

Multi-FLEX-2

SECOND GENERATION UNIVERSAL TOOL POLISHER

Multi-FLEX-2

AUTOMATED RX LENS POLISHING AT ITS BEST

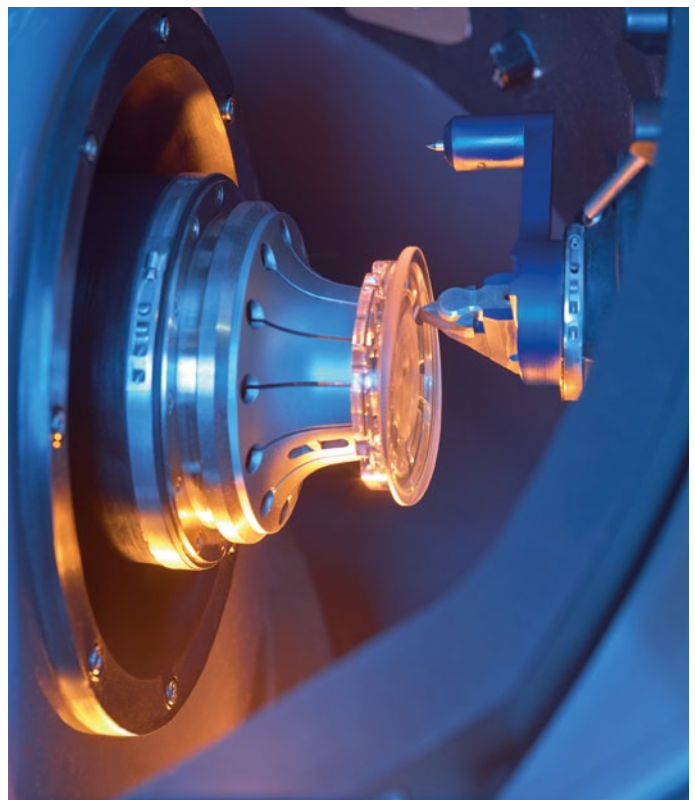
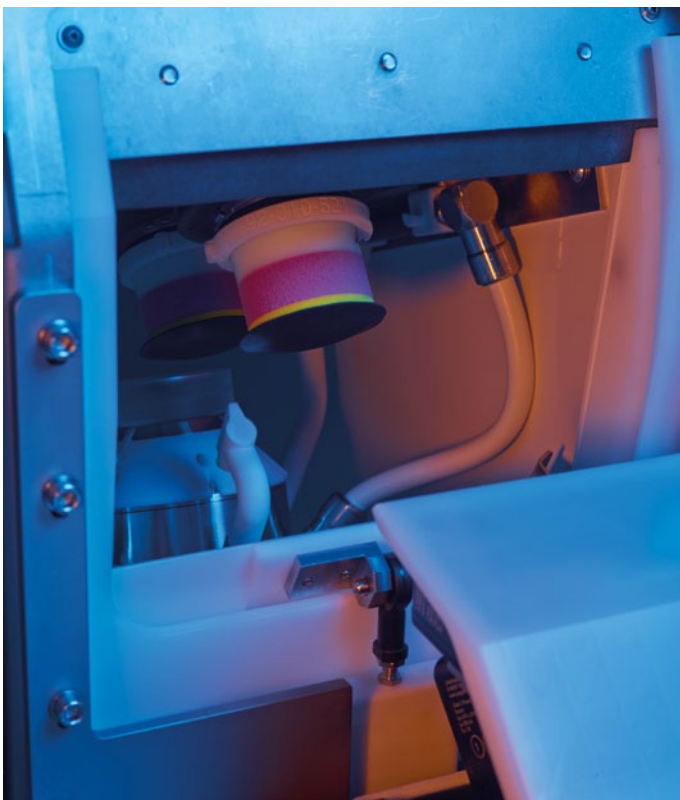
Multi-FLEX-2, the next generation fully-automated polisher, fulfills the demand of high volume Rx lens manufacturing with varied production needs.

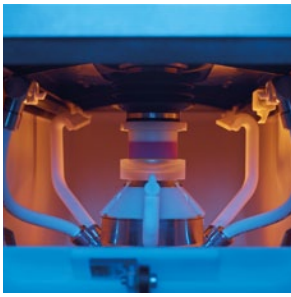
Multi-FLEX-2, the new digital polisher expands on the technology developed for Satisloh's flagship polisher Multi-FLEX, which was the industry's first machine with a universal polishing tool (one tool geometry for all standard lens materials and the majority of Rx ranges). It features a new tool-spindle design, a redesigned tool-reception interface and has a new state-of-the-art machine design.

Multi-FLEX-2, with proven dynamic kinematics, easily adapt to every Rx geometry and diameter without compromising polishing quality.

