



Lens Edging System

Lex



Lex 1000 / Lex Drill

Harmony of Perfection

The birth of a new generation lens edging system that meets the demands of the times

Lex Drill



Lex 1000

Eyewear fashion has changed radically over the last few years. We find a variety of unique designs in eyewear with rimless and highly curved sports frames. Frames with increasingly small size are also in fashion, and special coatings such as super-hydrophobic and anti-reflective have become the norm. There is a real challenge in processing those lenses. Rimless drill mounts with twin holes, rectangular holes, and notches continue to be popular.

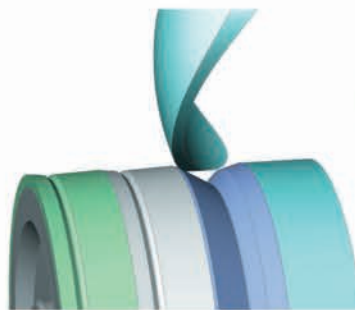
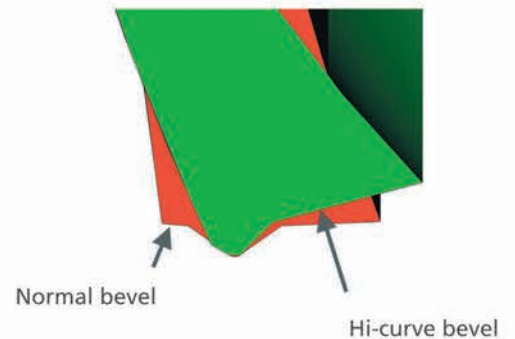
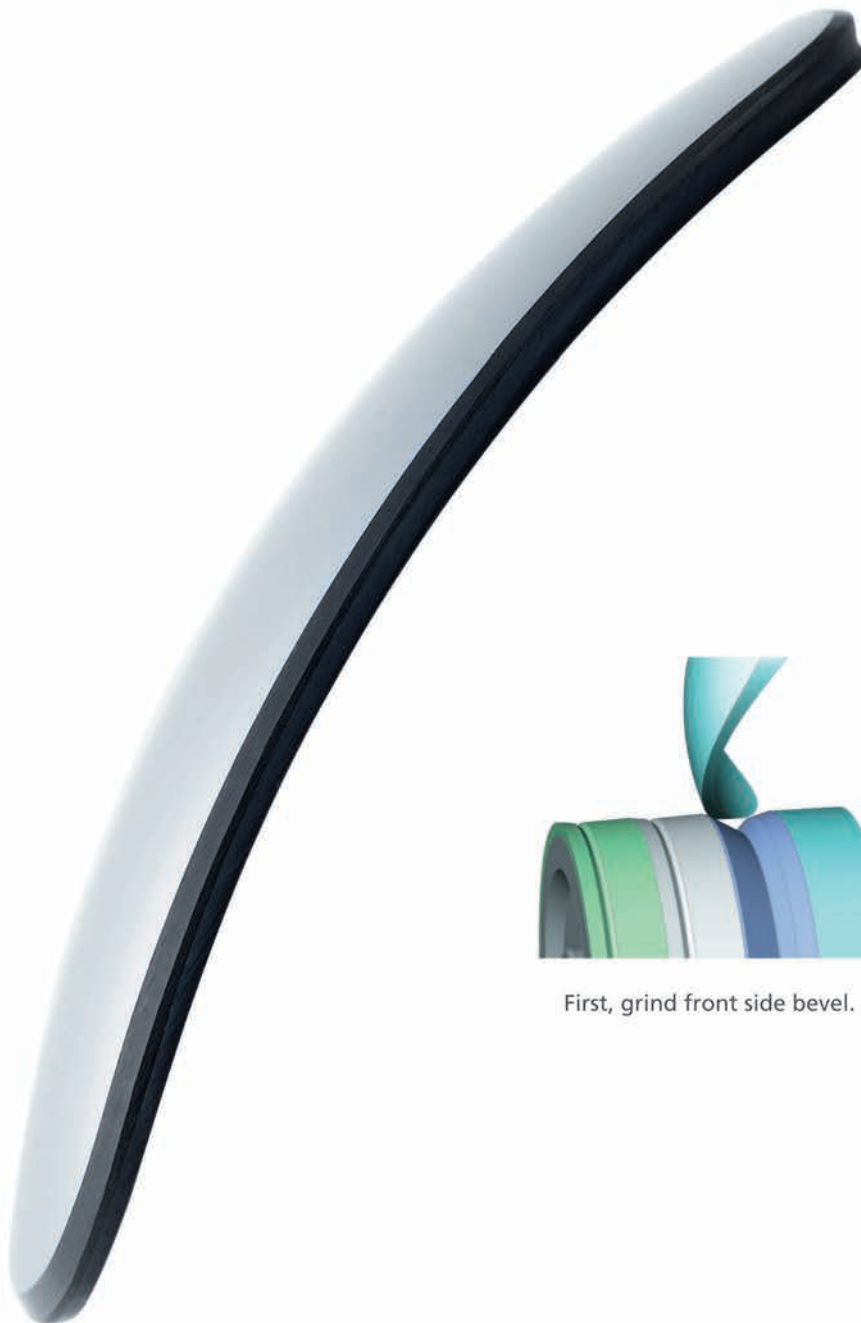
To meet all these demands, Nidek introduces the *Lex*, the high-standard edging system designed to keep up with evolving lens technology and frame styles.

