What Does It Measure?

The MoistureMap MM 100 is a device, featuring a capacitance based sensor comparable to the renowned L'Oreal SkinChip®* . The sensor gives graphic information on the **near surface hydration distribution** and the micro-topography of skin and other tissues (textiles, plants, etc.).

The Measuring Principle

The sensor measures the **penetration of the electromagnetic field**. On the 18.0 x 12.8 mm silicon chip of the sensor, over 90,000 capacitors are located. Conductive material e.g. water will reflect the signal making the resulting pixel darker while non-conductive material will make the signal go farther inside and the resulting pixel will be lighter on a scale of 255 grey levels. Rather than absolute moisture figures, the MoistureMap indicates the distribution of hydration on the skin surface. With a special image analysis software the image can be evaluated in different ways.

Fields of Application

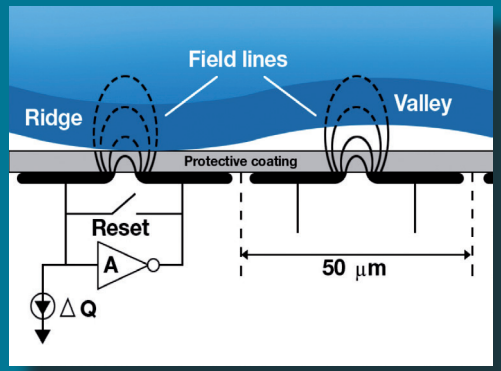
Wherever moisture distribution plays a role, the MoistureMap MM 100 is an ideal imaging addition to the purely quantitative measurements.

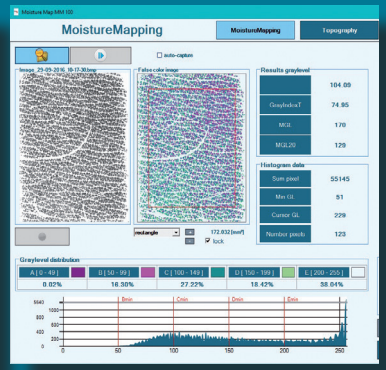
- **Efficacy testing** of cosmetics & pharmaceuticals & surfactants
- Sun damage and **illustration** of skin lesions and scars.
- To map the **hair moisture level**

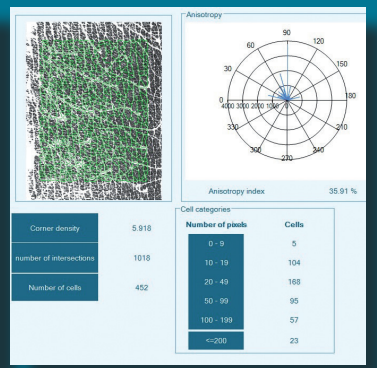
Advantages

- Perfect **addition to the quantitative measurement**, as it shows the distribution of the water on the skin surface.
- Easy and quick to handle
- **Live stream** visible in the software
- Captured image in standard jpg-file
- **Video** possible (.avi)
- Spring loaded sensor
- **Automatic saving** of the images under study name
- Optionally **footswitch** to trigger measurement
- **In-vivo** skin measurement and also **in-vitro** application can be performed.
- **Evenness** of the hydration is displayed in 5 different colours and a histogram.
- Additionally **topographic measurements** (profile, corner density, anisotropy index) give interesting aging parameters.
- **Easy calibration** possibility for the user
- All results are saved in an Excel®-file
- Up to six images together with their complete results can be **compared** in one overview.
- The only instrument working side by side with the established **Corneometer® and Tewameter®**.

**The MoistureMap MM 100 is licenced worldwide under the L'Oréal patent for the Skin Chip® (EP 1 438 922 B1). A variety of articles on the measurement principle of the Skin Chip® (same as MoistureMap) has been published.*







Technical Data

Device: Dimensions: 13 x 14.6 x 5 cm, Weight: approx. 1.5 kg, Power supply: external 100-240 VAC, 47-63 Hz, DC 12V/4A, Port: USB 2.0, type B connector
Probe: Dimensions: length: 16.6 cm, measurement head: 4.3 x 3 cm, Weight: approx. 90 g, Active measurement area: 18,0 x 12.8 mm, Sensor size: 256 x 360 pixel, Sensor resolution: 508 DPI 8Bit/pixel, Measurement principle: relative permittivity; MoistureMap in-vitro Adapter: Dimensions: 23 cm (H) x 8 cm x 8 cm, Weight: 220 g
Technical changes may be made without prior notice.

Courage+Khazaka electronic GmbH since 1986
Mathias-Brüggen-Str. 91 · 50829 Köln · GERMANY
phone +49 221 95 64 99 0 · fax +49 221 95 64 99 1
info@courage-khazaka.de · www.courage-khazaka.de

2020-10