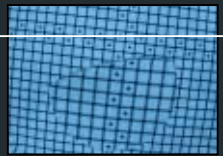
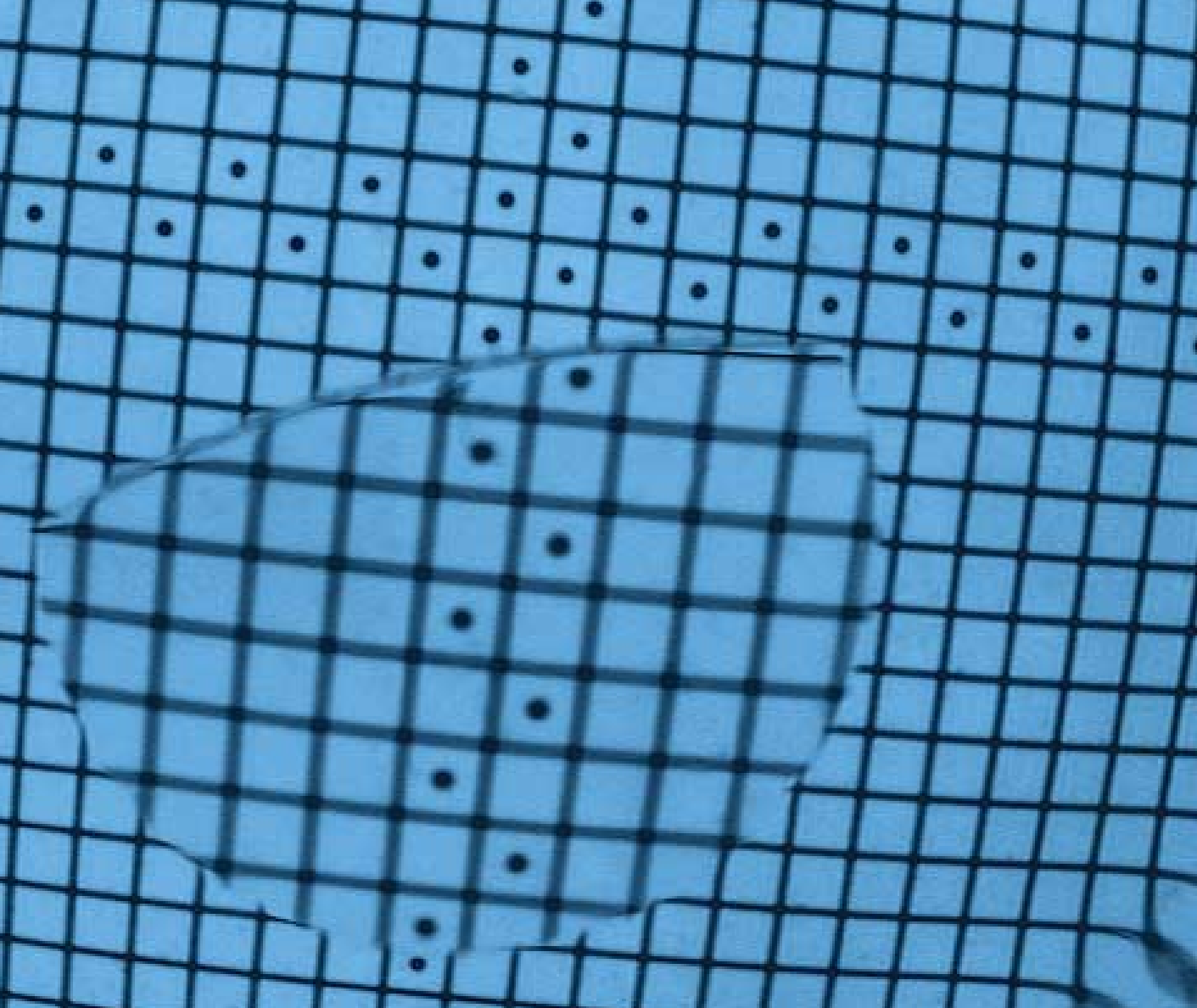




Optical Machinery by WECO
Verifier Pro





Verifier Pro – A technological innovation.