Ice 1000

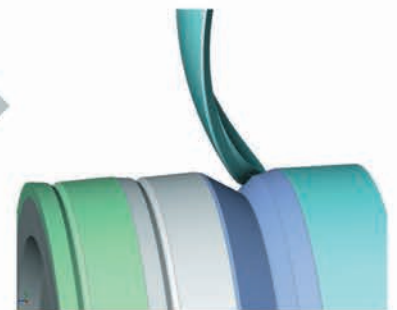


The ultimate beveling cycle that processes highly curved lenses

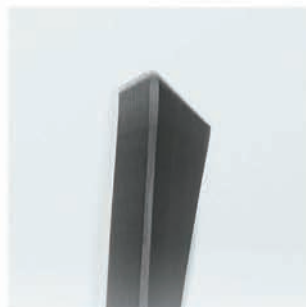
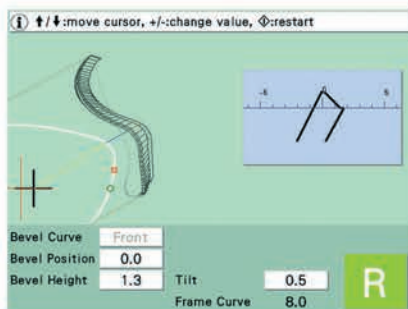
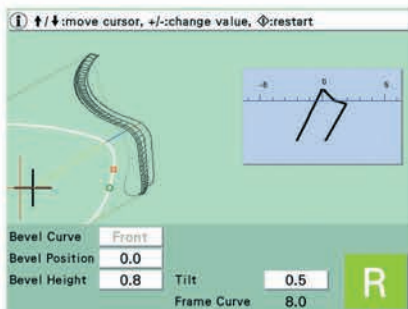
The Lex 1000 creates the best bevel profile for highly curved lenses by processing the front and back bevel independently. The Lex 1000 is capable of creating a customized bevel to suit even the most challenging eyewear. This original process creates a consistent and custom profiled bevel around the circumference of the lens. The Lex 1000 delivers a perfect fit and a precise bevel every time, resulting in a flawless look.



First, grind front side bevel.



Next, grind back side bevel.



All aspects of the bevel can be adjusted, including the position, height and tilt using the easy 3-D bevel simulation. The angle of the bevel is automatically tilted, depending on the thickness of the lens, for a perfect look.



Nano Cup (optional)



Nano Cup



Supporter



Nano Cup Kit

Minimum 15.5 mm "B" dimension can be processed with the new Nano Cup. You can process super hydrophobic lenses without worry about axis shift with the use of the Nano Cup and its Supporter.

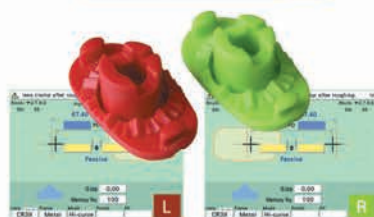
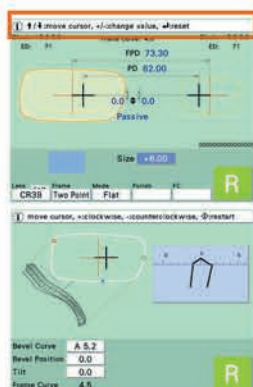
Minimum size in mm (not including safety bevel)

	Nano Cup	Standard P-Cup
Flat edging	ø 20 × 15.5	ø 32 × 19.5
Bevel edging	ø 21 × 16.5	ø 33 × 21.0
Bevel edging(PL-8)	ø 21 × 17.5	ø 33 × 21.0
Hi-curve bevel	ø 27 × 22.5	ø 39 × 26.0



Operation

The Lex 1000 is equipped with a full-color display, providing easy viewing. The display was designed for simplicity and intuitive operation.



Information Bar

Even first-time users can easily operate the Lex 1000 with the assistance of the Information Bar which provides helpful "next-step" information.

