

PAMI Aquapore

Principle

Aquapore is a liquid intrusion porosimeter used for characterization of hydrophobic pores. Water does not wet hydrophobic pores. Intrusion of water into pores occurs on application of pressure. Measured intrusion volume of water yields pore volume and measured intrusion pressure yields pore diameter.

$$p = - 4 g \cos q / D$$

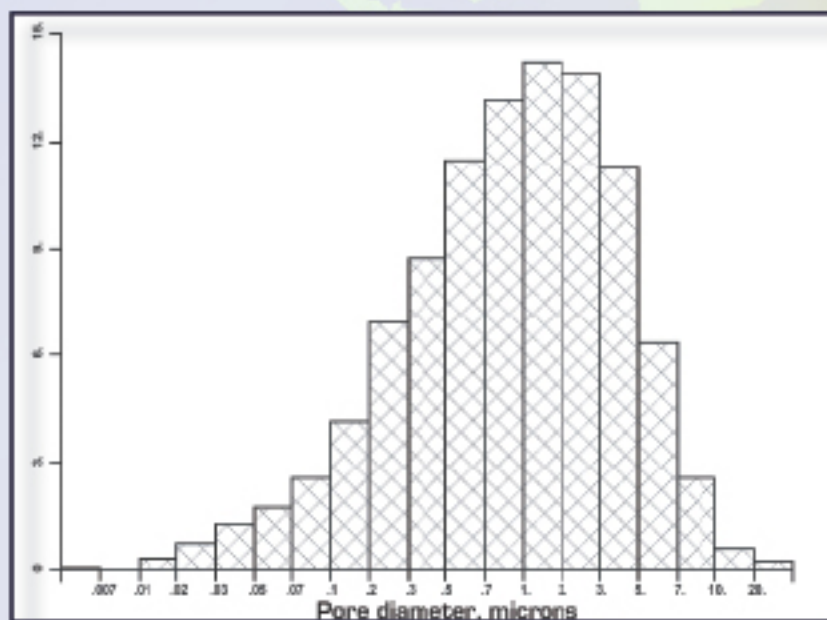
p = differential pressure on water g = surface tension of water
 q = contact angle of water D = pore diameter



Capability

Measures:

- Pore volume
- Pore diameter
- Pore volume distribution
- Hydrophobic through pores
- Hydrophobic blind pore



Specifications

Pore Size Range

3.5 - 2000 microns

Surface Area Range

0.01 m²/g and higher

Sample Size

Up to 1 cm in diameter

Pressure Range

Vacuum - 1 Atm (14.5 PSI)

Pressurizing Gas

Any non-corrosive gas including nitrogen, krypton, argon, ammonia

Pressure Transducer Range

10 Torr - 1000 Torr

Accuracy

0.15%

Resolution

1 in 10,000

Power Requirements

110/120 VAC, 50/60 Hz (Other available)

Dimensions

70" H x 29" W x 13" D

Weight

250 lbs

Features

Handles micropores and mesopores

Evacuation and testing under sub-freezing to elevated temperature ranges

Unlimited number of user defined data points

Windows-based software handles all control, measurement, data collection, and report generation; manual control also possible

Compatible with Windows 95 or higher

Real-time visual test display depicts testing status and results throughout operation

Non-destructive testing

Length of test varies from 2.5 hrs to 2 days depending on sample type and tests performed

Wide range of acceptable sample types and sizes

Multiple sample chambers available

Minimal maintenance required

Chemisorption over a wide range of pressures and temperatures

Other Products

Average Fiber Diameter Analyzer

Bubble Point Tester

Capillary Flow Porometer

Complete Filter Cartridge Analyzer

Clamp-On Porometer

Compression Porometer

Cyclic Compression Porometer

Envelope Surface Area Analyzer

Filtration Media Analyzer

High Flow Porometer

Integrity Analyzer

Integrity Analyzer

In-Plane Porometer

Microflow Porometer

Multi-Chamber and Multi-Mode Porometer

QC Porometer

Diffusion Permeameter

Gas Permeameter

Liquid Permeameter

Vapor Permeameter

Water Vapor Transmission Analyzer

Liquid Extrusion Porosimeter

Mercury/Nonmercury Intrusion Porosimeter

Mercury Pycnometer

BET Liquisorb

BET Sorptometer

Gas Pycnometer

Also Available:

Testing Services

Consulting Services

Short Courses

Buy Rent Lease

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