Authorized representative: Willrich Precision
Ph: 866-945-5742
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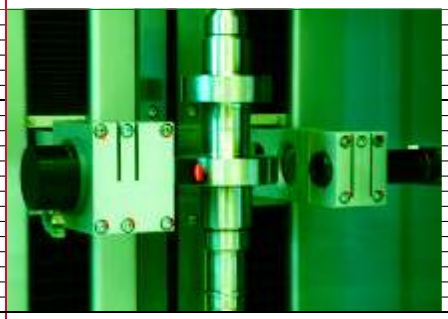
HELIO - SCOPE | OPTICAL MEASURING SYSTEM



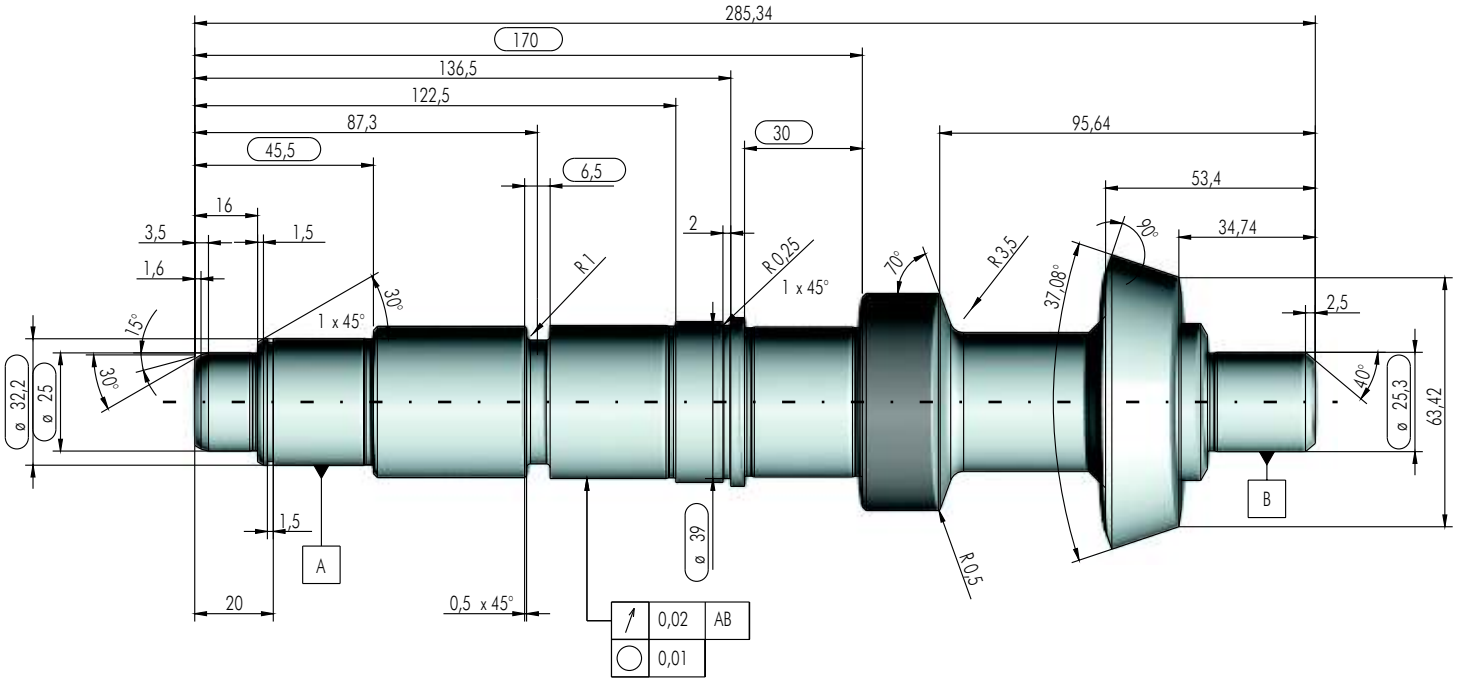
Mahr

EXACTLY

HELIO - SCOPE

Flexible optical measuring system for the measuring of round and round processed parts. Static and dynamic measurements are measured with highest precision within seconds.

