# Clamp-On Porometer

## Instrument

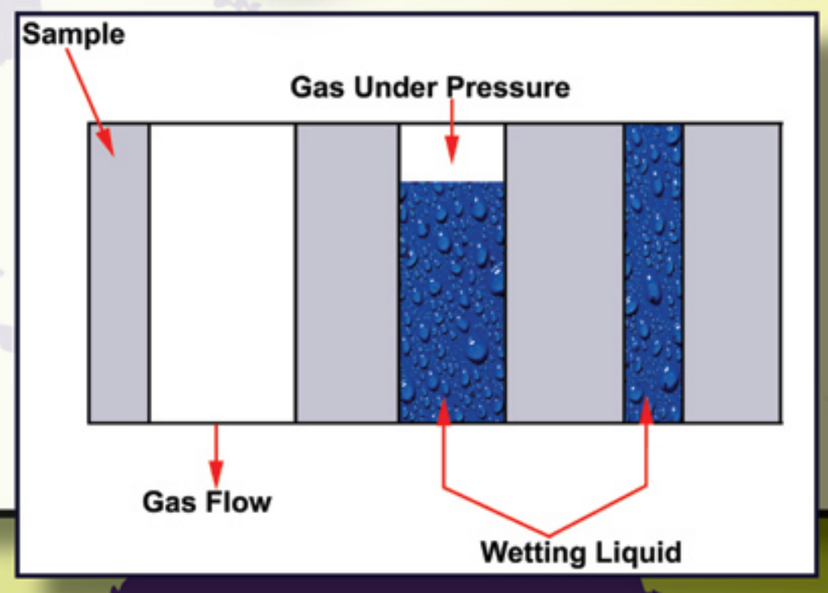
The PMI Clamp–On Porometer provides pore structure information quickly and accurately for your quality control, production control or R&D needs. The need for cutting samples from bulk material is eliminated.


## Principle

The pores in the part of the material to be tested are spontaneously filled with a wetting liquid. The test head is clamped on the material and gas pressure behind the sample is slowly increased to displace the liquid in the pore and increase gas flow. The flow rate of gas is measured as a function of gas pressure. The flow rate verses pressure data is also generated using a dry sample. Pressure is related to pore diameter.

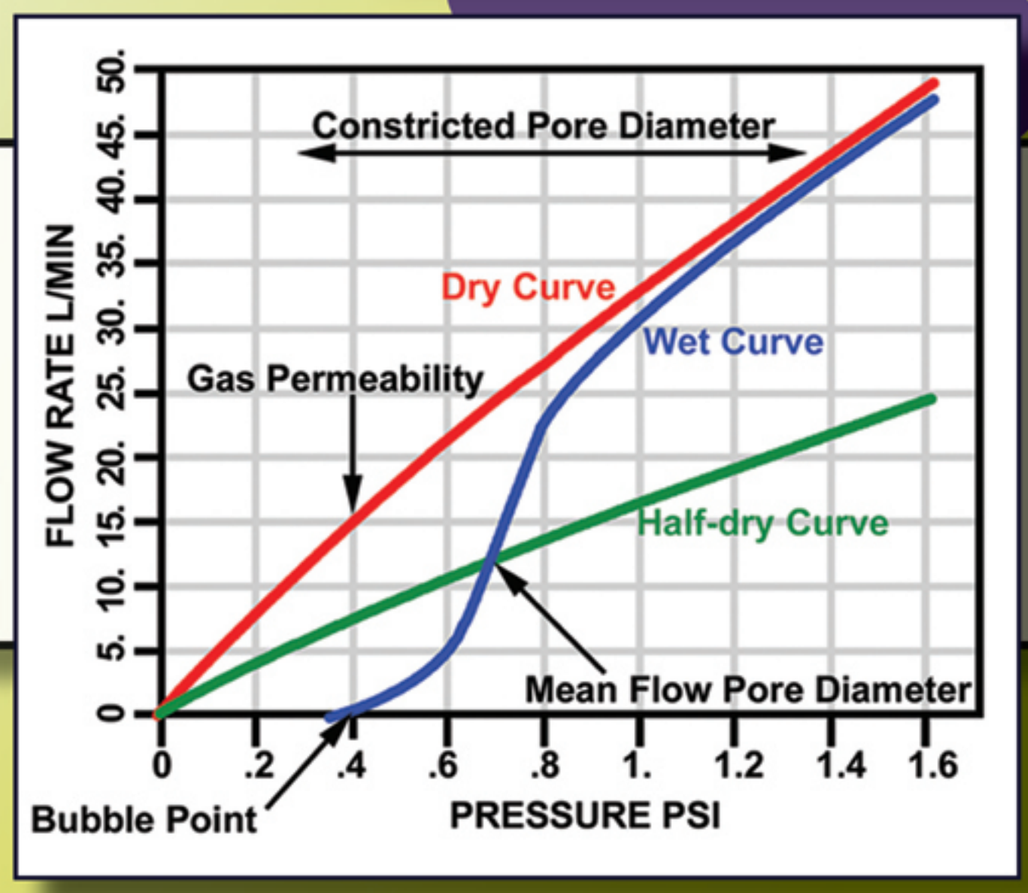
$$D = 4 \gamma \cos \theta / p$$

where D is the pore diameter, $\gamma$ is the surface tension of liquid, $\theta$ is the contact angle of liquid, and p is the differential gas pressure. From these data the characteristics of the pore structure are calculated.