3-D Bevel Simulation

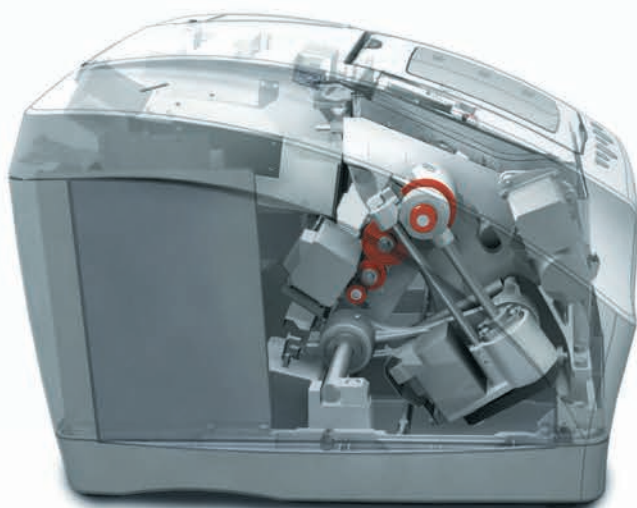
Sophisticated 3-D bevel simulation allows you to check the placement of bevel as if viewing the actual lens from any selected angle.

Color-coded Lens Identification

To aid the lens edging process, the display of the Lex 1000 utilizes a color-coding system adapted from navigational light colors, to identify right and left lenses: green represents the right lens and red represents the left lens. Red and green cups are included. You can avoid processing the wrong lens by following the color-prompted indicator on the display.



Edging performance



■ Direct Drive Lens Rotation

The *Lex 1000* is designed with the most advanced CAE (Computer Aided Engineering) techniques. A direct driven gearing system ensures stable cylindrical axis with every cut. An integrated stabilizer keeps the chucking pressure consistent, yet without harming lens coatings.

■ Grooving

The *Lex 1000* features a specially designed grooving wheel which achieves a superior groove quality with "pin-point" accuracy. A reduced groove wheel diameter, set at the optimal angle, grooves high-base curve lenses flawlessly.



■ Polyurethane Lens Processing

The *Lex 1000* can process polyurethane lenses used for sunglasses.

■ Advanced Soft Grinding Mode

The *Lex 1000* features Advanced Soft Grinding Mode, the most advanced technology for processing coated lenses. This technology monitors the grinding pressure and maintains it at an optimal level throughout the entire cycle to eliminate axis shift.

■ "Whisper Quiet" Operation

The noise level on the *Lex 1000* is extremely low by an innovative method of processing control. The grinding chamber lid seal provides a noise barrier which also helps significantly. The low volume is maintained throughout all edging cycles, so lenses can be processed with "Whisper Quiet" operation.



Utilities

■ Automatic Grinding Chamber Door

The motorized door opens and closes automatically - no need to manually operate the door.

■ Integrated Job Tray

Frame and lens can be conveniently stored in the Lex1000's built-in job tray.

■ USB Memory Port

Saved shapes and patterns can be transferred from a PC to the Lex1000 Blocker. You can then transfer the data back to the Lex1000. Data management is easy and flexible.

■ Water-Saving

When a lens edger is connected to direct water, there is a large amount of water consumed. With the Lex1000 the amount of water used is reduced by 40%*.

*applicable when processing CR39 or high index lenses

■ Built-in Barcode Reader (Optional)

The Lex1000's integrated barcode reader saves lab space and streamlines the lens finishing process.



Color selection

You can choose a side panel color for your Lex1000 edging system to best suit your practice. A beautiful Lavender color (standard) or stylish Silver Mica* color are available.

*option only available in some countries



Lavender (Standard)



Silver Mica (Optional)



Wheel options

Three choices of grinding wheels are available depending upon your needs.

	PL-8	PLB-8	PLB-G
Plastic bevel	○	◎	◎
Hi-curve mode	○	○	×
Plastic flat	◎	◎	◎
Glass	○	×	Bevel only

◎: Normal and Polish finish ○: Normal finish ×: Unable



System configurations



■ LEX V

Combination of The *Lex 1000NT**, The *Lex Drill* and *Ice 1000* Blocker.

*The *Lex 1000NT* is a non-tracer model of the *Lex 1000*.



■ LEX IV

Combination of The *Lex 1000*, The *Lex Drill* and The *ICE mini+*.



■ LEX I

Combination of The *Lex 1000* and *Ce 9*.

The *Lex Drill* may be added to this system at any time.

