

MAAT SUB-APERTURE POLISHER



MULTI-AXIS ADAPTIVE TECHNOLOGY

POLISHES TRADITIONAL AND DIGITAL (FREE-FORM) LENSES

EXCEPTIONALLY ACCURATE LENSES

The **Multi-Axis Adaptive Technology** (MAAT) sub-aperture polisher replaces conventional fining and polishing processes to produce traditional and digital (free-form) lenses. MAAT works seamlessly with the Diamond Turning Lathe (DTL) dry-cut, single-point lens generator, resulting in Gerber Coburn's Advanced Lens Processing System (ALPS) that is both expandable and affordable. Using the latest technology, the MAAT polisher produces exceptionally accurate lenses, faster and more economically.

STANDARD FEATURES

- MAAT's **Multi-Axis Technology** precisely positions and orients the lens in five degrees of freedom, while controlling the pressure applied to the lens during the polishing process. The five axes of control are required to maintain the polishing tool perpendicular to the area being polished.
- The **High-Speed Spindle** expedites the lens material removal process. Combining the five degrees of control with the high-speed spindle rotation results in a high quality, uniformly polished lens in less time than conventional fining and polishing methods.
- MAAT is the only sub-aperture polisher made specifically for the DTL generator. MAAT follows the DTL's exact **Tool Path**. With one of three different tool-path programs automatically selected, MAAT delivers a seamless "best fit" lens processing that achieves superior lens quality.
- MAAT's unique design includes an **Automatic Lens Washer/Dryer**, reducing labor and streamlining the lens production process.

- The **Sealed Polishing Chamber** helps keep the laboratory and operator clean.

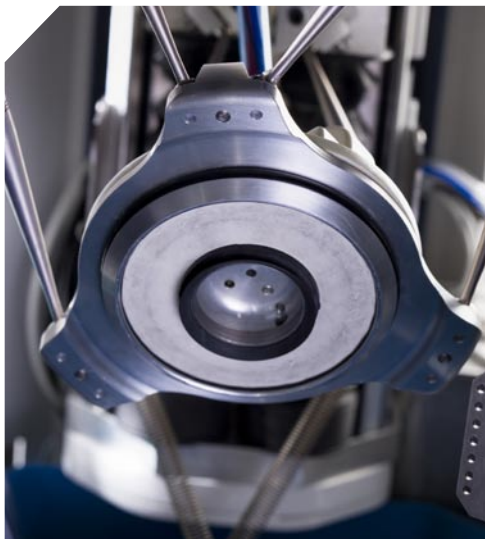
- The full color, adjustable tilt angle **Resistive Touch Screen** allows easy viewing while entering, displaying or changing job information. Intelligent software features large buttons, descriptive labeling and Windows-like programming for ease of navigation and data entry. A bar code reader enables operators to enter job data electronically, reducing input errors.

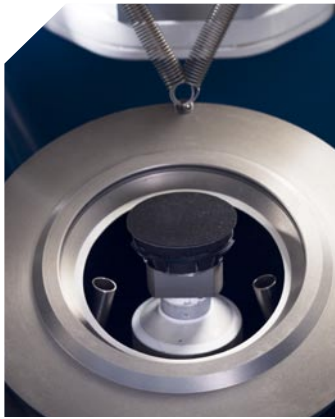
- The **Intelligent Lap Management System** automatically selects, places, removes, and inventories the correct lap required for the lens being processed, reducing operator

error and lens breakage. Only a small number of sub-aperture laps are required, eliminating traditional lap inventory and management.

- **Radio Frequency Identification Technology** measures the amount of usage of each sub-aperture lap. MAAT automatically discards the lap when it has been fully consumed, keeping jobs moving smoothly through the laboratory.

- MAAT is easily upgradeable to **Full Automation**. The bi-directional conveyor can be configured for a single or double automation tray.





HIGH-SPEED SPINDLE



AUTOMATIC LENS WASHER/DRYER



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TECHNICAL INFORMATION

SPECIFICATIONS

POWER	230 VAC +/-10%, 50/60 Hz, single phase, 20 Amps (Requires dedicated circuit)	
AIR REQUIREMENTS	5.86 bar @ 226.5 SLPM (85 psi @ 8 SCFM)	
DIMENSIONS	Manual:	80" w x 41" d x 72" h (+12" d for hoses) 203.2 cm x 104.1 cm x 183 cm (+30.5 cm d for hoses)
	Automated:	83" w x 54" d x 88" h (+12" d for hoses) 210.8 cm x 137.2 cm x 223.5 cm (+30.5 cm d for hoses)
WEIGHT	1,000 – 1,200 lbs/454 – 544 kg	
WATER REQUIREMENT	3.1 bar @ 6 LPM (45 psi @ 1.5 GPM)	
POLISH REQUIREMENT	0.34 – 0.48 bar @ 19 LPM (5 – 7 psi @ 5 GPM)	
CONNECTIONS	LMS (standard)	RS-232
	LDS (free-form)	Ethernet
LENS MATERIALS	Plastic, Polycarbonate, High-Index	
LENS DIAMETER	43 mm – 72 mm	
PROCESSING RANGE	Soft-Tool Lenses	Digital (free-form) Lenses
	Base curve: +3 to -12 Cylinder: 6D Prism: up to 4D (generated)	Specifications are dependent on lens design
BLOCK STYLE	Gerber Coburn Standard Pin and AcuBlock™ LOH	

11/07 Specifications subject to change without notification.



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