

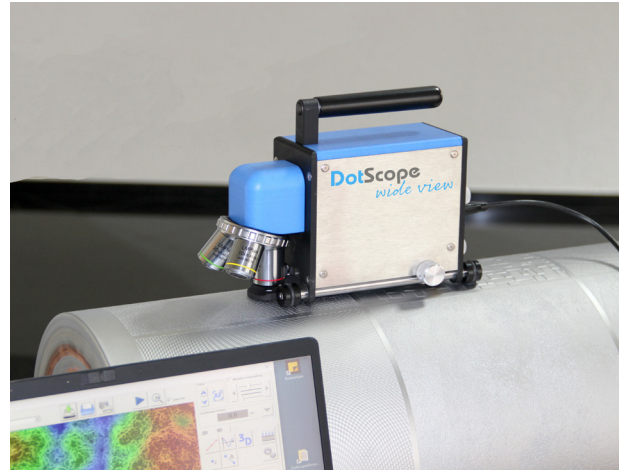
DOTSCOPE WIDE VIEW

PRODUCT DESCRIPTION

The Dotscope wide view is the solution for analysing embossing rollers and coarse coating rollers. A high level of user-friendliness makes it possible to perform many measurements on rollers every-day.

Benefits offered by **DotScope wide view**:

- Lightweight, portable 3D microscope.
- Intuitive to use software.
- Simple and accurate cylinder management.
- Optimisation of processes.
- Perfect data preparation.
- Automatic 3D measurement.
- Automatic and manual 2D measurement.
- Typical measuring time 3D measurement: 15 - 20s.
- One software for all applications (embossing, anilox, gravure, flexo, etc.).
- Special screens (trihelical, SteppedHex, GTT, etc.).
- Cylinder database.
- Comparison report.
- Dot percentage measurement.
- Replica tape analysis (Press-O-Film®).
- Calibration wizard.
- Lens turret: easy lens change, protection against dust ingress.
- Fatigue-free work due to transport handle.
- Objectives: 5x NA0.15, 10xNA0.30, 20xNA0.40, plan achromat, infinity optics, high resolution, unique in this price range.
- Cylinder diameter from 60mm.
- Focusing button on the camera: fast and precise focusing of the object.
- Control buttons on the device: quick and convenient work.
- xy adjustment.
- Software licence: one-time purchase, software maintenance for one year included, afterwards optional.
- Weight with 3 lenses, without cable: 2.9 kg.
- Scope of delivery: DotScope wide view with 3 lenses, software on USB stick, dongle, USB cable, carrying case.



SOPRIN
solutions for the printing industry

DOTSCOPE WIDE VIEW

PROPERTIES

Larger field of view

This 3D measuring microscope is equipped with a special feature that opens up new possibilities for manufacturers of rollers and cylinders as well as users of embossing rollers. The DotScope wide view with a larger field of view of up to 3290 x 2460 μm and a diagonal of 4100 μm enables the measurement of coarser structures. It is the ideal tool for measuring embossing rollers or coarse coating rollers and documenting their quality. Screens from 6 l/cm can be analysed.

Fast scan

Chrome rollers are typically scanned at 20 $\mu\text{m}/\text{s}$ when using the 10x lens. With the 5x lens, structures can be scanned at up to 100 $\mu\text{m}/\text{s}$. I.e. a 1000 μm high structure is captured in 10 seconds.

Control buttons and focus knob on the DotScope wide view

The DotScope has control buttons and a knob to focus directly on the device. With the focus knob you can adjust the focus very quickly and precisely. The control buttons are used to control functions, such as starting and saving a measurement, displaying the live image, and re-setting the stepper motor position indicator. Advantageous when a large number of measurements have to be carried out or when a depth measurement has to be determined very quickly. This allows the software to be operated remotely, if you can stay on the device.

Integrated xy-adjustment and lens turret

These two features are essential in the embossing area. With the xy adjustment and a 5x objective, a specific detail of the roller is approached. Afterwards, the objective turret can be used to change to the 10x or 20x objective without losing the measuring position and further analyses can be carried out in the form of a 3D scan or a simple depth measurement.

Mobility at the highest level

The DotScope wide view is compact, lightweight and robust, and can be transported together with a notebook with one hand to the printing cylinder. Since the DotScope only requires a USB connection, a high degree of mobility is achieved. The low power consumption in combination with a notebook easily allows a multi-hour network-independent use.

DOTSCOPE WIDE VIEW

PROPERTIES

Intuitive to use software

The associated software has a modern design and can be operated by anyone in a short time, even without training, making it ideal for production use. Only one software is needed for all applications such as halftone, gravure, flexo and embossing. Perfect data preparation includes one-click saving of a measurement, report creation in different languages and layouts, and a database export.

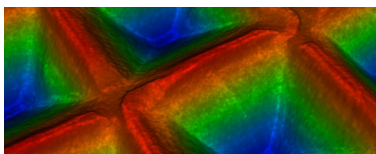
TECHNICAL DATA

Specification:

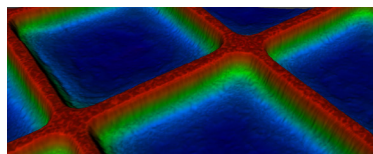
- Camera sensor resolution: 1280 x 1024 pixels
- Roll diameter: From 60 mm to flat
- Maximum vertical scan range: 3000 μm (Other optics, measuring field sizes and scanning ranges on request)
- Weight: 2,9 kg

Lens	Max. measuring field	Min. optical resolution	Screen range
5x	3290 x 2460 μm^2	2,57 μm / pixel	6 - 25 l/cm
10x	1645 x 1230 μm^2	1,28 μm / pixel	12 - 50 l/cm
20x	822 x 615 μm^2	0,64 μm / pixel	24 - 80 l/cm

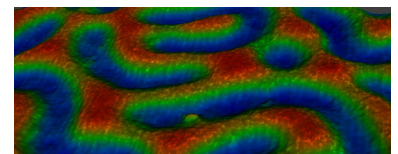
APPLICATION EXAMPLES



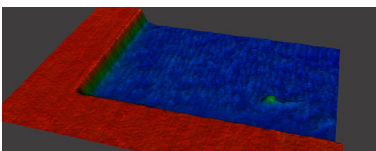
Coating roller 14 l/cm, 10x lens



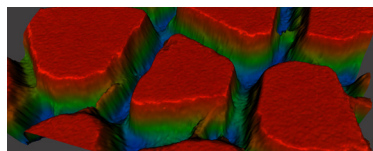
Etched roller 14 l/cm, 10x lens



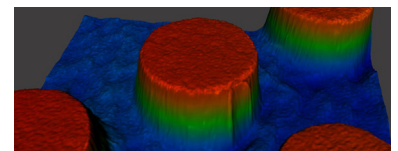
Embossing roll



Calibration engraving for laser



Embossing roll



Embossing roll