



Blocking

# CCB modulo

AUTOMATED ALLOY-FREE BLOCKING,  
INTELLIGENTLY COMBINED



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 freeform idea. Individual freeform lenses are now the top product in the market, and SCHNEIDER has grown to be the premier equipment manufacturer 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 is a highly integrated system solution: SCHNEIDER's Modulo Line.

Following a new self-organizing philosophy, the cognitive machines manage the production flow all by themselves – fully self-sufficient. The result is an unprecedented level of equipment utilization and unmatched throughput. Designed for utmost flexibility, the unique arrangement and plug-and-play connection allows adding new modules in any order, with minimal disruption.

The Modulo Control Center interacts with the intelligent machines and provides centralized production control. At a glance, the smart dashboard presents all the key information and functions to run the lab at highest efficiency. Significant cost and time savings as well as maximum equipment utilization are guaranteed.



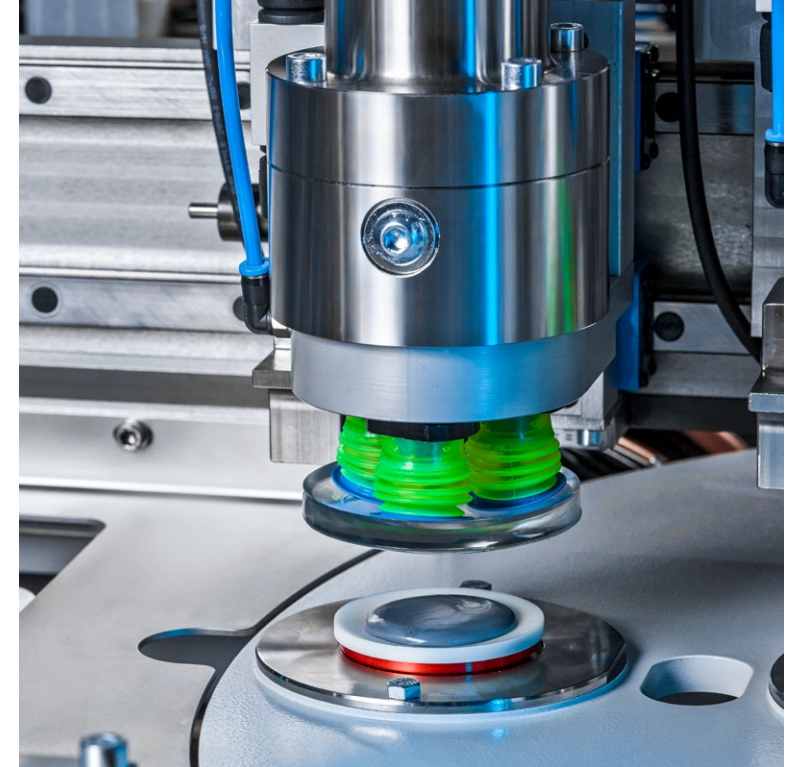
**Environmentally friendly**  
alloy-free blocking  
technology –  
Eco-Fuse Technology (EFT).



**Economical blocking**  
without block rings.



**Double station**  
for highest productivity  
and throughput.



## CCB modulo

With the development of the alloy-free and high-performance thin film blocker, CCB Modulo, SCHNEIDER demonstrates its investment in green sustainable technologies. The ground-breaking innovation meets the rising requests of an economical, sustainable and environmentally friendly production.

Parallel processing steps combined with an intelligent block piece concept and highly accurate positioning of the lens ensure lowest costs as well as high quality and stability. Even high prisms can be processed with the powerful Eco-Fuse Technology (EFT).

Another highlight is the full freedom to use any blank type on the market which makes the CCB Modulo the perfect solution to satisfy all blocking requirements.

As an integral part of the Modulo concept, the CCB Modulo perfectly fits into the Modulo Line as well as into any other industry-proven Rx and freeform installation.

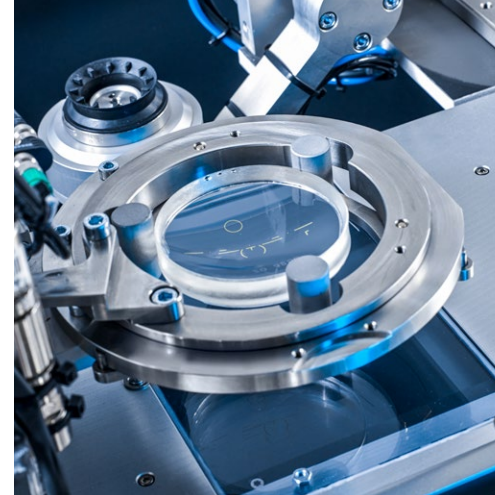




*Double station blocking system for highest productivity.*



*Intelligent application for lowest material consumption.*



*Precise lens recognition of progressive and multifocal lenses.*

### Perfect task coordination

Several independent handling systems enable the CCB Modulo to run multiple activities simultaneously. Lens pick up, lens measurement, block piece supply and media application are placed in a parallel and easy accessible configuration. After the lenses are picked up from the tray, a high-resolution optical lens recognition and alignment system guarantees perfect positioning of the lens and the block piece. The process flow is managed by independent handling systems for lens and block piece pick up, lens alignment and feeding of the block stations. While the first pair of lenses is processed, the next lenses are already loaded and precisely aligned before they meet their block piece counterparts.

