



BENDTSEN ROUGHNESS / POROSITY TESTER

Code: PTA-1702XX

Measures the air permeability and surface roughness according to Bendtsen method.

Standards: ISO 8791-1, ISO 8791-2, ISO 5636-1, ISO 5636-3, SCAN P21, SCAN P84, IS 9894, DIN53108, BS 4420



Three instrument configurations available:

Test	Measuring Head	Model	Code
Bendtsen Roughness	1 x Roughness measuring head	LBD-01	170218
Bendtsen/Gurley Porosity	1 x Porosity measuring head	PBD-01	170219
Bendtsen Roughness- Porosity	1 x Roughness measuring head 1 x Porosity measuring head	LPBD-01	170221

TEST DESCRIPTION:

Surface roughness:

The operator places the sample below the measuring head. By pushing the start button, the measuring head lowers onto the sample and gently clamps it. The test starts. As soon as the pre-set flow rate (e.g., 1,47 ml/min) is stable, the measuring value is displayed. The test time is adjustable from 1-40 seconds. After test performance, the sample is released. The measuring head returns to its initial position and the device is ready for further measurements.

Air permeability:

The operator places the sample below the measuring head. By pushing the start button, the measuring head lowers onto the sample and gently clamps it. Air flows through the sample at a selected pressure (e.g., 1,47 KPa). As soon as the pre-set flow rate is stable, the measuring value is displayed. The test time is adjustable from 1-40 seconds. Gurley values are calculated according to the standard and are displayed in Gurley seconds by default.

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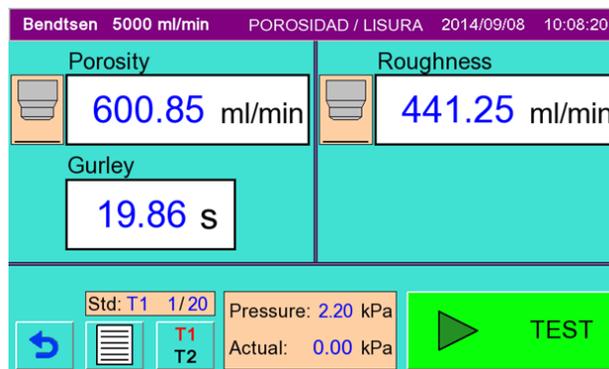


CHARACTERISTICS:

- Fully automated measuring cycle, sample is not influenced manually.
- Adjustable feet for the equipment leveling.
- Big Color Touch Screen 7".
- Full Statistics, with graphs, average, deviation, min and max value, etc.
- Automated system for aligning measuring and positioning head on sample under constant pressure of 98Kpa. (490 kPa Optional).
- **Test Pressures according to standard:** 0,74 – 1,47 – 2,20 kPa (Continuously adjustable).
- Glass measuring surface attached to the equipment.
- Photocell for automatic test when positioning the sample, or manual test.RS- 232 interface for connection to management and control programs.
- USB connection for maintenance works and for connection with USB printer
- CE mark.
- **Measuring ranges:** 25 - 5.000 ml flow rate, pressure difference: $\pm 0.5\%$ of the final value
- **Measuring accuracy:** Pressure differential: $\pm 0.005\text{kPa}$ linear, Flow: $\pm 0.5\%$ of the final value, Accuracy of test duration: $\pm 0.5\text{s}$
- **Roughness:** Measuring land: $\varnothing 31.5\text{mm}$, $150\mu\text{m}$, 267g, Test duration, Dwell time: 1-40 seconds (adjustable)
- **Air permeability:** Measuring area: $10 \pm 0.2 \text{ cm}^2$, Test duration, Dwell time: 1 - 40 seconds (adjustable), Display in ml/min or $\mu\text{m}/\text{Pa} \cdot \text{sec}$, Gurley Value: Seconds
- **Flow Sensors (Optional):** 15 - 3.000ml/min, 5 - 1.000ml/min, 1 - 5.000ml/min, Other High Porosity/Roughness under Request. Up to 10.000 ml/min
- **Electrical Connection:** 110-230V, 50-60Hz (40W)
- **Compressed air:** 400-600 kPa

USER INTERFACE:

- Machine controlled by means of a touch screen and an auxiliary button.
- Through the visualization and control screen, the total control and configuration of the machine can be managed.
- Easy and intuitive operation of the control menu, configurable in different languages.
- Two result tables with a maximum of 10 result types and 20 test results per table.
- Possibility of display a diagram showing different test results.
- Statistical control. Mean value, standard deviation, and maximum and minimum values.
- Value in $\mu\text{m}/\text{Pa} \cdot \text{sec}$ shown in statistics.
- Periodical program updating (without additional costs).
- Maintenance Menu, Set-Up, and Calibration.



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