Also Available:

LEX III with Ice 1000

LEX II with Ice Mini +

High quality drilling with the addition of our Lex Drill

The LexDrill interfaces seamlessly with the Lex1000. This drilling unit processes complex drilling jobs automatically at the touch of a button.



■ Slim Design

The width of the LexDrill is only 145 mm (5.7"). It can fit into a small space of 180 mm (7") wide and 480 mm (19") deep.

■ Quiet Operation

The belt-driven drill minimizes noise during operation for a quiet practice environment.

■ Easy Cleaning

With the LexDrill, lens shavings are collected in the dust bin which is easily emptied when full. (Please follow local regulations for disposal.)





Hole & notch



Slot

■ High Quality Drilling

LexDrill can easily process challenging drilling such as twin holes, rectangular holes, notches, jewel holes and countersunk holes automatically.

■ Simplest Operation

The *LexDrill* works in conjunction with the *Lex1000*. Simply place the lens in the *LexDrill* after edging the lens and start drilling with the press of a button. (*Ice1000* or *ICE mini+* blocker is needed for inputting hole position.)

■ Adjustable Hole Angle

Holes are drilled 90 degrees perpendicular to the front based curve of the lens automatically. Custom angling can be adjusted from 0 - 30 degrees.



Lex Specifications

Model	Lex 1000	Lex 1000NT
Grinding system	Patternless	←
Tracer	Built-in	None
Mode	Beveling (Automatic / Guided), Flat edging, Polishing, Chamfering, Grooving (Automatic / Guided), High base curve beveling (PLB-8, PL-8)	←
Grinding Size	Maximum lens size=ø 85	
Flat edging	Min.ø 32 x 19.5 mm Nano cup: ø 20.0 x 15.5 mm	
Bevel edging	Min.ø 33 x 21 mm Nano cup: ø 21.0 x 16.5 mm (PL-8: ø 21.0 x 17.5 mm)	
Hi-curve bevel edging	Min.ø 39.0 x 26.0 mm Nano cup: ø 27.0 x 22.5 mm	←
Flat chamfering	Min.ø 34.5 x 21.5 mm Nano cup: ø 23.0 x 18.5 mm	
Bevel chamfering	Min.ø 35.5 x 22.5 mm Nano cup: ø 24.0 x 19.5 mm	
Grooving	Same as periphery processing	
Wheel configuration	Type PLB-G, Type PL-8, Type PLB-8	←
Water supply system	Pump Circulation or Direct Connection to Tap Water	←
Power supply	115 V model AC 115 V ±10%, 50 / 60 Hz 230 V model AC 230 V ±10%, 50 / 60 Hz	←
Power consumption	1.5 kVA	←
Dimensions / Weight	528 (W)X 493 (D) X 356 (H) mm / 45 kg 20.79 (W) X 19.41 (D) X 14.02 (H) " / 99.21 lbs	528 (W)X 493 (D) X 356 (H) mm / 39.6 kg 20.79 (W) X 19.41 (D) X 14.02 (H) " / 87.30 lbs
Standard accessories	Pliable cup x10, Double-coated adhesive pad x100, Pliable cup remover, Dressing stick for the finishing wheel, Dressing stick for roughing wheel of glass lens (except for type PLB-8), Compound kit for polishing wheel, Pattern setting unit, Standard frame, Standard pattern, Hex driver (2.5 mm), Drain hose adapter set, Power Cord, Spare Fuse x2, Accessory Case	Pliable cup x10, Double-coated adhesive pad x100, Pliable cup remover, Dressing stick for the finishing wheel, Dressing stick for roughing wheel of glass lens (except for type PLB-8), Compound kit for polishing wheel, Hex driver (2.5 mm), Drain hose adapter set, Power Cord, Spare Fuse x2, Accessory Case
Optional accessories	Nano cup kit, Barcode reader, Circulation pump and tank	←

Model	Lex Drill
Milling function	
Hole diameter	ø 0.8 to 4.0 mm (0.01 increments)
Hole depth	6.0 mm or less
Range of hole milling	ø 32 to 75 mm from lens rotation axis
Direction of hole milling	Automatic tilting / Manual tilting 0° to 30°
Slotted hole width	ø 0.8 to 4.0 mm (0.01 increments)
Slotted hole depth	6 mm or less
Slotted hole length	20 mm or less
Power supply	100-120 / 230 V ±10%, 50 / 60 Hz
Power consumption	90 VA
Dimensions / Weight	145 (W) X 477 (D) X 335 (H) mm / 14 kg 5.71 (W) X 18.78 (D) X 13.19 (H) " / 30.86 lbs
Standard accessories	Drill bit x5, RS-232 cable, Brush, Power cord, Spare fuse x2

*Specifications and design are subject to change without notice for improvement.