



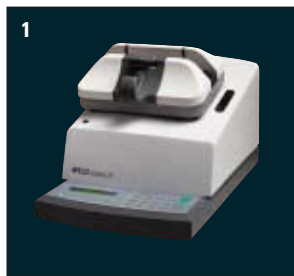
Optical Machinery by WECO
Edge 430



WECO edge 430 – the All-round Talent.

With the WECO Edge 430 WECO engineers have developed a robust machine for ophthalmic opticians who attach great importance to quality, user-friendliness and reliability.

The WECO Edge 430 processes all kinds of lens material in any glass thickness to a fully processed spectacle lens with high-quality finish. The operating sequence in your workshop is sim-



1 Trace II
2 CAD III
3 Verifier



1 Display Edge 430
2 WECO Block-up-System



plified with an internal mould memory in which the spectacle lens moulds for various frames can be deposited. This enables a quick and efficient operational process.

Depending on your specific requirements the WECO Edge 430 can be furnished with a test foil cutter allowing you to produce precise test foils at high speed. In addition to the WECO Edge 450, WECO Edge 430 is the only automatic CNC machine worldwide which offers this function.

In combination with WECO peripheral equipment WECO Edge 430 creates a variable system for the sophisticated ophthalmic optician.

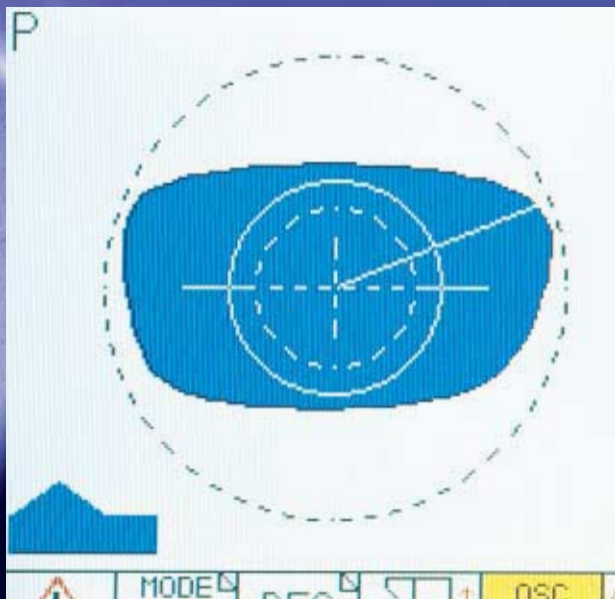
Grinding – and everything that goes with it.

At the beginning of the grinding process the first step in manufacturing spectacles is the task of scanning the spectacle mould. This is exactly defined with the help of the Tracer and then stored for further use via an interface in the mould data memory of the automatic grinding machine. The mould data are thus available for a centring system to perform the centring operation.

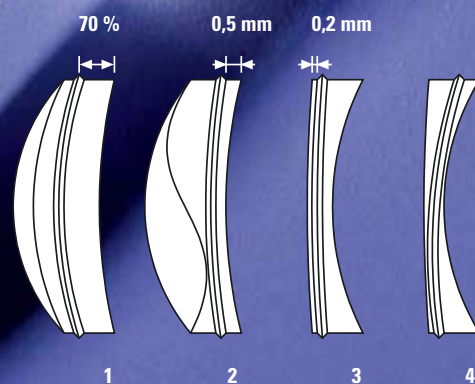
The centring data determined are then transferred to the automatic grinding machine. All information required for the grinding process is now in the data memory of the automatic machine. The form of the spectacle lens to be ground then appears on the colour display.

All further settings are made via the clear, user-friendly and ergonomic keypad on the display.

Before grinding the lens it has to be first positioned in the grinding section. The block attached in the centring system to the glass which is chucked together with the spectacle lens in the shaft axle. The special design of the block and the block retainer in the shaft axle prevent a rotation of the spectacle lens and thus reduce the danger of rejects by axial distortion.



- 1 Percentage curve
- 2 Rear curve
- 3 Front curve
- 4 Auto-facette



Grinding and polishing the facette.

After chucking the spectacle lens in the automatic grinding machine, the grinding process is started. You can simultaneously follow the operating process at any time on the display. After the preliminary grinding process, the facette is applied, whereby the facette can be optionally ground as flat facette, free-running, manual or monitored facette, depending on which facette is best for the lens currently being processed.

In free-wheel operation the course of the facette of the first rotation is saved in the fine surface finish. Each additional rotation as well as all subsequent surface finishing are therefore automatically performed in monitored operation. That drastically enhances the facette quality in the case of thin spectacle lenses and extreme forms.

The manual facette is applied if you desire to shift the facette course directly to individual areas to ensure that the spectacle lens e.g. will fit into an unusually shaped frame.

With the help of the monitored facette the spectacle lenses are measured in the rough-grinding process. Various programs are available: auto-facette, percentage curve and facette course with regard to the front or rear curve of the spectacle lens.

In auto-facette operation a facette curve similar to the frame curve is created. It is applied in the case of frames which are difficult to adapt to the lens curves.

In the program percentage curve the facette curve is ground in the desired ratio taking the margin thicknesses and the lens curves into account. The percentage curve can be used for all spectacle lenses in the standard range.

To grind a sufficient facette in the case of frames with a minimum groove depth, an adjustable miniature facette can be ground.

The diamond grinding discs are applied according to the calculated facette course.

After the facette grinding process the glass is refined with a polish.

Key parameters and technical specifications:

Grinding with optimum results

- > For processing all lens materials
- > For all optical values
- > Polishing
- > Chamfering the ground spectacle lenses (option)

Excellent fit

- > With regard to the facette course, facette surface and shaft position
- > Computer-monitored facette taking sphere, cylinder, prism and decentring into account

Simple operation

- > Convenient and ergonomic user guidance
- > Clear 1:1 presentation on the colour monitor
- > Permanent procedural presentation on the colour monitor
- > Graphic presentation of the facette position
- > Internal data memory for up to 200 glass forms
- > Barcode input (option)

Equipment with diamond disc according to requirements

- > Pure synthetic material processing, including polycarbonate
- > Silicate mineral and synthetic material processing, incl. polycarbonate

Compatible in the WECO System

- > Standard interface to peripheral system units; CL (Current Loop), RS 232, OMA
- > Operation as single machine or in the system
- > Multitasking, parallel operation on all system components

Further accessories and extras:

Test foil cutter

Die WECO Edge 430 features a test foil cutter which can be used to easily cut the test foil to the exact size required. Progressive lenses, aspheric lenses and other lens types are easily centred with maximum precision. The WECO Tracer supplies the exact data required for marking.

Interfaces

The WECO Edge 430 disposes of several interfaces which ensure a flexible configuration of your workshop equipment.

Extras

- > Half Eye Set – to grind extremely flat frame forms
- > Cooling facility – to cool the lenses during the grinding process

Technical specifications:

Width	455 mm
Depth	420 mm
Height	550 mm
Weight	56 kg

Subject to changes within the scope of technical development.

For further information on the Edge 430 and WECO optical machinery please call us.

We would be pleased to inform you.

WECO Optik GmbH
Administration Jägerstraße 58
D-40231 Düsseldorf
Tel +49-211-21 04-105
Fax +49-211-21 04-251
info@weco-instruments.com
www.weco-instruments.com

Distributed by: