

**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]).

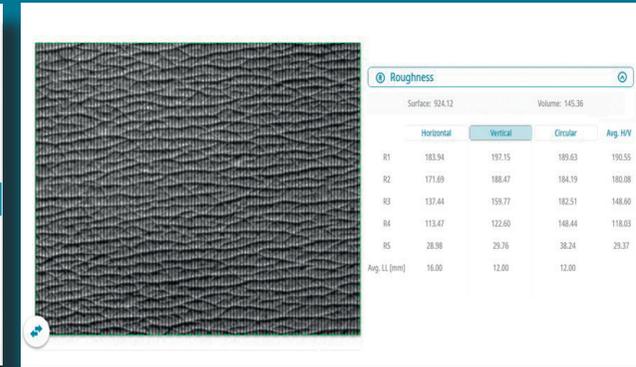
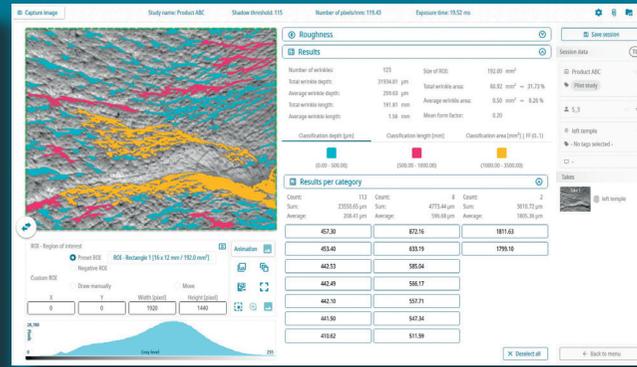
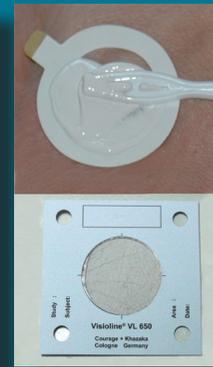
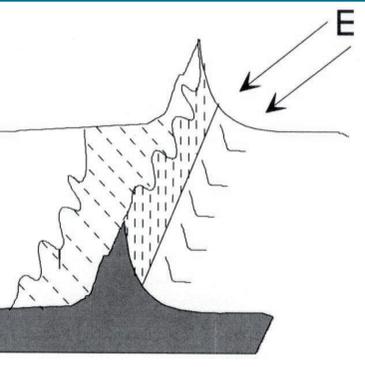
**Fields of Application**

- 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®, 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  
 Measurement principle: optical, reflected light from replica

Technical changes may be made without prior notice.

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