

Industrial Lens Finishing Equipment Guide







The ultimate industrial lens processing

Santinelli International continuously listens and responds to our wholesale lab customers' needs and our innovative technology will always strive to be at the forefront of ever-changing lens and frame designs.

Our industrial lab finishing technologies are extremely accurate, durable, robust and suitable for labs of all sizes. Based on each lab's specific needs, various customized finishing solutions are easily developed for edging, automation, tracing or blocking.





Xtrimer SE-1 Dry Cut Edging Technology

The all-new Xtrimer SE-1 5-Axis Milling Edger System utilizes dry cut lens edging technology, setting a new industry benchmark for high-volume lens processing.

Fixed Tool "V-Layout"

The SE-1's unique, efficient "V" design allows for faster lens-to-tool approach, thereby increasing productivity in an extremely compact footprint. Additionally, this design enables easy tool maintenance.

Independent, Free-Standing Tool Design

With a mechanical interlocking design, the SE-1 incorporates six independent tools which increase processing speed and eliminates the use of a "tool changer".

Astonishing Speed with Uncompromised Quality

Maximized lens and tool rotational speed accelerates cutting time, while maintaining high quality.

Feature-Rich

The SE-1 provides all the features your lab needs including beveling, customized incline beveling, flat edging, 3-D grooving and partial grooving, polishing, safety beveling, partial step beveling, 3-D drilling and Design Cut.

5-Axis Design

The unit's 5-Axis design allows for an array of lens finishes and provides lens design flexibility. Furthermore, it vastly increases one-cut "lens-to-frame fit".

User-Friendly Operation

The high resolution graphics, along with intuitive touch screen design, make the SE-1 extremely easy to operate. The unit's design also facilitates tool maintenance.

Highest Customization of Tiltable Bevel

The highly customizable, high curve tiltable beveling function provides an optimal fit for all sports frames, especially when paired with tracing data from our new high-curve XtremeD LT-980 and LT-1200 tracers.

Space-Saving Design

An astonishing amount of features are built into the SE-1, making it one of the most compact, yet most powerful units available on the market. This streamlined design allows for easy integration into any lab environment.

Simplified Job Operation & Maintenance via Tablet

The iRx Editor supports multiple edgers via Wi-Fi and features a unique "Retouch Function" while the machine is in operation. It even allows the operator to view bevel simulation. This feature can be used for easy software upgrade, as well as remote diagnostics.







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Easy Robotic Integration

The SE-1 is engineered to seamlessly integrate with existing AES-2200 or AES-1000 robotic units.



Nidek Intelligent Conveyor System (NICS)

Incorporating a combination of conveyor belt and stacker systems, the unique robotic configuration handles job tray "traffic" in a highly efficient method. Multiple systems can be integrated in series or parallel tandem configurations, providing the highest volume throughput with the smallest footprint. The possibilities are infinite...





SE-9090 Supra Advanced Industrial Edger

The SE-9090 Supra is a highly advanced, robust "24/7" lens edger for any volume production lab. Featuring proven state-of-the-art technology, the unit is positioned at the core of our robotic hand ling systems for consistent, quality finishing results.

Faster Grinding with Dual Spindle System

The unique Dual Spindle System of the SE-9090 Supra incorporates a program which automatically controls grinding pressure at seven different levels for maximizing on-axis performance.



User-Friendly LCD Touch Panel

The large, 10.4" SVGA color LCD touch panel provides all job processing information at a glance. Bevel profiles and 3-D simulations can be previewed, assuring optimum quality results.

Simultaneous Dual-Side Lens Measurement

The SE-9090 Supra simultaneously measures both front and rear sides of the lens for faster operation before and after roughing.



High Quality, Automatic Polish Safety Beveling

This unit features in-chamber grooving, highly customizable high curve beveling and shelf beveling, safety bevel polish and our renowned *Crystal Cut*TM diamond luster polish.

AES-2200

Opening the new door to the next stage of lab business

The AES-2200 is an automatic lab system, with the combined power of two SE-9090 Supra Edgers. This 24/7 robotic automation system opens the door to a new standard of laboratory business.

High-speed processing

The NICS (NIDEK Intelligent Conveyor System) can operate over 1,600 jobs in just 14 hours*. *when connecting four units of AES-2200

Double arm mechanism

Remarkable double arm mechanism improves lens setting ability dramatically and provides high-speed performance.

Easy setup of full automation

NICS (NIDEK Intelligent Conveyor System) can be run in a closed loop or linked to the lab management software. Complicated server configuration and peripheral equipment are unnecessary. Maximization of laboratory space and unparalleled throughput elevate any lab for greater efficiency.

AES-1000

Combination system of SE-9090 Supra and RHU-1000

Available with the SE-9090 Supra, the AES-1000 system is offered in either a stacker configuration or a conveyor belt configuration.

Patented high base curve lens processing

Easy operation and maintenance

High speed conveyance









Me 1200 Award-Winning Technology

Our flagship ME 1200 Multifunction Lens Edger delivers automatic 3-D drilling, step beveling technology, DESIGN+ advanced features and other high-tech functions - all in a compact footprint. Upon its debut, the Me 1200 was honored with the SILMO d'Or Award recognizing innovation, technology and creativity. It has since become the benchmark for quality in the industry.

Automatic 3-D Drilling

The Me 1200's 3-D drilling function enables the operator to create various hole shapes such as slots, notches, countersunk holes and

jewel holes. The hole data input can be easily set with a stylus pen on the touch screen. The hole shape selection is made by simply choosing one of the pre-loaded illustrated icons.



Design Mode

The Me 1200's features state-of-the-art design functions.



Partial Grooving & Bevel



Design Cut

Step Bevel Processing (PLB-8S & PLB-2R8S only)

Step bevel processing allows for Rx lenses to be easily inserted into sunglass frames which are traditionally difficult to mount due to uneven eyewear profile.



Patented High Base-Curve Lens Processing

Unique front and rear independent grinding function offers a high base curve bevel with flawless results.





Then, the back side of the bevel is edged.



Click Mode Software

for Chemistrie[™] Sunlenses

Santinelli International Lens Edgers are the most popular edgers used by retailers and wholesale labs in the production of Chemistrie™ Sunlenses.

Chemistrie[™] Sunlenses

- Virtually transparent to the frame design, transforms patient's Rx frames into high-end Rx sunglasses
- Advanced alternative to bulky, adjustment prone, clip-on sunglasses
- Now available with reader and 3-D lenses.

Click Mode Software

Our Click Mode Software allows Santinelli edger operators to create customized Chemistrie[™] Sun, Reader and 3-D lenses at the push of a button. Manufacturing these lenses provides a competitive advantage and an additional revenue source for wholesale labs.









Lex 1000

Eyewear fashion has changed radically over the last few years. The Lex 1000 high-standard edging system is designed to keep up with evolving lens technology and frame designs.

Patented High Base-Curve Lens Processing

The Lex 1000 creates the best bevel profile for high curved lenses by processing the front and rear bevel independently.



Advanced Soft Grind Mode

Advanced Soft Grind Mode monitors the grinding pressure and maintains it at an optimal level throughout the entire cycle to eliminate axis shift.

"Whisper Quiet" Operation

The Lex 1000 reduces grinding noise level by using an innovative method of processing. The grinding chamber lid's seal provides a noise barrier which also helps significantly.

Le 1000 Express

Improved Edging Speed

The Le 1000 Express Lens Edger is a high speed version of its predecessor, the Le 1000. This model boasts high accuracy and performance stability at a mid-range price point.











Faster Edging Cycles

The Le 1000 Express edging cycle is approximately 35% faster than its predecessor. Even though the speed has been increased, the end result is a jewel-like finish on the lens edge.

Heavy Duty, Durable Mechanism

The unit's belt-free direct drive with exclusive motor and rotary gear system delivers high-quality lens processing. A newly designed Y-axis direct drive assembly controls the lens size with a specialized servo motor, achieving consistent accuracy.

Grooving and Safety Beveling

A "multi-disk arm" facilitates grooving and safety beveling in a fully automatic fashion. Specially designed wheels provide grooving and safety beveling with pinpoint accuracy. The Le 1000 Express results in a beautifully finished lens every time.

High Precision 3-D Frame Tracer

The Le 1000 Express incorporates our highly accurate, world-class tracer. With its user-friendly design, frame setting position can be easily observed during the tracing process.



XtremeD LT-1200 Confidently Performs Around All Curves

The XtremeD LT-1200 incorporates an advanced state-of-the-art and newly engineered tracing mechanism that operates in a true 3-D precision context with all frames regardless of the degree of curvature.

