PRECISION MOUNTING FOR SMART EYEWEAR

An end-to-end in-store smart eyewear edging and mounting solution, fully integrated into the ES and ES PRO edgers—enabling ECPs to deliver brand-aligned* and high-quality results with confidence.

*Edging and Mounting Quality aligned with Brand Standards: Rayban Meta, Oakley Meta and Nuance Audio Series 1.
Disclaimer: Geometrical constraints related to the frame shape, lens geometry, edging parameters and patient measurements may result in certain jobs being incompatible with this function.

ESSILOR INSTRUMENTS

Smart eyewear is redefining the optical market — bringing together high-value frames (RayBan, Oakley, Nuance) advanced embedded electronics and certain consumer expectations.

This means that lens mounting must protect both the frame’s integrity and the technology (built-in battery, camera, microphone) it carries while delivering quality aesthetics.

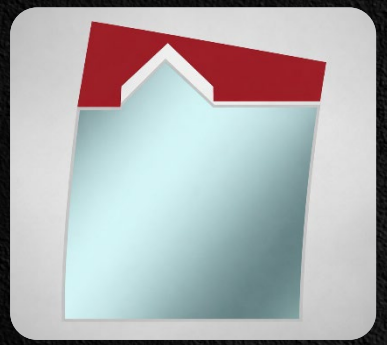
LIMITS OF EXISTING SMART EYEWEAR MOUNTING

Currently, edging and mounting smart eyewear with prescription lenses can be achieved with certain limits.

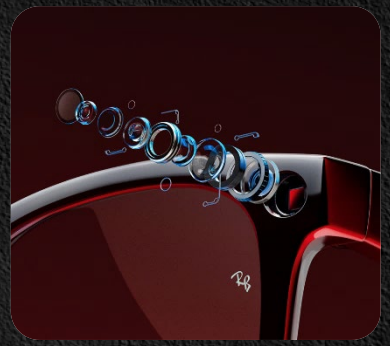
Brand Authentic Programs	Remote Edging	Manual In-Store Edging
Smart Frames are fully-assembled and delivered directly to ECPs, ensuring full brand alignment and quality. **Limitation:** Ability to respond immediately to patient needs	Lenses are edged remotely and shipped to ECPs for simplified mounting. **Limitations:** In-Store Mounting requires know-how Dependency on external processing with longer lead times that reduces in-store agility. Inability to use inventory stock lenses.	Opticians edge lenses directly using iterative parameter adjustments. **Limitations:** Requires high expertise Time-consuming processes Involves trial-and-error Potential lens waste High chance of poor fit or moving lens No guarantee of repeatable quality or brand alignment.

TECHNICAL COMPLEXITY & TRADE-OFFS

Mounting lenses into smart eyewear is inherently complex



Deep bezel designs[1] make proper lens seating harder with traditional edged bevels.



Frame deformation must be avoided to protect embedded electronics and sensor alignment.

Aesthetic expectations are higher for premium products.

In practice, opticians face a trade-off:

- Prioritize fit, risking poor aesthetics.
- Prioritize aesthetics, risking mechanical stress.

Current solutions rely on:

- Manual adjustments
- Trial-and-error iterations
- High Expertise

Results:

- Inconsistent quality,
- Prolonged processing time,
- Hesitation to offer prescription mounting on smart glasses.

1. A proprietary bevel geometry has been developed by Essilor Instruments for smart eyewear frames or deep-bezel frames to enhance fitting performance.

ADDRESSING THE MARKET GAP

Smart Eyewear Program: an automated function integrated into Essilor's ES and ES PRO edging systems.

This program is designed to transform a complex, expert-driven process into an **automated, brand-aligned and reliable workflow**, combining two complementary innovations:

DEEP BEVEL	AUTOMATIC TRAJECTORY
A novel bevel shape[1] designed to: Maintain continuous contact with deep bezels Ensure secure and stable lens seating Reduce mechanical stress on the frame Deliver a clean, flush aesthetic result	**An innovative method[2] that:** Evaluates the ideal aesthetic and frame-safe trajectories, then computes an optimized, brand-aligned path: Preserves frame integrity Achieves the best possible aesthetic outcome

Together, these technologies eliminate the traditional trade-off between fit and aesthetics.

1. A proprietary bevel geometry has been developed by Essilor Instruments for smart eyewear frames or deep-bezel frames to enhance fitting performance.
2. An advanced method for computing the bevel trajectory to match the frame's bezel trajectory, developed by Essilor Instruments.

FROM COMPLEXITY TO AUTOMATED SIMPLICITY

The Smart Eyewear Program is fully integrated into our ES range and ES PRO edgers

One-Click Activation
The ECP selects the smart eyewear program, selects the frame and launches the cycle directly on the interface.

Automatic execution
The system applies the optimal **deep bevel and trajectory** calculation

Guaranteed alignment
The process ensures alignment with brand* requirements

No expertise required
No manual adjustments, no trial-and-error, no test lenses

Transform a complex process into a simple, guided workflow.

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THE DIFFERENCE IT MAKES

The Smart Eyewear Program: Precision Fit, Stress-Free Lenses, Clean Aesthetics

Fit

Loose Fit
Lens-to-frame gap may cause lens movement, rattling, loss, and wearer discomfort.

