



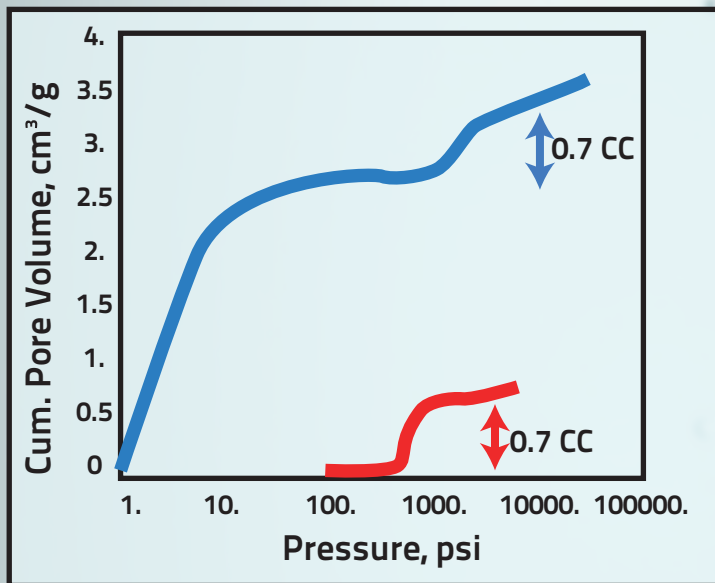
# AQUAPORE WATER INTRUSION PERMEAMETER AQUAPORE-30K-A-1

*Not just products... Solutions*

## PRINCIPLE

Aquapore is a liquid intrusion porosimeter used for 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.

$$p = 4 \gamma \cos \theta / D$$



■ Mercury ■ Water

$p$  = differential pressure on water  
 $\gamma$  = surface tension of water  
 $\theta$  = contact angle of water  
 $D$  = pore diameter

Figure 1  
Pore Volume vs Pressure Graph

## SPECIAL FEATURES

- Uses no toxic materials like mercury
- Completely automated windows based simple operation
- An order of magnitude lower intrusion pressure compared with mercury intrusion & minimal distortion of pore structure
- Much less expensive instrument compared with mercury intrusion porosimeter pore diameter range from 20 to 0.002 microns

## CAPABILITIES

Measures:

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

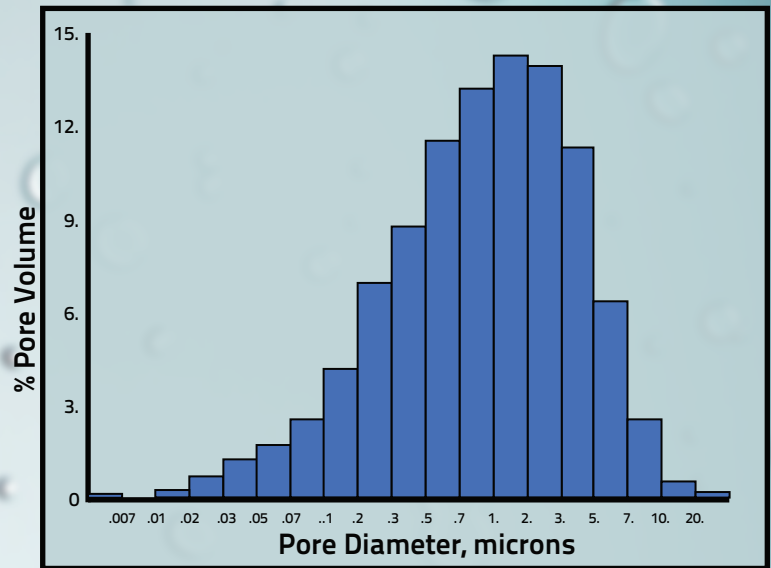


Figure 2

Pore Volume vs Pore Diameter

## SPECIFICATIONS

- Optical encoder utilized for measuring the change in volume
- Windows controlled, fully automated test unit
- Maximum pressure of 30,000 psi - custom models capable of 60,000 psi
- Pure liquid (water or industrial alcohol) used with precise pressure control and pressurization - No mercury required!
- Total pore volume, pore size distribution and hysteresis of pores ranging from 20 to 0.005 microns

## SALES & SERVICE

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.



*Customize your machine today!*

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

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



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