HIGHER PRECISION MAKES THE DIFFERENCE

PERSONALISED LENSES THANKS TO DYNAMIC 3D MEASUREMENT
For the very first time, Essilor can reveal the unique code of every human eye.

Eyecode is a stunning breakthrough and is at the forefront of innovation. Currently, all lenses that are manufactured assume every person has the same Eye Rotation Centre (ERC), when in fact it can vary by up to 30%. The dynamic 3D eye measurement is based on pinpointing the exact Eye Rotation Centre that is unique to every person. This measurement can for the first time ever be taken by Essilor’s Visioffice measuring system. It delivers a truly tailored eye diagnosis that is quick and easy to determine, and is highly accurate. Provided as x,y,z readings, we call this measurement ‘Eyecode’.

Truly bespoke accuracy and personalisation

Pinpointing a unique Eye Rotation Centre measurement heralds a new era in lens personalisation. Along with your patient’s prescription and your assessment of additional parameters relating to frame fitting and behaviour, you are now able to offer the most advanced, physiologically matched lenses ever made - lenses that are more optically precise* wherever the wearer’s gaze passes through them.

*Versus a lens designed without information relating to the wearer’s ERC.
The most advanced universal measuring system on the market.

The Visioffice measuring system is the first all encompassing 3D measuring system that lets you obtain - with a high level of accuracy - every possible parameter required for today’s lenses. Visioffice® provides the cutting edge technology that will impress your patients and demonstrate your practice professionalism. Today, thanks to the new dynamic 3D eye measurement that is uniquely patented to Essilor (meaning no other lens manufacturer will be able to feature ERC measurements in their lenses), Visioffice® outperforms all other devices on the market.

Growing your business and developing stronger patient relations

Visioffice® measuring system is a constantly evolving technology designed to be future-proof. As new technological advancements are realised, individual units can be quickly and easily upgraded, ensuring its long-term cost-effectiveness and productivity.

Latest upgrades

The latest upgrades to the Visioffice® measuring system ensure that the personalised service you provide to your patients is better than ever before:

Dynamic 3D measurement with eyecode
Uniquely pinpointing a patient’s ERC

Updated screen displays
Easier to navigate and read

New patient demos
Helping you promote modern day lens benefits

New eyecode screensaver
Providing a quick eyecode animation

New filing system for personal data
Including eyecode information

New ordering file
Including Precal drawing
Each eye is unique

Several scientific studies* have declared that the axial length of the eye can vary by up to 30% on a case-by-case basis. This leads to a variance between the ERC position and the corneal apex. Significant differences are even shown for patients who have the same level of ametropia, which highlights exactly how unique each eye is.

These differences of course mean large variations in the distance between the ERC to the spectacle lens rear surface (the ERCd); recent Essilor research shows a variation of +/- 2.5 mm being observed.

The ‘standard’ eye theory

Theoretical distance from ERC to spectacle lens rear (back vertex): 25.5mm

*Theoretical eye (24.00mm, Gullstrand), NOMINAL ERC to apex DISTANCE (13.5m, Kohl. Roth/Augenoptik).  

The eyecode reality

Real distance from ERC to spectacle lens (back vertex): huge variation

R&D data based on 13,845 cases

**Greater accuracy**

The precise 3D measurement of the ERC position results in the perfect lens-to-eye fit, whatever the prescribed ametropia. For any measured eye, whatever the lens product chosen (SV or Varilux) the optical accuracy of the lens design is now five times more precise than with a similar lens created without eyecode. This enhances the core benefit of each lens, meaning it works even better for the wearer.

**The advantages to you**

The ERC measurement is independent from the head posture measurements and is unaffected by convergence and phoria problems. Lens centering is more accurate and for the first time we can relate the pupillary distance (PD) and the fitting height (FH) to the exact position of the ERC, which reduces fitting errors.

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**Without eyecode**

**With eyecode**

**Different gaze directions analysed**

Illustration: Unwanted astigmatism as perceived by the eye

**Single Vision**

0.30D

0.05D

**Varifocal**

2.30D

0.05D

Key lens function does not align 100% with ERC

Key lens function is aligned perfectly for optimal performance
Did you know?

• More than 85% of patients are interested in purchasing lenses developed through additional eye diagnosis and are willing to pay an additional price*.

• The benefits they expect (above and beyond just ‘clear vision’), are ‘instant vision’ and ‘effortless vision’**.

Unequalled vision benefits

Lenses personalised with eyecode exceed the expectations listed left; whatever the age and whatever the ametropia of the wearer. Personalised through the unique dynamic 3D measurement system, they provide total vision harmony. While standard eye exams deliver ‘just clear vision’, with eyecode your patients will experience so much more.

Your unique 3D diagnosis + your prescription

Clear vision + instant vision without effort

Vision becomes immediately comfortable, highly contrasted, dynamic...

No need to make an effort to adjust posture, even when looking through the lens periphery.

Lenses are as comfortable as a custom-made sports shoe.

No more struggling with low-contrast images, even when reading in dimly lit conditions.

Vision is tuned to eyes like the image on a HD TV.

No more struggling with distortion or ‘swimming’ images, even during the most dynamic activities.

Captures dynamic images like a high quality video camera with 3D effects.

* 2009 Neilson online study, 300 interviewees in France and Germany.
** 2009 Ipsos study, focus groups, UK and France.
Competitive advantage

Eyecode has a simple philosophy: *the better we know the eye, the better we design the lens*. This is why it is the foundation of our Visioffice® measuring system - making it the most advanced, most personalised and most accurate measuring system on the market.

### Essilor Visioffice

- Behaviour
- Frame data
- Eye data
- Prescription

### Brand A, B, C...

Other ‘universal’ measuring systems

- Frame data
- Prescription

### Essilor personalisation

<table>
<thead>
<tr>
<th>Dominant eye</th>
<th>Eyecode data</th>
<th>Frame data</th>
<th>Behaviour data</th>
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### Essilor lens product

- VARILUX S 4D
- VARILUX S 2
- VARILUX S DESIGN
- VARILUX PHYSIO 2.0
- VARILUX E 2
- VARILUX E DESIGN
- VARILUX COMFORT NEW EDITION
- SINGLE VISION 360°

### Aberrometers

These do not result in personalisation, just an Rx adjustment
A PERSONALISED AND UNIQUE VISION

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**Breakthrough lens personalisation /** eye + frame + behaviour

**Visioffice exclusivity /** dynamic 3D eye measurement

**Higher optical precision**

**Total lens-to-eye synergy**

**Business benefit /** unequalled accuracy in lens centring

**All premium lenses /** Varilux and Single Vision 360°

*All eyecode lenses can be engraved with the wearer’s initials*

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