



Permeability measurement according to
ISO: 4003 & ASTM D-737-96 standard

The PMI Advanced
**Frazier Permeability Tester &
Average Fiber Diameter Analyzer**
GP-100A-F/AFA-201-A

Not just products...solutions!

DESCRIPTION

Frazier Permeability Tester

The PMI Advanced Frazier Permeability Tester is able to calculate fabric resistance (woven, knitted and non woven textile materials) to the passage of air. The machine provides fast and accurate measurement of gas permeability of solid, cylindrical and sheet samples. Featuring nondestructive testing and fast results, our machine is perfect for both R&D and quality control.

Average Fiber Diameter Analyzer

PMI's Average fiber diameter analyzer (AFA) offers a simple, fast, and reliable technique for Average fiber diameter measurement - a measurement not readily achieved by static nitrogen adsorption (BET) methods. The AFA's innovative use of flow permeametry combined with its sophisticated self-adjusting viscous flow controller enables testing of a wide range of powders and other samples, including materials with surface areas of only several square meters per gram.

APPLICATIONS

Industries worldwide utilize PMI permeability testers for R&D and quality control. Applicable industries include:

- Automotive
- Battery Separator
- Biotechnology
- Ceramic
- Filtration
- Fuel Cells
- Geotextiles
- Nonwovens
- Paper
- Textiles
- And many more...



PRINCIPLE

Frazier Permeability Tester

Our Advanced Frazier Permeability Tester is used to determine the permeability of porous solids. A gas such as air is forced to flow through the test sample. Measurements of the steady-state flow rate and the corresponding pressure drops provide the necessary data for calculation of the Permeability using darcy, Liters per minute, Frazier and other units.

Average Fiber Diameter Analyzer

The Average fiber diameter analyzer (AFA) operates on the principle of flow permeametry. By measuring the flow of Nitrogen (or any non-corrosive gas) through a sample at various differential pressures, one is able to deduct, through a series of equations, the Average fiber diameter of the sample.

SOFTWARE

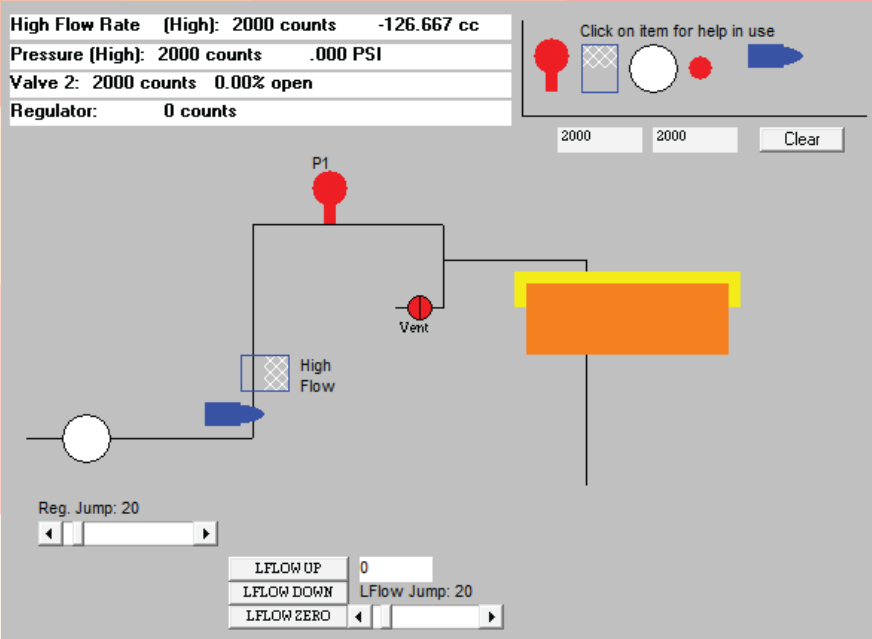


FIGURE
Software Manual Control Sreen



FIGURE
Sample Test Report

FEATURES

Frazier Permeability Tester

- Fully automatic
- Units in Frazier
- Non-destructive testing
- Length of test approximately 1 minute
- Wide range of acceptable sample types and sizes
- Multiple sample chambers available
- Minimal maintenance required
- Windows-based software handles all control, measurement, data collection, and report generation; complete manual control also possible
- Comes with a PC computer equipped with real-time graphical LCD test display that depicts testing status and results throughout operation



FIGURE
Sample Chamber

Average Fiber Diameter Analyzer

- Uses nitrogen or other non-corrosive gases; no expensive gas mixtures required
- Nondestructive testing
- Compatible with Windows XP or higher
- Real-time graphical test display depicts testing status and results throughout operation
- Length of test approximately 5 minutes
- Wide range of acceptable sample types and sizes
- Minimal maintenance required
- Windows-based software handles all control, measurement, data collection, and report generation; manual control also possible

SPECIFICATIONS

Frazier Permeability Tester

- Sample Size: 5 cm² to 100 cm² test area
- Pressure Range: Up to 2" water column
- Pressurizing Gas: Clean, dry or compressed air (any other non-flammable & non-corrosive gas)
- Pressure Controller: 0.5 ± 0.01 inch water
- Accuracy: 0.15% of reading
- Mass Flow Transducer Range: 200 LPM
- Power requirements: 110VAC, 50/60 Hz (Others Available)
- Weight: 25kg
- Permeability Measurement (According to the following Standard): ASTM D-737-96

Average Fiber Diameter Analyzer

- Sample Size: 0.5 cm to 5 cm diameter
- Pressure Range: 0 - 5 psi
- Pressurizing Gas: Nitrogen or any non-corrosive gas
- Pressure Transducer Range: 0 - 5 psi
- Mass Flow Transducer Range: 3,000 cc/minute
- Power Requirements: 110VAC, 50/60 Hz
- Dimensions: 7" H x 17" W x 17" D
- Weight: 30lbs

SALES & SERVICES

Our sales team is dedicated to helping our customers find which machine is right for their situation. We also offer custom machines for customers with unique needs. To find out what we can do for you, contact us. We are committed to customer support including specific service products, short response times & customer specific solutions. To quickly & flexibly meet our customer's requirement, we offer a comprehensive range of services.

Disclaimer : Other specifications of this product are also available.
Design subject to change without notice.



**Customize your machine
today!**

The most advanced, accurate, easy to use and reproducible Permeability Testers in the world.



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