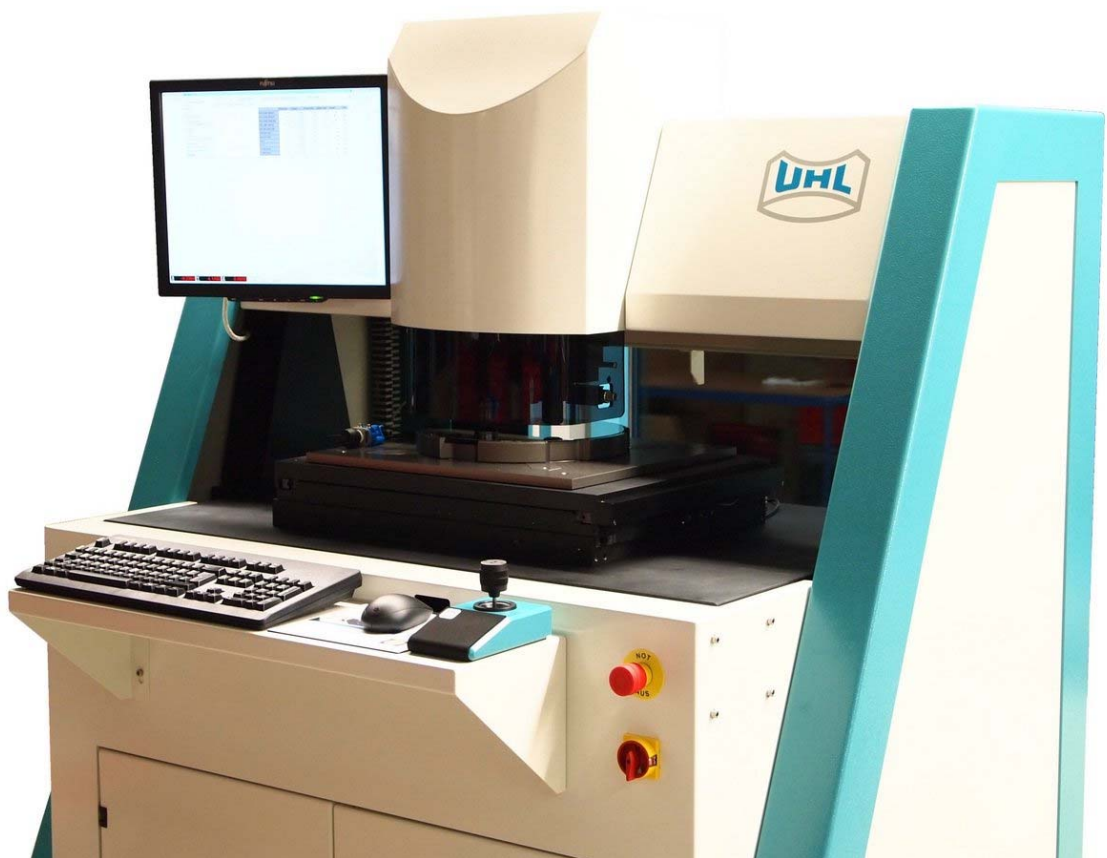


Optical Measuring System UHL MS5



Revision: 02

On the basis of a modular concept the optical measuring system MS5 provides the opportunity to solve different measuring tasks.



Made-To-Measure Metrology

Due to its modular basic concept configuration of MS5 can be exactly attuned to customer's application. Mere incident light application, e.g. topographic measurement or measuring of semiconductor parts do not require transmitted light and open-frame measuring stages. In such cases our cross stage GT9 in closed frame design is applied. Because of its high straightness/flatness and a measuring range of 350x350 mm this measuring stage is suitable for measurements of 12" wafers - also with two sensors. The open frame stage KT9 (measuring range 420x300 mm) is used for classical optical measurements. The x/y stage can be equipped with wear-free and low-vibration linear motors.

The sturdy high-precision Z-axis PT8 (movement range 200 mm) offers enough mounting surface for various microscopes and sensors. Our production line ranges from classical incident light microscopes with motorized turret to zoom microscopes and telecentric measuring tubes. Furthermore there are different topographic sensors like laser triangulation, chromatic white-light sensors or white-light interferometers available.

The portal design and the active anti-vibration system ensures the long time precision and accuracy. Also the measuring software can be chosen according to the application. The easy-to-learn and user-friendly software OMS is used for inspection of single parts and specimen in laboratories and workshops, IMS for measuring of diverse characteristics in great quantities. Moreover we can quote adaption of QC5000 software (Metronics) which provides entire 3D functionality as well as touch-probe management. Therewith the MS5 becomes a adequate 3D-coordinate-measuring machine.

In the consequence of its multifarious expansion stages the MS5 provides a solution for almost every measuring task in the field of optical measuring. You will give us a description of your application and we are going to tailor the system according to your requirements. You are only bound to pay what you really need - that is **made-to-measure metrology**.

Technical data:

General:

Basic device: precision granite on steel pipe frame, completely cased

Dimensions: see drawing

Weight: approx.. 500 kg (without desk)

Working temperature: $20 \pm 5^\circ \text{C}$

Power supply: 230 VAC, 50

Measuring axes:

Measuring range XY : KT9: 420 x 300 mm
GT9: 350 x 350 mm

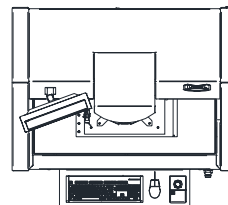
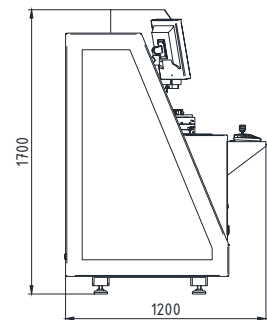
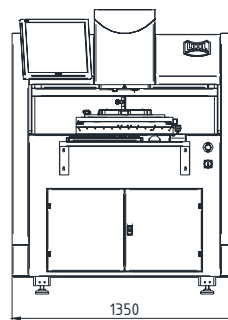
Stage surface: KT9: 580 x 460 mm
GT9: 460 x 460 mm

Workpiece weight: KT9: 10 kg
GT9: 25 kg

Measuring range Z : 200 mm

Resolution: 0,1 μm

Measuring system: opto-electronic linear measuring scale



Optic:

Magnification: 50x bis 5000x

Illumination: transmitted and coaxial incident light, ringlight, quadrant ring light, oblique incident light

Software:

OMS: easy-to-learn and userfriendly
2D measuring
software for random tests and initial
sample inspection

IMS: fully-automated and highly integrable
measuring software for
serial measurements

QC5000: complete 3D measuring software

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