



m^odulo
ONE



Surfacing

M^odulo Center ONE

FULLY AUTOMATED ALL-IN-ONE SURFACING CENTER



Fascination for Innovation

Modulo Line

SCHNEIDER had the vision to manufacture individual lenses based on freely definable mathematical descriptions. The HSC generators and CCP polishers have become the tools used to develop the free-form idea in the ophthalmic industry. Individual freeform lenses are now the top product in the market, and SCHNEIDER has grown to be the premier manufacturer of freeform equipment worldwide. The innovative machines have also made their way into standard Rx production, leading to higher productivity and quality of virtually all lenses surfaced today.

The next step has been SCHNEIDER's Modulo Line, the large industrial production system with its unique combination of high level intelligence and plug-and-play simplicity. Following a self-organizing philosophy, the cognitive machines manage the production flow all by themselves – fully self-sufficient and with the highest level of equipment utilization.

For the small and mid-sized lab, SCHNEIDER is now extending the Modulo offer with the Modulo Center ONE. The same idea but different, it combines everything needed to surface a lens in one highly integrated ready-made machine.

All-in-one
Surfacing Center

GETS
THE JOB
DONE



4
processes



80
lenses



in 1
hour



72
sq.ft.



Modulo Center ONE

Imagine one single machine featuring all the technology to surface 80 lenses/hour, in just 72 sq. ft. (7m²). This is Modulo Center ONE. The compact all-in-one surfacing center is a full-fledged production line without limitations: **a milling station // a lathe turning station // one or two 4-spindle polishing units // a CO₂ or excimer laser**

Modulo Center ONE features highly advanced process technology, based on robust and reliable components proven in hundreds of installations across the globe.

The all-in-one surfacing center substantially saves time, running all processes simultaneously and perfectly synchronized – even milling and lathe turning. And with the chambers placed right next to one another, the smart automation transfers the lenses in virtually no time. There is no faster way to surface a lens.

The dedicated Control Center (MES) informs at a glance about the current status of the machine, production parameters, and efficiency.

Labs can now run larger scale productions even in small locations and under non-industrial conditions. Little to no operator intervention is needed as the center works fully automated with all essential components on board.

Simply put: Blank in, surfaced lens out.

Tight integration

Modulo Center ONE is virtually four machines in one: a generator, one or two 4-spindle polishers and a laser marker. Even lens washing and drying is fully integrated.

Milling and lathe turning – The two processes are decoupled and form autonomous stations, allowing the center to run the processes in parallel, thereby cutting down production time. Modulo Center ONE is equipped with the proven and powerful XS-Tec motor, exceeding any acceleration levels previously known in ophthalmics.

Polishing – Modulo Center ONE is available either with one or two polishing chambers. Working with just a single pad over the full range, the Modulo ONE polishing technology works entirely without tool changes. Thanks to its four (resp. eight) active spindles and with former auxiliary times greatly reduced, the center guarantees highest throughputs. Significantly longer pad life-times allow for uninterrupted polishing all shift long.

Laser marking – Labs can choose between the basic industry proven CO₂ laser option or the Modulo ONE excimer laser option that comes with an ultra-fast full lens scanning concept and provides highest quality results. The laser unit can be integrated before or after polishing.

Proven components

Special attention has been paid to rely on proven components and reliable process technology. The center's process kinematics and parameters have been used in hundreds of installations. As a result, Modulo Center ONE delivers the same high-quality standards as any other SCHNEIDER solution without any limitations.

Fastest results

The surfacing center's individual stations are placed very close to one another allowing the four high-speed handling systems to swiftly transfer the lenses from station to station. The result: There is no faster way to surface a lens end-to-end.

The intelligent production logic ensures time consuming complex jobs do not slow down overall production speed, as the smart automation allows for bypassing. The handling systems feed the next job to whatever polishing station is available. Variability in polishing time based on material or complexity can be balanced out.