Perfection in manufacturing spectacles depends primarily on the quality of centring the lenses. Every ophthalmic optician knows how important and simultaneously how time-consuming optimum centring can be and that small mistakes can unintentionally creep in especially in this job step, generating enormous follow-up costs in particular in processing modern progressive lenses with small channels.

The idea to create a product which aims at providing an optimum solution to this problem originated from this knowledge giving birth to the revolutionary centring system which was implemented in a product, the Verifier Pro. WECO created this highly progressive product for the ophthalmic optician's workshop based on the experience it has gathered over many decades.

The Verifier Pro is a high-tech product solution integrating the centring device and the function of a lensmeter. In the operating sequence it is no longer necessary to mark spectacle lenses on the lensmeter, as the task of measuring, centring and blocking spectacle lenses is performed in an automated operating sequence.

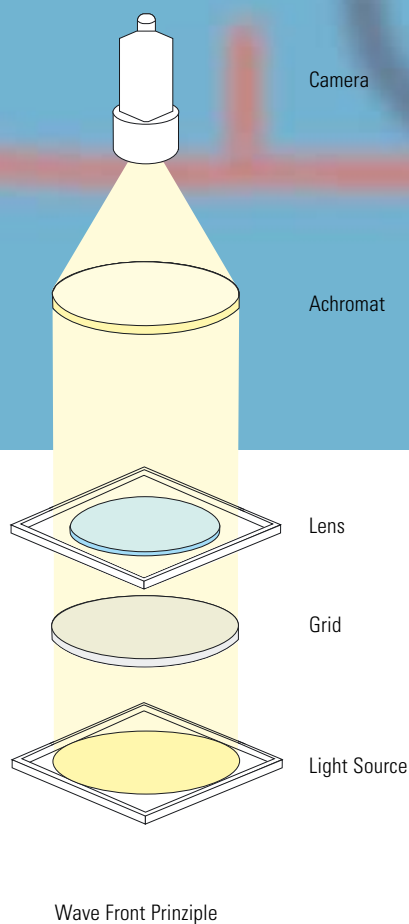
With a high degree of reliability the Verifier Pro takes over the task of automatically controlling the operating sequence. The result is higher profitability with fewer operational steps, shorter processing times, less rejects and higher precision.

Measuring – precisely and without risk.

Before beginning the centring and blocking process the spectacle lenses are measured to determine the optical centre and the shaft position. With the Verifier Pro it is not necessary to use a punctually measuring lensmeter, as the Verifier Pro is equipped with ultramodern wave front technology which takes over the precise measurement of the spectacle lenses in the surface.

In particular in the case of progressive lenses, measurements are thus enabled with maximum accuracy. Individual tolerance tables which can be deposited in the software by the user facilitate an assessment of the test results.

No special know-how is required for these operational steps, as the lens can be positioned with any random alignment in the lens retainer. The risk of damage to the lenses by marking the lenses is omitted, as there is no contact with the lens surface.



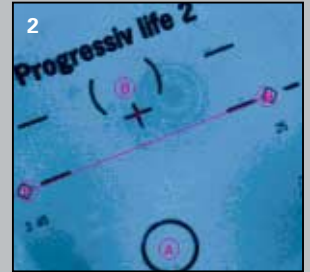
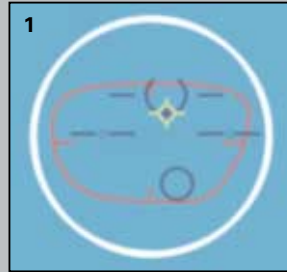
- 1 Insertion of spectacle lens
- 2 Insertion of block
- 3 Spectacle lens after blocking process

Centring – non-complicated and without parallax error.

After measuring the spectacle lenses, centring is the procedure which follows immediately. The lens remains in the Verifier Pro; time-consuming handling with the danger of damaging the lens surface is now a thing of the past.

In centring reference points and cylinder shafts are automatically found with a high level of precision. At the same time the automatic detection of the raw glass margin and the calculation of the block point is initiated. The overlapping degree between the raw glass and the mould is also checked to ensure that the raw glass is optimally used. If the raw glass is at any time hardly sufficient, the system informs the user of the prismatic difference which may possibly arise as a result of possibly shifting the mould.

