (972) 247-4000  
Fax: +1 (972) 247-4060  
info-us@schneider-om.com

SCHNEIDER Optical Machines  
do Brasil Ltda.  
Avenida Tucunaré, 574  
Cond. Palmar Modular – Modulo 1  
Tamboré  
06460-020 Barueri – SP  
Brazil  
Phone: +55 (11) 4777-1717  
info-brasil@schneider-om.com

SCHNEIDER Optical Machines  
(Shanghai) Co., Ltd.  
Room 202, 2nd Floor, Building 16  
481 Guiping Road  
200233 Shanghai – Xuhui District  
Phone: +86 (21) 61 48 00 61-120  
Fax: +86 (21) 61 48 00 65  
info-cn@schneider-om.com

SCHNEIDER Optical Machines  
Asia-Pacific Co., Ltd.  
Piya Place Lunguan Building  
29/1, Tower B, 9th Floor, Unit 9B  
Soi Lunguan Ploenchit Road  
Lumpini, Pathumwan  
Bangkok 10330, Thailand  
Phone: +66 (0) 2014-4690-2  
Fax: +66 (0) 2014-4693  
info-asia@schneider-om.com

For a complete list of SCHNEIDER agencies, please visit [www.schneider-om.com](http://www.schneider-om.com)

