

THE PMI MERCURY/NONMERCURY INTRUSION POROSIMETER



Not just products...*solutions!*

Description

The PMI Mercury/Nonmercury Intrusion Porosimeter is a versatile and accurate instrument used to determine properties such as pore size distribution, total pore volume, surface area, and bulk and absolute densities of solid and powder samples. With unlimited user-defined data-points, automated data collection and reduction, and the least mercury exposure of any porosimeter on the market, PMI's Mercury/Nonmercury Porosimeter is safe, reliable, and precise.

Principles of Operation

The PMI Mercury/Nonmercury Intrusion Porosimeter uses mercury intrusion or intrusion of any other nonwetting liquid to determine pore volume. The Mercury/Nonmercury Intrusion Porosimeter fills the penetrometer and sample chamber with mercury under vacuum and takes a volume reading. The sample, however, is not initially intruded with mercury or other nonwetting test liquid because of the high surface tension. Gradually, increasing amounts of pressure are applied on the nonwetting liquid. For each incremental increase in pressure, the change in intrusion volume is equal to the volume of the pores whose diameters fall within an interval that corresponds to the particular pressure interval.

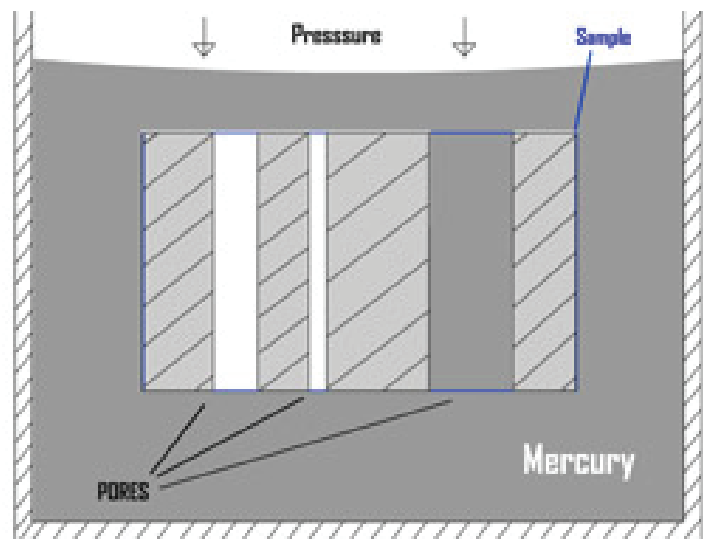


Figure 1
Principle of Operation:
Mercury Intrusion Porosimeter

Applications

The PMI Mercury/Nonmercury Intrusion Porosimeter is an excellent R&D tool. Used in various industries ranging from automotive and pharmaceutical to paper, the Mercury/Nonmercury Intrusion Porosimeter can test samples such as brake pads, catalytic converter materials, coated papers, and powder precursors.

Applicable Industries

Cement
Automotive
Chemical
Paper
Battery Separator

Filtration
Pharmaceuticals
Ceramic
Fuel Cells
Powder Metallurgy

Features

- Windows-based software handles all control, measurement, data collection, and report generation; manual control also possible
- Unlimited user-defined data points based on pressure, volume, or a combination
- Displays both intrusion and extrusion curve
- Compatible with Windows 95 or higher
- Real-time graphical test display depicts testing status and results throughout operation
- Length of test approximately 2 hours
- Wide range of acceptable sample sizes and types
- Multiple sample chambers available
- Minimal maintenance required
- Low level of mercury exposure
- No need for sample transfer from low pressure to high pressure stations
- Automatic mercury refill and clean up
- All stainless steel construction

Specifications*

- Pore Size Range: 0.0035 - 500 microns
- Surface Area Range: 1 - 100 m²/g
- Sample Size: 2.7 cm H x 2 cm D
- Pressure Range: Vacuum to 60,000 psi
- Pressurizing Gas: Air or isopropyl alcohol
- Pressure Transducer Range: 0 - 60,000 psi
- Resolution: 1 in 60,000
- Accuracy: 0.25 % of reading
- Power Requirements: 110/220 VAC, 50/60 Hz (Others available)
- Dimensions: 72" H x 30" W x 30" D
- Weight: 400 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

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