#### What Does It Measure?

The Visioline® VL 650 is the ideal instrument to objectively analyze the deeper lines and **macro wrinkles** such as crow's feet. It is a further development of the renowned Quantirides® system.

# **The Measuring Principle**

The measurement is based on **skin replica and oblique lighting**. The replica is illuminated at an angle of 35° and the mountains representing the wrinkles of the skin produce measurable shadows. They are digitized by a **high resolution** camera mounted vertically to the replica and serve as a basis for different arithmetical calculations of **well-known** "**shadow parameters**" for lines and wrinkles (depth [µm], length [mm] and size/area [mm²]).

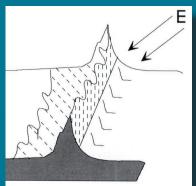
### **Fields of Application**

- This economical system is indispensable in efficacy testing and claim support for cosmetic anti-wrinkle products, especially suitable for the large wrinkles such as "crow's feet" or the nasolabial fold.
- Perfect tool for multicentric studies, as the replicas can be collected over a long time in different places and then be evaluated together.

## **Advantages**

- Convenient connection of hardware by USB.
- Easy to make replicas in all sizes from all different body sites with Silflo<sup>®</sup>, a well-known, white, non-glossy silicone material.
- Multidirectional adjustment possibility for perfect placing of the replica.
- Modern intuitive software.

- Study manager to create settings for depth, length and size categories for micro and macro structure to analyse all replica images of one study together.
- Large live window for perfect placement of the replica against the light with a special matching score and for succeeding replicas with an "object overlay mask" for highest reproducibility & comparability of the results.
- Immediate automatic display of all results in different colours.
- Micro structure characterization with the well-known roughness indices R1-R5 for up to 100 lines arranged in vertical, horizontal or circular direction (in literature: Ra-Rz), and virtual parameters for skin topography volume and unfolded surface in %.
- Impressive "3D-like" animation for illustration.
- Easy & accurate calibration in x/y and z directions with documentation report.
- Safe **export of all data** & images for statistical analysis.











#### **Technical Data**

Power supply: illumination: external, 12 VDC, Camera: USB; Dimensions: 15.3 x 21.7 x 21.7 cm; Measurement area: from 13.5 x 18 mm to 16.5 x 22 mm; Weight: 4 kg; Port: USB; Light source: white LED under 35° (± 0.5°); Shadow length determination in µm; xy-Stage: Resolution: 1µm, Accuracy: 2µm, Range: 10 mm; Camera: 2560 x 1920 Pixel, 5 MPix; Objective: Focal length: 25 mm, Aperture: 1.4 - 16; Computer: Windows® 10/11, performance must meet system requirements, USB 2.0/3.0

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