HELIO - SCOPE measuring systems are used worldwide in the production for quality assurance. Reliable measuring results without influence of the operator guarantee the safety of the production process.



HELIO - SCOPE optical measuring system . . .

Allows fast and precise measurements on turned parts, camshafts, round plastic parts and much more.

Our over 30 years experience in the field of measurements on round parts was integrated in the measuring software HELIO Argus and allows a fast and flexible generating of quality control plans.

The results can be used for SPC analysis for the assurance of the production process.

Measuring with up-to-date technology

Programming -

coherent and user-friendly

The user-friendly software is developed with the latest ergonomic aspects. All important functions can be operated directly and allow a safe operating of the HELIO - SCOPE within short time.

After clamping of the workpiece its geometry is scanned and displayed at the screen.

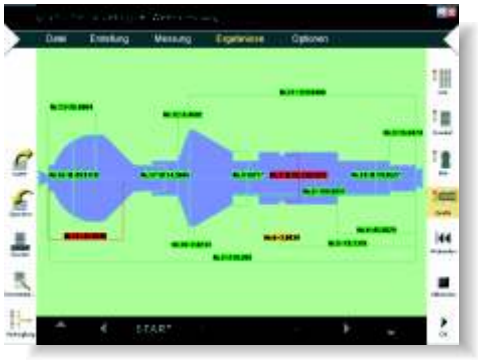
Afterwards the characteristics to be measured are fixed and the nominal values and the tolerances are inputted. With this a quality control plan is created within short time and can be stored in the quality control plan management.

Procedure of measurement

The quality control plan can be loaded from the management. After pressing the start button the workpiece is measured within seconds and the results are displayed at the screen. The measuring results can be stored or printed out.

The measuring printout can be generated free and be adapted easily to customer specific standards.

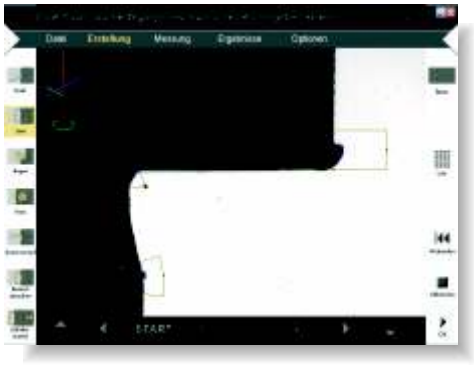
Definition of the measuring areas for measurements of angles, distances and radii



