

## **MULTI-FLEX**

Multi-FLEX, Satisloh's flagship polisher, is designed for high volume Rx lens manufacturing lines with varied production needs. It offers full automation, and with three independently controlled polishing chambers, can simultaneously process three lenses for highest throughput.

#### **Features and Benefits**

- Universal tool geometry processes all standard organic materials and the majority of current Rx working ranges, optimizing production flow with fewer tool changes while reducing polishing tool inventory and complexity
- Multi-FLEX is the only polisher with Dynamic Kinematics that are unique for every single Rx, geometry and diameter, delivering a new level of polishing accuracy and stability
- Two tool spindles in each chamber allow for:
  - a second process step without tool exchange
  - using different polishing tools to fit individual lab requirements
  - increased uptime when using both tool receptions for 1-step polishing
- A precise gantry loader handles lenses from above, so the automated process is always in clear view and chambers are easily accessible
- Smart loader alignment for easy setup
- Integrated automated lens washing and drying
- Full Remote STEP capability web based troubleshooting with technical staff

### **Intelligent Tools**

Every polishing cap has an embedded RFID tag and Multi-FLEX has an RFID reader. When tools are exchanged, the RFID tag is scanned and correct Dynamic Kinematics are loaded for the particular tool and process, eliminating operator errors. All relevant tool and process information that links lens quality to tool data is available to the machine locally, the MES-360 (Manufacturing Execution System), and the optional Tool Wear Monitoring System. This allows effective troubleshooting of polishing issues and enables proactive process control.

## **OPTION**

### **Tool Wear Monitoring**

The smart system monitors 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 can be fully customized to fit the needs of each lab.





 Productivity
 Up to 100 lenses/hour

 Working Range:
 Base curve concave: 0-14 dpt / extended up to 18 dpt

 Lens diameter: 60-85/ extended down to 48 mm

 Cylinder: 0-6 dpt

**Dimensions (wxdxh)** 

1724 x 2108 x 1995 mm / 68 x 83 x 79 in



## **TORO-FLEX**

## **Features and Benefits**

- Robust, manual dual spindle soft tool polishing system
- Easy operation
- 7 types of flexible polishing tools cover the full working range of Rx production
- Integrated tool storage area with LED indicators for lifetime and tool selection, ensuring appropriate tool selection for high process stability
- Lens washing basin, water spray and air gun for manual lens washing and drying



Productivity	Up to 50 lenses/hour					
Working Range	Base curve concave: 0-14 dpt Cylinder: 0-6 dpt Lens diameter: 48-85 mm	Cylinder: 0-6 dpt				
Dimensions (wxdxh)	695 x 1344 x 1843 mm / 27 x 53 x 73 in					



# **MULTI-FLEX PROCESS OPTIONS**

With three independently-controlled polishing chambers, it can simultaneously process three lenses for highest throughput.

Process	Characteristics	Туре	Throughput
STANDARD			
Premium	Covers full standard range of lenses	1-Step	≈ 85 lenses/hour

OPTIONAL SPECIAL			
Extended Range	Significant wider working range	1-Step	Depends on production mix
High Luster	For high luster polishing in 2 steps	2-Step	≈ 85 lenses/hour
Top Speed	Fastest available polishing process, unsurpassed speed	2-Step	≈ 100 lenses/hour
Hyper Index Booster	Unprecedented best-in-class mapping for hyper index	1-Step	Depends on production mix

• Included with Multi-FLEX machine o Included with Satisloh Polishing tools

While the standard Premium process covers the same full range of lenses like Multi-FLEX's predecessor Duo-FLEX, labs can now pick from various specialty processes. Choose from processes for an even further extended range, high luster, unprecedented mapping accuracy for hyper index lenses, and a whole new level of speed.



Working Range	Materials	Tools	Ø	Process License
0-14 dpt (incl. up to cyl 6 dpt) 60-85 mm	CR39, all HI, PC, Trivex	Universal Premium FLEX XL	Ø 56mm	•
>14-18 dpt (incl. up to cyl 6 dpt) 48-60 mm	CR39, all HI, PC, Trivex	Universal Extended Range FLEX	Ø 48 mm	0
0-18 dpt (incl. up to cyl 6 dpt) 48-85 mm	CR39, all HI, PC, Trivex	Universal Premium FLEX or     Universal Extended Range FLEX	Ø 56 mm Ø 48 mm	0
		2. Universal High Luster FLEX	Ø 56 mm	=
0-14 dpt (incl. up to cyl 6 dpt.)	CR39, all HI, PC, Trivex	1. Universal Speed FLEX	Ø 56 mm	0
60-85 mm		2. Universal Premium FLEX XL	Ø 56 mm	-
0-14 dpt (incl. up to cyl 6 dpt.) 48-85 mm	All HI, but esp. 1.67, 1.71 and 1.74 index	Universal Extended Range FLEX	Ø 48 mm	0

# CONTACT

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