

THE PMI LIQUID PERMEAMETER (without confining pressure)

LP-100



Not just products...solutions!

Description

The PMI Liquid Permeameter is used to perform fast and accurate measurements of liquid permeability. PMI's Liquid Permeameter is user-friendly, features non-destructive testing, and accommodates a wide variety of samples. The Liquid Permeameter also allows testing under ambient or elevated temperatures to simulate actual operating conditions.

Principle

The flow of liquid through a sample is measured by the distance a column of liquid drops in relation to time and pressure. This method gives reproducible results, even for hydrophobic materials, as pressure can be applied up to 200 psi to the liquid column to force the liquid through the sample. Very low permeability samples are tested using an accurate weighing balance to measure liquid flow rate.

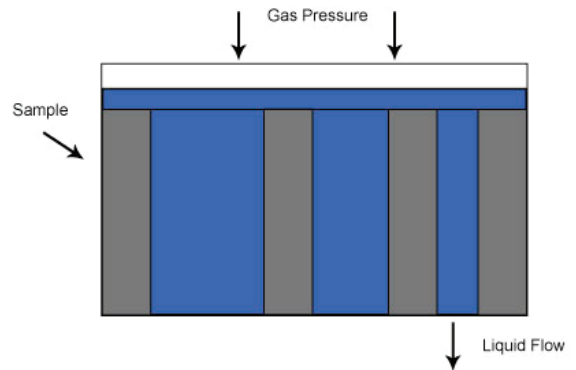


Figure 1

Principle for how the Liquid Permeameter functions.

Applications

Industries worldwide utilize the PMI Liquid Permeameter for R&D and quality control. Samples tested include filter media, membranes, paper, and battery separators.

Industries: Rock Core, Automotive, Battery, Separator, Filtration, Geotextiles, Textiles, Nonwovens, Paper, and Food.

Optional Features

- High Temperature Operations
- Permeability of Strong Chemicals
- Liquid Permeability incorporable as part of other PMI instruments

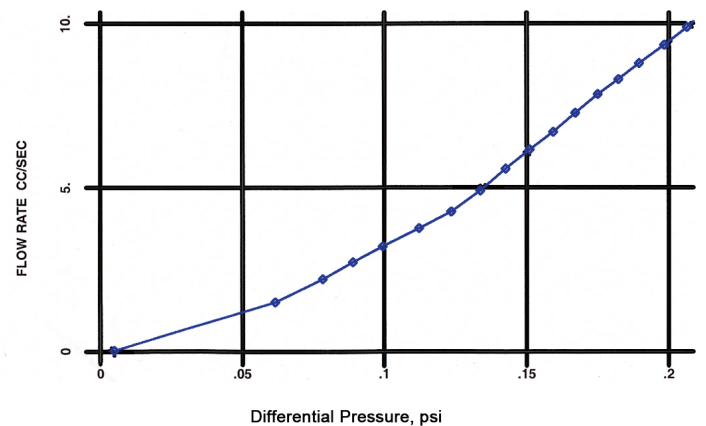
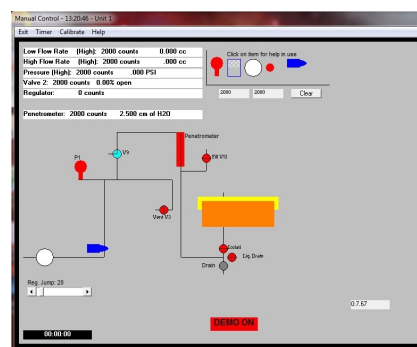
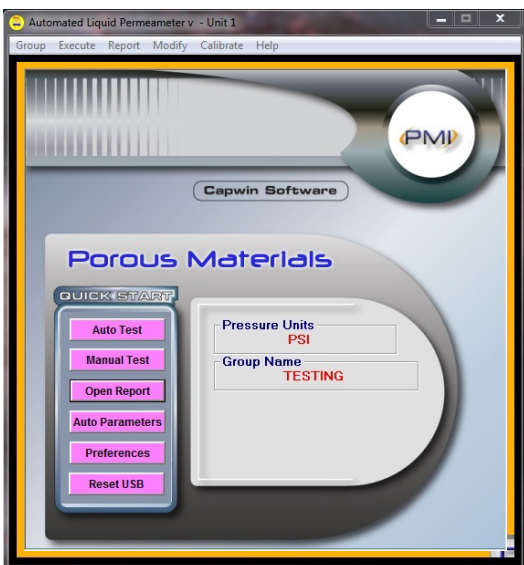
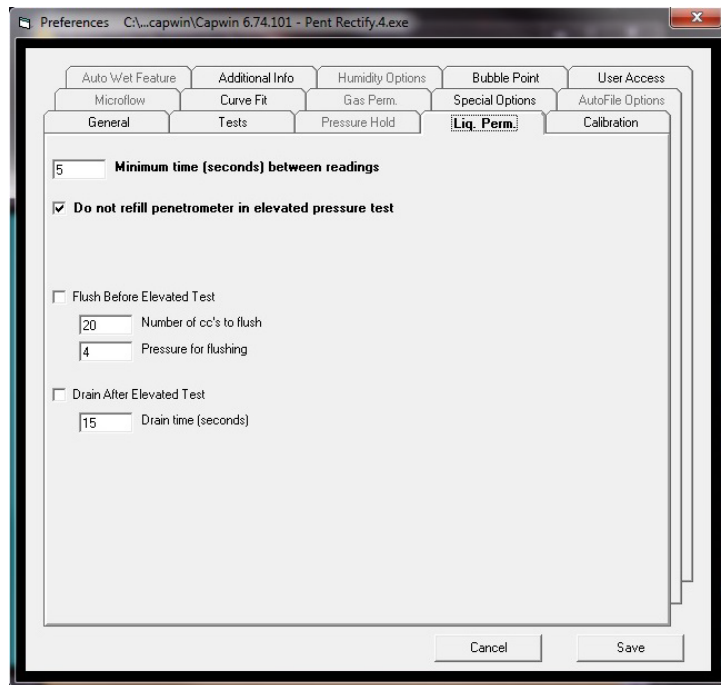
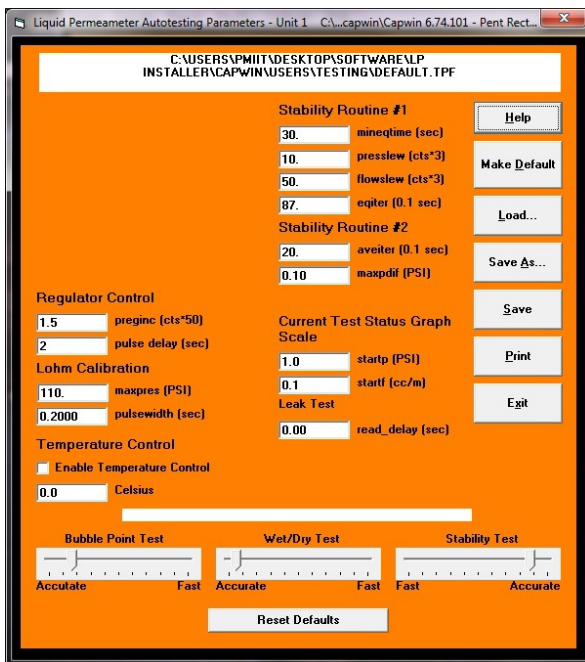