### High prism capability

SCHNEIDER's unique CNC controlled prism and axis adjustment together with a very high mechanical medium stability enable lens positioning with maximum accuracy. Another highlight is the intelligent block piece concept consisting of a highly robust metal piece and a pre-shaped plastic part which can be exchanged. The stable and reusable block pieces guarantee cost reductions and blocking material savings.

No matter how complex the requirements, the EFT system ensures high precision blocking and consistency.

### Economical blocking without block rings

Compared to other blocking systems using different block ring sizes, the CCB Modulo features a new and flexible CNC blocking concept without the need for block rings. While block ring based machines suffer from the need for continuous block ring changes leading to high production losses, the CCB modulo ensures continuous machine utilization.

### Sustainable alloy-free blocking

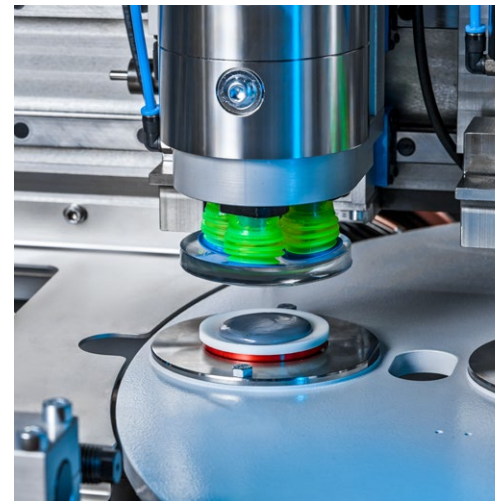
Years of experience helped SCHNEIDER to create a new and patented formulation. The environmentally friendly thermoplast guarantees optimal performance by uniting all important requirements like stability, adhesion, temperature behavior and deblocking on demand.

An intelligent algorithm calculates the required material amount for the thin film blocking which is applied on the block piece.

### The Modulo advantage

CCB Modulo comes with an on-board global interface philosophy that allows connection to the Modulo system. Once connected to the Modulo system, the machine works as an integral part of this one-of-a-kind solution and is subject to the centralized monitoring Control Center. The lab manager is fully informed about the current status of the machine. Therefore, critical situations and downtime can be avoided before they arise. Higher uptimes and increased yields are assured.

*High precision lens positioning without the need for block rings.*

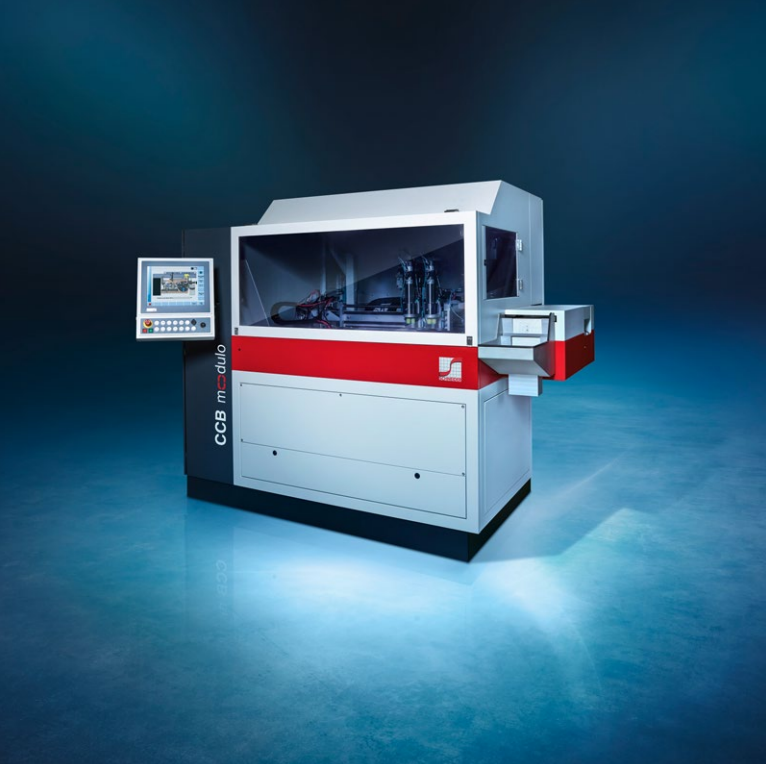


### Features

- Fully automated Eco-Fuse Technology (EFT) blocking
- Intelligent block piece concept
- Blocking without block rings
- Parallel lens handling, blocking and loading processes
- Camera-based lens recognition and alignment

### Benefits

- Consistent precision blocking
- Fully automated operation
- Sustainable production – no toxic waste
- Highest yield
- High performance patented thermoplast
- Very little material consumption
- Works for single-vision, multi-focal and progressive lenses
- Low cost of ownership compared to other non-alloy solutions



technical data	
lens diameter	up to ø 85 mm
clamping system	block ø 43 mm
lens material	all organic lens materials
blocking material	EFT
prism angle	up to 6°
power consumption	2 kVA avg.
air requirement	min. 6 bar (87 psi)
weight machine	approx. 1000 kg (2205 lb.)
dimensions without control panel (width x depth x height)	approx. 2220 x 1340 x 1915 mm (88 x 53 x 75 inches)

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

01.2023



### 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.

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