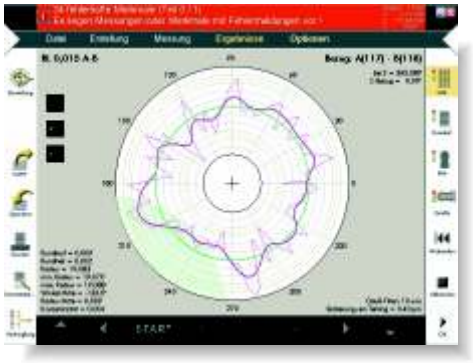
Graphic view with measuring values

Data input for the measurement report

Storing of measuring values in Q-DAS



Visual inspection of geometry



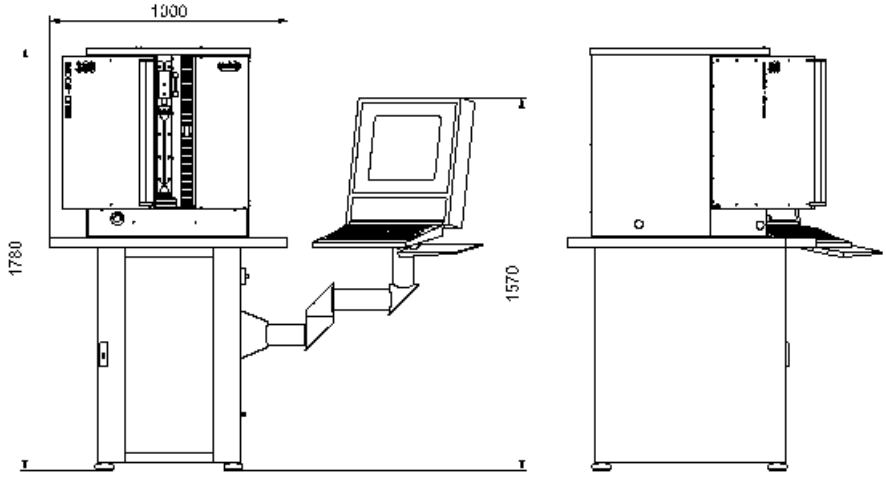
View of a roundness measurement with extraction of interrupts

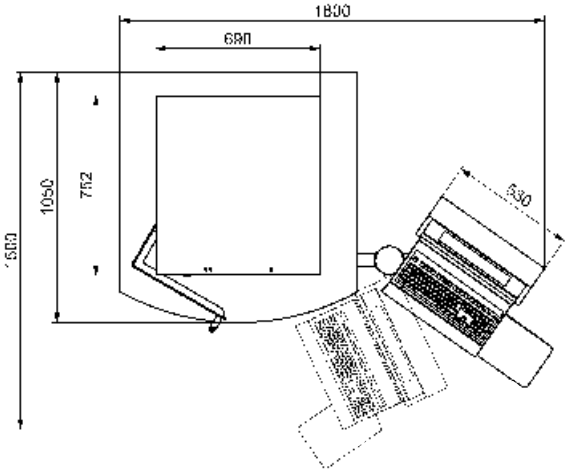
Bar graph with nominal, actual values and tolerances free to generate

Temperature compensation optionally available

Dimensions

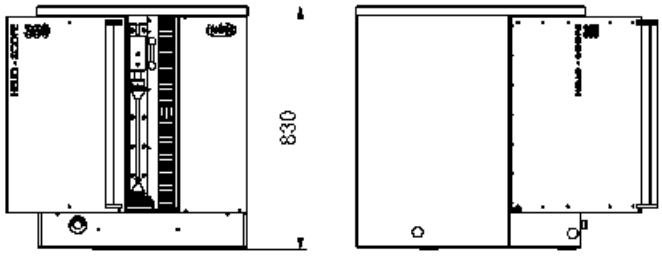
Floor standing version

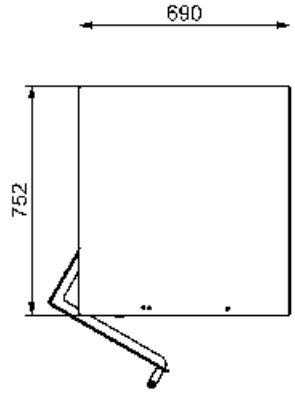




Dimensions

Bench-top version





Technical specifications

Measuring range

Length (Z)	350 mm or 750 mm
Diameter (X)	80 mm or 120 mm

Workpiece

Weight (max.)	30 kg

Resolution

Adjustable	
Lengths/Diameters	0.01…0.0001 mm
Angle	0.01…0.0001°
	Degree (decimal)
	Or degree, minute, second

Error limits

Length	(4+L/100) µm, L (length) in mm
Diameter	(2+L/100) µm, L (length) in mm

(2s at 20°C +- 1°C on reference standard)

Drive
Brushless motor (no maintenance required)

Optical System
Telecentric precision optical system
High resolution CCD camera

Calculator
PC based on Windows NT operating system

Weight

Basic instrument	approx. 80 kg

Operating temperature 10°C - 45°C

Recommended temperature

When measuring	18°C - 25°C

Maximum air humidity 80 %

We reserve the right to make changes due to technical progress.

Accessories
CNC precision measuring spindle
Floor standing version with TFT industry screen
Software upgrading (SPC; Q-DAS interface)

Clamping devices
· MK2 adaptor
· Three-jaw chuck

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