Figure 2

Expected data from PMI Software.





Features

- Windows-based software handles all control, measurement, data collection, and report generation; complete manual control also possible
- Compatible with Windows 95 or higher
- Real-time graphical test display depicts testing status and results throughout operation
- Nondestructive testing
- Length of test is approximately 10 minutes
- Wide range of acceptable sample types and sizes
- Multiple sample chambers available
- Minimal maintenance required
- A variety of materials including vegetables, meat, etc. can be tested

Specifications*

- Permeability Range: 1×10^{-4} - 5 Darcy
- Sample Size: 1.5" in diameter to 3" in length
- Pressure Range: 0 - 200 psi
- Pressurizing Gas: Clean, dry or compressed air (Or any other nonflammable and noncorrosive gas)
- Pressure Transducer Range: 0 - 250 psi
- Resolution: 1 in 60,000
- Accuracy: 0.15% of reading
- Power Requirements: 220 VAC, 50/60 Hz (Others available)
- Dimensions: 30" H x 19" W x 18.5" D
- Weight: 100 lbs

*Other specifications for this machine are available. Specifications are subject to change without notice.



20 Dutch Mill Rd, Ithaca, NY 14850, USA
 Toll Free (US & Canada): 1-800-TALK-PMI (1-800-825-5764) Phone:
 607-257-5544 Fax: 607-257-5639
 Email: info@pmiapp.com www.pmiapp.com

Liquid Permeametry Parameters

Starting Pressure (PSI differential):

Point Step Pressure (PSI):

Maximum Pressure (PSI differential):

Maximum Wait Between Points (sec):

Maximum Number Of Points:

Test Selection - Unit 1 C:\...capwin\Capwin 6.74.101 - Pent Rectify.4.exe

Liquid Permeametry Options

- Elevated Pressure Test
- Ambient Pressure Test

Run Multiple Tests

of Tests

Liquid Permeametry

- Use pressure step list

**The most advanced, accurate, easy to use
and reproducible porometers in the world.**



20 Dutch Mill Rd, Ithaca, NY 14850, USA
Toll Free (US & Canada): 1-800-TALK-PMI (1-800-825-5764) Phone:
607-257-5544 Fax: 607-257-5639

Email: info@pmiapp.com
www.pmiapp.com