## Testing Capabilities

- Bubble Point
- Mean Flow Pore Diameter
- Gas Permeability
- Frazier Permeability
- Gurley Permeability
- Pressure Hold
- Pore Size Distribution

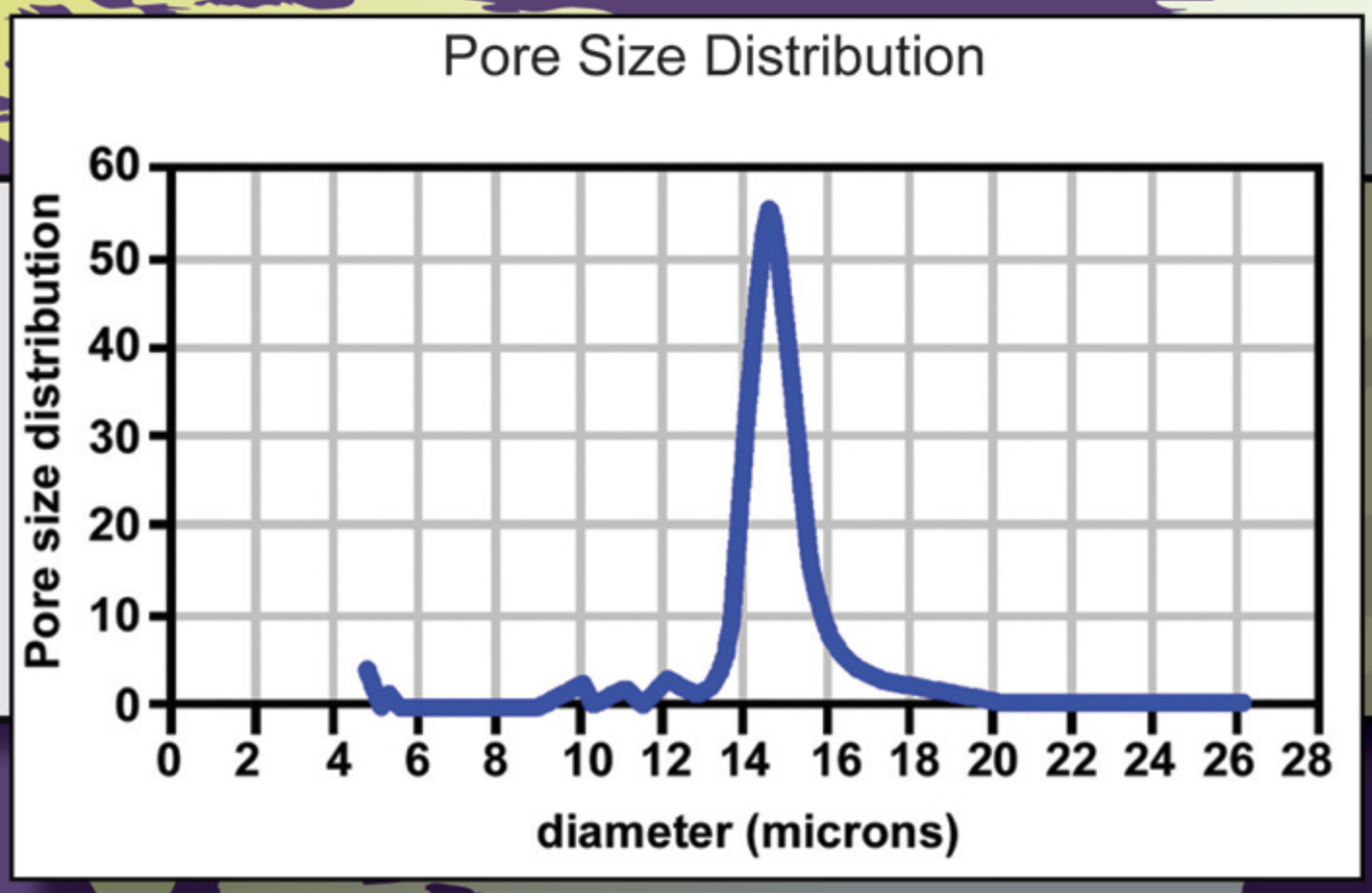


## Features

- On–line sample testing possible
- No need for cutting the sample and damaging the product
- Fast testing
- Fully Automated Operation
- Windows Based
- Determination of product uniformity by performing tests at multiple locations of the product without creating any damage
- Highly Reproducible
- Minimal Maintenance
- Economical

## Applications

Industries world–wide, ranging from the filtration industry to the battery industry, use the PMI Clamp–On Porometer for R&D and quality control. Materials often tested include: filter media, membranes, nonwovens, paper, powders, ceramics and battery separators.




## Other Products

Average Fiber Diameter Analyzer
Bubble Point Tester
Capillary Flow Porometer
Capillary Condensation Flow Porometer
Complete Filter Cartridge Analyzer
Clamp-On Porometer
Compression Porometer
Custom Porometer
Cyclic Compression Porometer
Envelope Surface Area Analyzer
Filtration Media Analyzer
High Flow Porometer
Integrity Analyzer
In-Plane Porometer
Microflow Porometer
Nanopore Flow Porometer
QC Porometer
Diffusion Permeameter
Gas Permeameter
Liquid Permeameter
Vapor Permeameter
Water Vapor Transmission Analyzer
Liquid Extrusion Porosimeter
Mercury/Nonmercury Intrusion Porosimeter
Vacuapore
Water Intrusion Porosimeter (Aquapore)
BET Liquisorb
BET Sorptometer
Gas Pycnometer
Mercury Pycnometer

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01/08