Automatic Dual 3-D Tracing with Variable Fulcrum Stylus

A variable fulcrum stylus keeps the axis angle perpendicular to the frame at any height and the unique 3-D mechanism digitizes a binocular measure of 1,000 points of reference per eye.



Composite Tracing

Composite tracing measures the FPD/DBL and frame wrap angle, along with the frame shape. Thus, calculating all frame measurements automatically.

LCD Color Touch Screen

The LT-1200 offers a large 10.4 inch color LCD screen for ease of job data input.

Advanced Shape Editor Function

The LT-1200 has a unique shape editing function inclusive of height ("b") and width ("a") dimensional adjustments via a simple +/- touch screen input, or select easy shape modification for finite design when needed.



Multi-function Lab Tracer and Web Tracer

As a lab tracer, grinding condition and layout data can be easily transmitted to any server PC and/or lens edger. The LT-1200 can also be used as a web tracer without the need for a PC.

XtremeD LT-980



Vital Performance for Accurate Lens Fit

Tracing is the essential foundation for well-constructed eyeglasses. The advanced technology of the, XtremeD LT-980 delivers the ultimate fit and finish of eyewear.

Automatic Dual 3-D Tracing with Variable Fulcrum Stylus

A variable fulcrum stylus keeps the axis angle perpendicular to the frame at any height and the unique 3-D mechanism digitizes a binocular measure of 1,000 points of reference per eye.



Multi-function Lab Tracer and Web Tracer

As a lab tracer, the LT-980 can be connected to any server PC and/or lens edger to send full frame traced data. In addition, it can be used as a web tracer with the use of the iRx Satellite.

Built-in Accessory Storage Space

The LT-980 has a convenient built-in storage compartment that is ergonomic for safe-keeping and storing of all additional accessories.



iRx Server



Practical management of job and pattern

3-D fit data communication

Server Software for Lab

The iRx Server along with the use of our equipment creates a simple and complete package of internet remote tracing, using only traditional internet access.

Internet remote tracing system with internet ordering system

Server function for small to medium class labs

Data structure

Connecting Retail Shops to Labs

Internet remote tracing system with iRx Server

Server function

Shape edit function

iRx Satellite



Communication with the Me 1200's or the ME 900's design mode data

Internet Remote Tracing System

Internet Remote Tracing System

Our internet remote tracing is the real solution, without the need for an installed dedicated server. Our tracers and lens edgers by 3D-fit technology provide high quality "first-time fit" lens-to-frame which is crucial to accurate and precise remote tracing.



These configurations are just examples. Please contact us for further information.



Ice mini+ One Step Ahead

The Ice mini+ receives praise for its simple, fast and "on-axis" accurate blocking. It provides the ideal solution for layout calculation and proper lens cut-out and the clamp removes any risk of lens movement when blocking. Drill hole position data can be easily and precisely entered on the magnified screen image, allowing the operator to confirm accuracy at a glance.

Quick and Easy Blocking

Operation is a quick, easy, 3-step process. First, place the marked lens on the table. Second, input all Rx data on the LCD touch panel. Lastly, block with the blocking arm.



User-Friendly LCD Touch Panel

The 8.4" color touch panel offers easy operation. Traced outline and lens blank outline are superimposed in actual size, which allows the operator to determine proper lens cut-out.

Hole Edit Function

The hole coordinate data is easily edited with the stylus pen on the touch screen.





Ice 900

Expanding the Function of Edgers

The Ice 900 boasts high accuracy, easy viewing and swift operation. The unique camera imaging allows for capturing trace and hole coordinates of any rimless lens and storing it in the blocker or transmitting it to any lab management software.

Unique Motor Drive Blocking

The all-new, touch-activated, motorized lens blocking process takes only two seconds, greatly increasing productivity. The Ice 900 applies the appropriate blocking pressure, and protects the lens from damage. In addition, the block adapter is ideally positioned for easy and comfortable block loading.

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Twin Jog Dials

In addition to the intuitive touch panel operation, data can also be entered by using the twin jog dials. The left jog dial moves the cursor for layout and grinding condition selection and the right one is used to enter numerical values and changes.

Tiltable Display

Ergonomically-designed, the screen display can be tilted at four different angles so that operation can be conducted either while sitting or standing.

Data Management

The data management feature allows storing, searching and recalling of traced data. A maximum of 30,000 patterns can be saved. Data can also be saved to a USB flash drive (optional).