The detection of spectacle lenses is not subject to any restrictions. All glass types ranging from single-focus lenses to bi-focal and progressive lenses can be processed. To meet the requirements of simple operation, the Verifier Pro also features an automatic detection function for printings on progressive lenses and segments of bi-focal lenses.



- 1 Mould on raw glass
- 2 Detection of printings



Blocking – automatic and without block error.

After the lens has been fully measured and centred, it only has to be blocked. In this operation the Verifier Pro once again demonstrates its perfection. Block errors occurring when the spectacle lens is not positioned vertically to the block direction are excluded thanks to a patented blocking mechanism.



- 1 Trace II
- 2 Edge 450
- 3 Verifier Pro
- 4 Detection of drilling hole coordinates

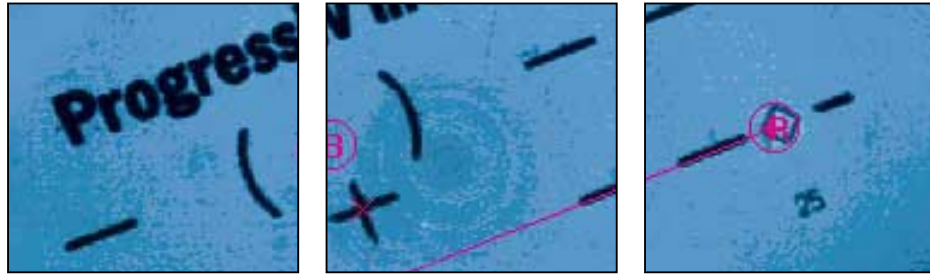


Calculating drilling hole coordinates – quick and uncomplicated.

To determine the drilling hole coordinates a former, supporting disc or an already edged lens is scanned with the WECO Tracer and placed in the lens retainer on the Verifier Pro. The traced mould is then activated in Verifier Pro and harmonised with the image of the former on the monitor. Each hole is then marked with a mouse click and the drilling hole coordinates are displayed in a separate window for control purposes and for numeric modification. With the Verifier Pro you can easily and reliably mark drilling holes. Expensive mistakes and scratches on the lens surface are now a thing of the past.

Verifier Pro – a device with powerful interfaces.

To ensure that the efficient operation with the Verifier Pro is not curbed in any way by the time-consuming input of data via the keyboard, it features a variety of different interfaces. A link with the WECO Tracer and WECO grinding machines is established via the WECO-CL interface. In addition, a serial interface is available with the OMA protocol, enabling a convenient connection to a host computer. The software designed for this application is WECO LabControl; it comprises simple handling, a mould memory and drilling data transmission.



Key parameters and technical specifications.

Dimensions

Height	655 mm
Width	219 mm
Depth	385 mm
Height of glass retainer	182 mm
Weight	20 kg

Technical limits

Measurement range for dioptré measurement	Sphere	-12 / +12 dpt.
	Cylinder	-6/+6 dpt.
	Cylinder shaft	0-180°
	Prism	0-6 cm/m
	Basis	0-360°
Raw lens dimensions	max/min diameter	85/40 mm
	max/min marginal	20/0,5 mm
Accuracy of detection		0,2 mm
Block range from lens centre	Horizontal	-20/+20 mm
	Vertical	-15/+15 mm
Accuracy of blocker		+/-0,1 mm

Process period

Single-focus lens	20 s
Bifocal lens	20 s
Progressive lens	20 s
Data input and handling	10 s
Total period for one spectacle lens	60 s

Interfaces

WECO	WECO CL interface, compatible with other WECO-interfaces.
RS232	Serial interface RS232, data protocol according to OMA-Standard

Your benefit by progress

- > Operation is easy to learn
- > The procedure is automatically controlled
- > The spectacle lenses are verified according to tolerance tables

Your benefit from profitability

- > Fewer operating steps
- > Shorter processing periods
- > Less rejects
- > Higher precision
- > High reliability

Subject to changes within the scope of technical development.

For further information on Verifier Pro and Optical Machinery by WECO please call us.

We would be pleased to inform you.

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