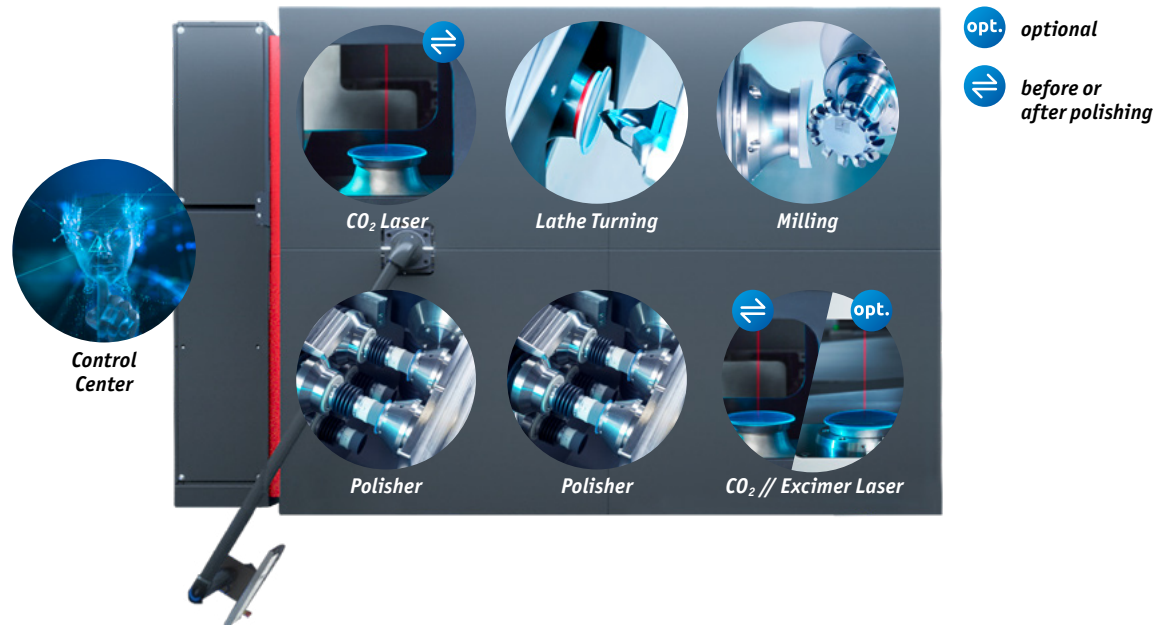
The Modulo advantage

Modulo Center ONE comes with its dedicated Control Center (MES) informing at a glance about the current status, production parameters, and efficiency. It also includes tool wear statistics, errors and alarms, as well as maintenance information. The smart cellphone app provides reports and sends notifications in real-time.



Benefits

- Fully automated all-in-one surfacing center
- All the technology to surface 80 l/h
- Highest throughput per sq. ft.
- Full surfacing capability for all curves and materials
- Proven and reliable components
- Fully automated tool and lens handling
- Dedicated Control Center (MES)
- Double polishing option
- Excimer laser option





technical data	
lens diameter	up to ø 90 mm
clamping system	block ø 43 mm
lens material	CR39, Hi-index, Polycarbonate, Trivex®
curve range	concave 0 – 18 diopters
power consumption	6 kVA avg.
air requirement	6 bar (87 psi)
weight machine	approx. 5150 kg (11354 lb.)
dimensions without control panel (width x depth x height)	approx. 3200 x 2167 x 2350 mm (126 x 86 x 93 inches)

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



SCHNEIDER

We are one of the world's leading suppliers of processing solutions to the ophthalmic and (ultra-)precision optical industry. Founded in 1986 our company is known as the pioneer of freeform and setting the pace. We are distinctive for our development of new technologies and swift translation of technological concepts into customer-oriented innovations. Our success stems from the creativity, commitment and enthusiasm of our highly qualified team.

With our locations in Germany, the US, Brazil, China and Thailand we support our customers at any time – worldwide, with fascination for innovation.

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

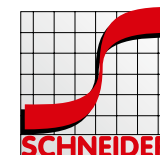
SCHNEIDER Optical Machines Inc.
6644 All Stars Avenue, Suite 100
Frisco, TX 75033, USA
Phone: +1 (972) 247-4000
Fax: +1 (972) 247-4060
info-us@schneider-om.com

SCHNEIDER Optical Machines
do Brasil Ltda.
Avenida Eid Mansur, 621
Parque São George
CEP: 06708-070, Cotia – SP
Brazil
Phone/Fax: +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 Lungsuan Building
29/1, Tower B, 9th Floor, Unit 9B
Soi Lungsuan 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



Fascination for Innovation