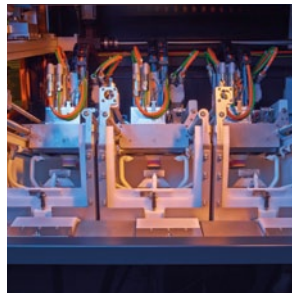
Combine **Multi-FLEX-2** using the Top Speed polishing process with the **VFT-orbit-2** digital lens generator with Performance Package for the fastest and most productive lens-surfacing duo available.

Multi-FLEX-2 and VFT-orbit-2 are perfectly matched for maximum performance and speed





Fixed polish nozzles maintain optimum polish direction and flow



Tool Wear Monitoring - scans each tool for ripping and wear



Large touch panel HMI - perfect overview and easy to operate



Intelligent polishing tools with embedded RFID tag

FEATURES + BENEFITS

- **Simultaneously process three lenses** in three independently controlled polishing chambers for maximum productivity, versatility and redundancy.
- **Dynamic Kinematics** perfectly suited for unique requirements of every Rx, geometry and diameter, delivering a superior level of polishing accuracy and stability.
- **New Evolution-U polishing process** for knife-edge lenses and a better polishing tool performance.
- **Two tool spindles** per chamber means a second process step without changing tools. Using both tool receptions for 1-step polishing increases uptime and labs can use different tools to fit individual requirements.
- **Universal tool technology** optimizes production flow with fewer tool changes and reduces polishing tool inventory and complexity.
- **Patented Universal polishing tool geometry** processes all standard organic lens materials and the majority of Rx working ranges.
- **Hydra-Boost** integrated wash station cleans both lens and block-piece and **uses up to 40% less water** per lens than its predecessor.
- Machine design features back and front doors that fully open for **best accessibility** and **easiest serviceability**.
- Easily schedule **automatic software-controlled cleaning** of polishing chambers for increased parts lifetime and minimized downtime for maintenance.
- **MES-360 Lite** included, provides daily reports using pre-established KPI to track machine utilization, production throughput, and top five errors. Upgrade to full MES-360 system as lab needs grow.
- **Intelligent polishing tools** with embedded RFID tag, loads the correct Dynamic Kinematics for specific job, tool and process, eliminating operator errors. All relevant tool and process information related to lens quality is available for effective troubleshooting of polishing issues and enables proactive process control.

OPTION

- **Tool Wear Monitoring:** The smart system scans polishing tools and detects damage. This is especially important in a fully-automated environment reducing lens breakage and machine downtime while ensuring best polishing results. The system has two laser sensors in front of each working chamber, and is fully customizable to fit the needs of each lab.



Lab 4.0 ready

TECHNICAL SPECIFICATIONS

Productivity	Up to 90+ lenses/hour with Evolution-U process
Working Range	Base curve concave: 0 - -18 dpt. Lens diameter: 48-85mm Cylinder: 0-6 dpt.
Lens Material	All organic lens materials
Dimensions (wxdxh)	1810 x 2231 x 2078 mm 60 x 85 x 82 inches; incl. conveyor and signal lamp
Weight	approx. 1400 kg / 3087 lb
Energy requirements	208V/400V, 50/60 Hz; Multinorm power cord included (UL, CSA, CE)

PROCESSES AND TOOLS

Process & Characteristics	Steps	Throughput	Working range	Tool
STANDARD (pre-installed with Multi-FLEX-2)				
Evolution-U For lenses that will be hard coated Knife-Edge lenses capability	1-Step	≈ 90+ lenses/hour	0 - -18 dpt. (incl. up to cyl 6 dpt.) Ø 48-85 mm	Universal Extended Range FLEX
OPTIONAL SPECIAL (included with Satisloh polishing tools)				
High Luster For high luster finish For lenses that will not be hard coated Knife-Edge lenses capability	2-Step	≈ 90 lenses/hour	0 - -18 dpt. (incl. up to cyl 6 dpt.) Ø 48-85 mm	1. Universal Extended Range FLEX 2. Universal High Luster FLEX
Top Speed* Fastest process on the market	2-Step	≈ 100 lenses/hour	0 - -14 dpt. (incl. up to cyl 6 dpt.) Ø 48-85 mm	1. Universal Speed FLEX 2. Universal Extended Range FLEX

*For lenses smaller than 60 mm or larger than 14 dpt. the process can be done in 1 step with the Universal Extended Range FLEX tool only.

Multi-FLEX-2 comes with **Evolution-U process** pre-installed which covers the complete working range. Additional licenses for special processes are available to add high luster, or increase the polishing speed (process license included with Satisloh polishing tools).

Multi-FLEX polishing machines include a free-of-charge license to use the Evolution-U process and other specialty polishing processes provided by Satisloh under the condition that customer is buying and using original polishing tools from Satisloh. Alternatively, customer may purchase a royalty-bearing license (one-time fee per machine) to use these Satisloh polishing processes with third party tools, which are not infringing Satisloh's IP rights.

All technical data subject to change without notice. Verify details with Satisloh.

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