Seamless Fit
Gap-free fit for improved lens stability, durability, comfort, and optical quality.

Tension

Stressed Lenses
Visual distortion, eyestrain, and reduced quality

Stress-Free Lenses
Clear and sharp vision, optimal comfort.

Aesthetics

Lenses protruding from the frame.

Perfect-fit lenses.

BUSINESS IMPACT

The Smart Eyewear Program transforms how ECPs approach this emerging category

FOR ECPs

Gain full autonomy to edge and mount smart eyewear in-store.

Upgrade their workflow without adding complexity.

Deliver premium-quality results with confidence.

FOR LABs

The only tabletop edgers with a dedicated smart eyewear edging cycle (Ray-Ban Meta, Oakley Meta, Nuance).

Standardize a previously complex process.

FOR THE MARKET

Accelerate adoption of prescription smart eyewear.

Protect high-value frames and embedded technologies.

Reinforce brand alignment* and perceived quality.

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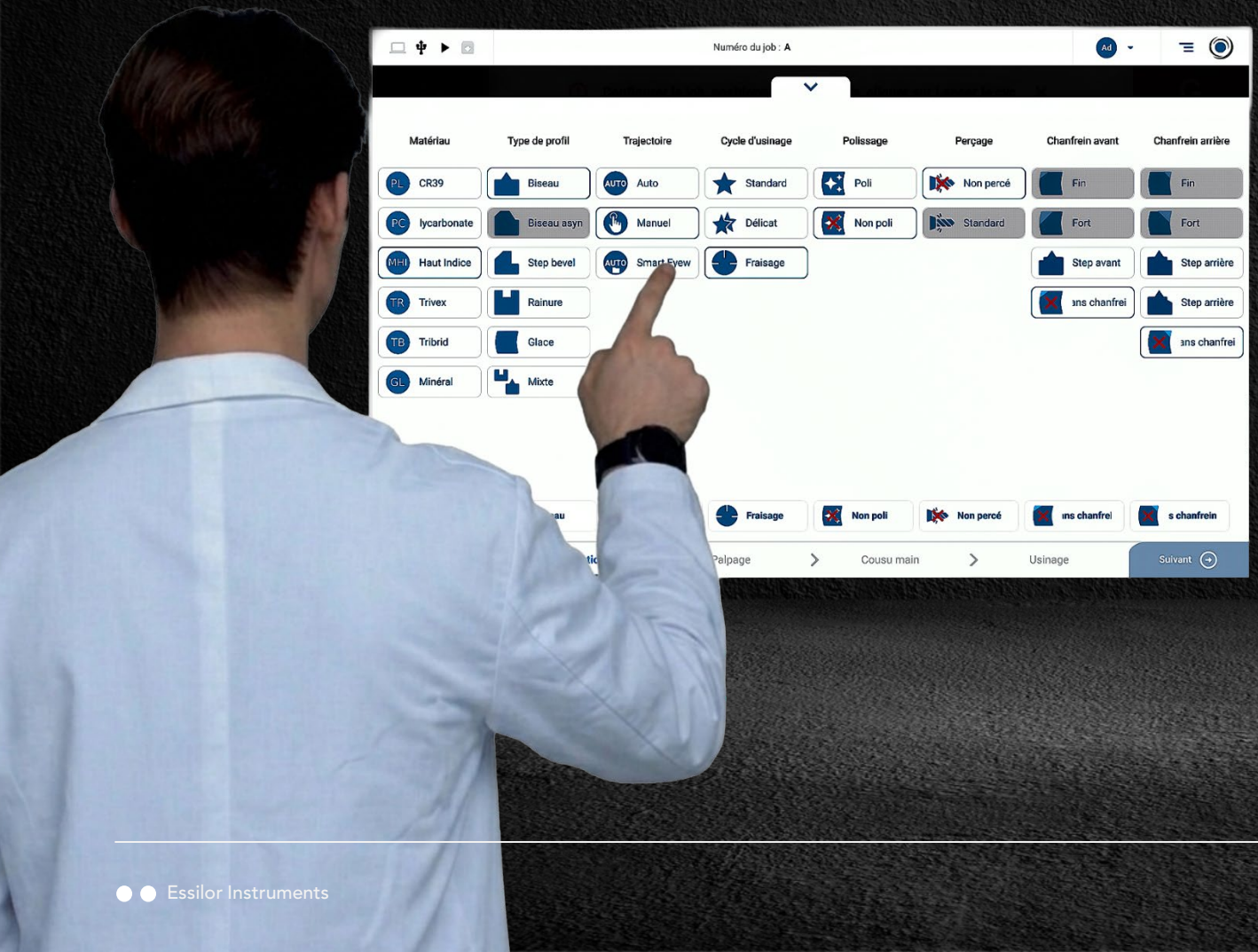
KEY MESSAGE



An intelligent, one-click workflow that enables ECPs to edge and mount smart eyewear in-store—with guaranteed quality, brand alignment, and confidence.

SMART EYEWEAR PROGRAM

Note: As improvements are made, information and data in this product presentation are not contractually binding and may be modified without prior notice. Please check the latest version with your local Essilor Instruments representative.