

PipeTest

Pipe dimension tester

With the PipeTest pipe dimension tester, the outer diameter, wall thickness, inner diameter, ovality and local wall thickness variations can be tested. For this purpose, the outer diameter and the wall thickness are directly measured 360 times during the rotation of the pipe and other quantities such as the inner diameter are calculated.

With its simple operation, the testing device can also be used directly in production. The measurement is tactile. After inserting the test piece and pressing the start button, the tester automatically determines the diameter range to be measured. This eliminates the possibility of operating errors.

There are different device variants for different diameter ranges.

The test device is controlled by a PC under the Windows 7 operating system. Operation as well as visualisation and evaluation of the test results are carried out with the easy-to-use software PipeTest, version 6. A coupling with the ERP system in the company is prepared. Surface roughness (longitudinal grooves) can be measured additionally as an option.

Advantages

- Automatic tactile testing of the outer diameter and wall thickness, calculation of the inner diameter, ovality and other derived variables.
- Monitoring of warning and tolerance limits, information with the signal colours green, yellow and red.
- Timed measurement during rotation of the test specimens
- Suitable for different pipe diameters and pipe materials
- Practically no operating errors possible
- Minimal training required
- Short measuring times
- Modern evaluation software for Windows® 7
- Connection to CAQ systems for Windows operating systems, e.g. with remote control and data transmission via Internet protocol
- Available databases: MS Access or MS SQL Server®R2
- Adaptations to special requirements possible on request
- Service and maintenance contract

Steinbeis
Qualitätssicherung und
Bildverarbeitung GmbH



PipeTest Pipe dimension tester



Steinbeis
Qualitätssicherung und
Bildverarbeitung GmbH

Werner-von-Siemens-Straße 9
98693 Ilmenau / Germany

Phone +49 (0) 36 77 · 46 90 59 0
 Telefax +49 (0) 36 77 · 46 90 59 11

E-Mail info@sqb-ilmenau.de
 Internet www.sqb-ilmenau.de

Contact

Dipl.-Ing. Steffen Lübbecke
 Phone +49 (0) 36 77 · 46 90 59 12
 E-Mail steffen.luebbecke@sqb-ilmenau.de

M. Sc. Norbert Jahn
 Phone +49 (0) 36 77 · 46 90 59 16
 E-Mail norbert.jahn@sqb-ilmenau.de

Technical data

Length of pipe sections

80±20 mm, max. permissible ovality: 1 mm

Measurable parameters

Outer diameter, inner diameter, wall thickness, measurement of the inner contour, optionally different roughness parameters of the surface on the outer diameter and depth of longitudinal grooves

Evaluation

Minima, maxima, mean values, comparison with warning and tolerance limits, information on product quality with the signal colours green, yellow and red

Uncertainty of measurement

± 0.005 mm for outer diameter and wall thickness; ± 0.010 mm for inner diameter when using calibration tubes

Test equipment capability

On request, the test equipment capability can be verified on a customer-specific basis according to the Cg/Cgk method and automatic measuring machine test.

Number of measuring points per tube revolution

360 for wall thickness

Size

605 x 2000 x 605 mm³ (W x H x D)

Mass

150 kg

Ambient temperature

15 - 30 °C

Ambient humidity

max. 80% humidity

Protection class (EN 60529)

IP 51

Power supply

115/230 V AC, 50/60 Hz, 11/5.5 A

Compressed air supply

4 bar, 5 l/min, oil-free

Unit variants

PipeTest 12-32

Measurable pipes Ø 12 x 1.5 mm to Ø 32 x 3 mm
 Test time approx. 20 s

PipeTest 10-75

Measurable pipes Ø 10 x 1.5 mm to Ø 75 x 7.5 mm
 Testing time approx. 22 s (depending on diameter)

PipeTest 32-110

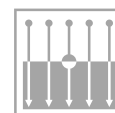
Measurable pipes Ø 32 x 1.5 mm to Ø 110 x 10 mm
 Testing time approx. 22 s (depending on diameter)

On request

Measurable pipes Ø 70 x 1,5 mm bis Ø 125 x 3 mm



Products Service



Development Research



Consulting Training