

Motorized Measuring Microscopes

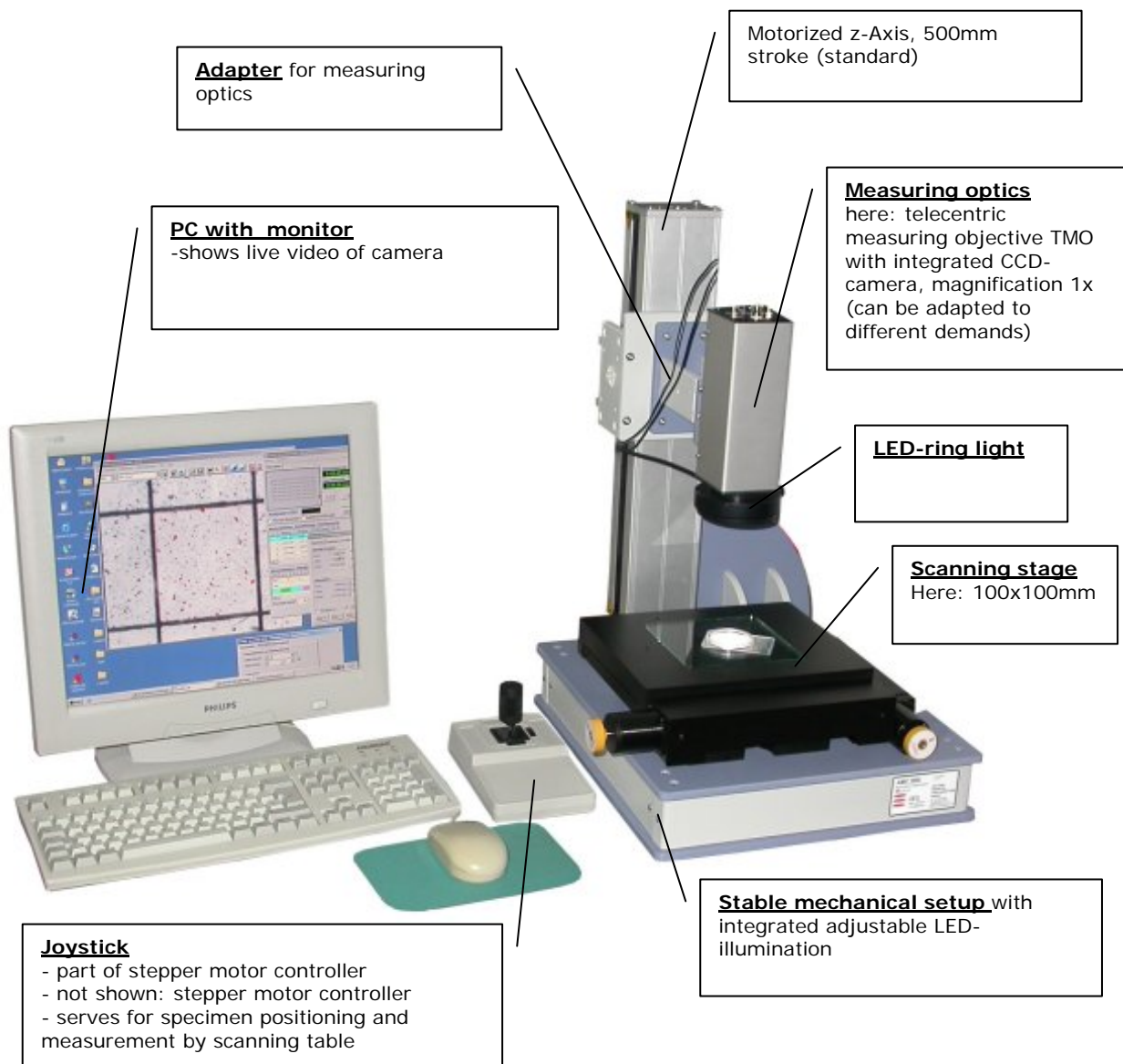
Standard and special solutions

Measurement of large objects by x/y-stage

Automatic scanning of outside contour

Measuring data as DXF-Files

Measuring field up to 1m x 1m



The measuring microscopes were adapted to the special demands in respect to measuring optics, illumination, scanning stage and measuring software. Special solutions are possible on the basis of the standard systems.

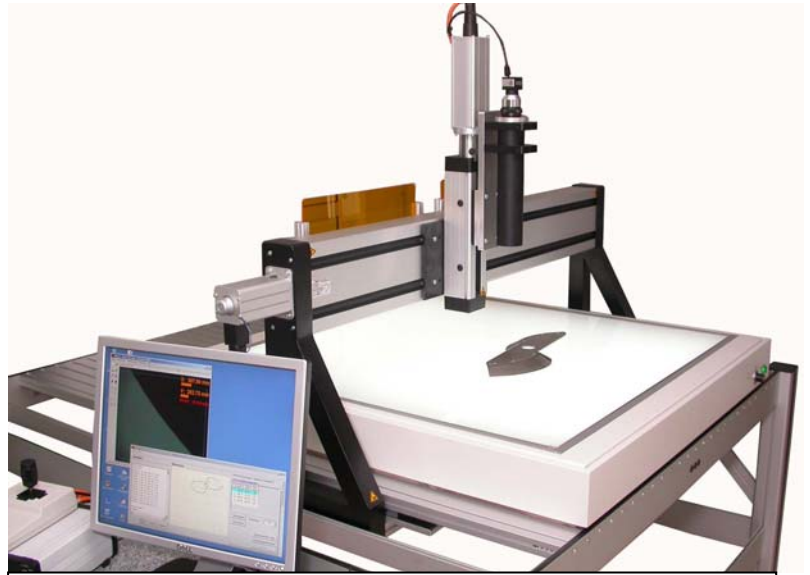
1. Basic setup and general parts

1.1. Microscope or telecentric measuring optics, mounted on stand with motorized z-axis

There are different types of microscopes, optics and illumination types available. The type is always selected according specimen type. The criteria are the necessary magnification and the illumination type.

1.2. Scanning stage*

The scanning table serves for the positioning of the specimen (or the measuring optics, if a gantry setup is used) and can be adapted according the specimen size. There are tables with transmitted light option available. In connection with the software MAGEO the table serves for the measurement of large distances. Therefore the table has to have a high positioning accuracy.



Optical measuring machine with measuring field of 1mx1m as gantry setup, telecentric measuring objective

1.3. Stepper Motor Controller*

The controller has 3 axis (x/y for the scanning stage and z for the focus). For manual control of the stages a joystick is provided.

1.4. Image processing with camera, PC, monitor

Usually an USB 2.0 camera is used. Numerous types with different resolutions are available. 1,3 Megapixel is the standard.

1.5. Software*

The software controls the image processing system and the motor controller. The software has standard measuring functions, special measuring functions can be developed on inquiry.



Measuring microscope with bright field illumination and large magnification for use in micro technology

2. Technical Parameter

<p>Meas. Field: (100 x 100)mm* to (1 x 1)m* Magnification: 1x-100x (only measuring objective)* Optics: according measuring task Illumination: LED-Ringlight* or any others</p> <p>Accuracy** - measurement by stage: 10µm -100 - in the image field of the optics: 1 µm - 10µm</p>	<p>Software The image processing system provides live video representation of the camera, coordinates can be stored and automatically positioned. Measurements can be performed using the x/y-stage or inside the imaging field of the optics. Numerous standard measuring functions are available. The outside contour of objects can be automatically scanned and exported as DXF-File.</p>
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*Die Ausstattung wird an die jeweiligen Anforderungen angepasst

**abhängig von Messfeld und Hardware