

### What does it measure?

The Visioline® VL650 is the ideal instrument to objectively analyze the deeper lines and macro wrinkles such as crow feet. It is a further development of the renowned Quantirides® system.

### The Measuring Principle

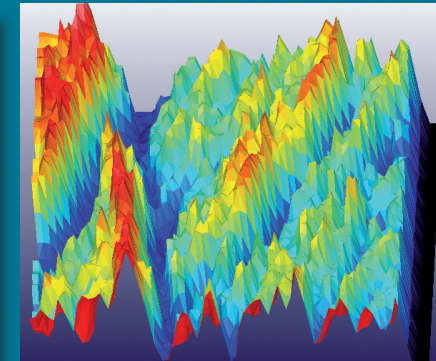
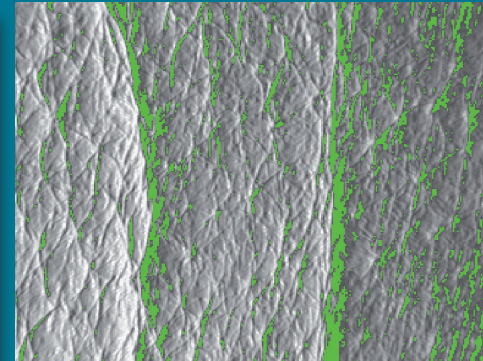
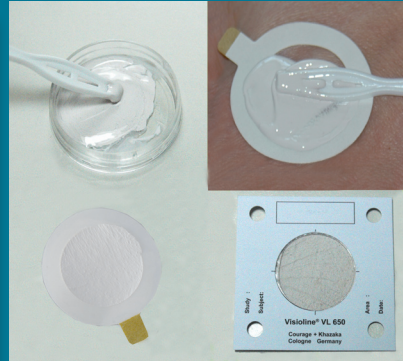
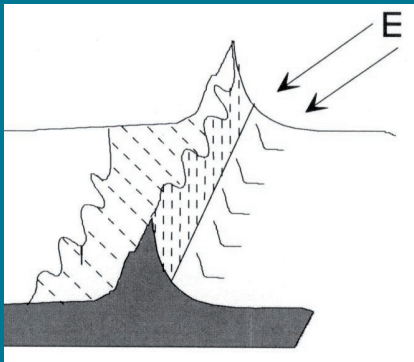
The measurement is based on skin replica and oblique lighting. The replica is illuminated at an angle of 35° and the mountains representing the wrinkles of the skin produce measurable shadows. They are digitalized by a high resolution camera mounted vertically to the replica and serve as a basis for different arithmetical calculations (length, depth and area of the wrinkles in  $\mu\text{m}$ ).

### Fields of Application

- It is indispensable in efficacy testing and claim support for cosmetic and pharmaceutical anti-wrinkle products.
- Interesting studies can be done in cosmetology and dermatology.
- Another application are scar measurements done with the negative image function of the software.

### Advantages

- Easy to make replica in all sizes of all different body sites.
- On the mount the replica can be moved very accurately in x,y direction by screws.
- To analyze the same site before and after treatment perfect placing is possible with the help of a histogram of the shadows and an overlay mask of the previous replica.
- Measurements and calibration can be performed very quickly.
- Perfect tool for multicentric studies, as the replica can be collected over a long time in different places and then be evaluated together.
- 3D and false colours for impressive marketing purposes available.
- All data are automatically stored in a database in the software.



### Technical Data

Power supply: illumination: external, 12VDC, 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° ( $\pm 0.5^\circ$ ) Shadow length determination in  $\mu\text{m}$   
 xy-Stage: resolution: 1 $\mu\text{m}$  accuracy: 2 $\mu\text{m}$  range: 10 mm  
 Camera: 2560 x 1920 Pixel, 5 MegaPixel Objective: Focal length: 25 mm Aperture: 1.4 - 16  
 Computer: Windows® Vista, 7, or 8, performance must meet system requirements, USB 2.0  
 Technical changes may be made without prior notice.

Courage+Khazaka electronic GmbH since 1986  
 Mathias-Brüggen-Str. 91 · 50829 Köln · GERMANY  
 phone +49 (0)221. 9 56 49 90 · fax +49 (0)221. 9 56 49 91  
 info@courage-khazaka.de · www.courage-khazaka.de

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