

### Advanced, cost-effective permeability and porosity system

The M9170 High Pressure Porosity and Permeability System is an advanced system for performing porosity and permeability tests on plug-sized core samples under confining pressures of up to 10,000 psi with three different testing media: nitrogen, helium, and dry air\*.

The device can make porosity measurements based on the pressure to volume relationship given by Boyle's law. It can also measure the gas permeability of low permeability cores using an unsteady state pulse decay method.

Using the steady state flow method, the M9170 unit can measure the gas permeability of high permeability cores. The *M9170 PC* software is able to calculate the Klinkenberg-corrected permeability using the gas permeability measurements at different pressures.

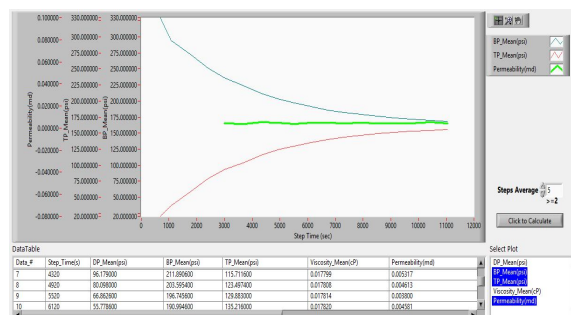
*M9170 PC* software handles all control, measurement, data collection, and calculation of grain density, inertial coefficients, and rock compressibility based on the results of the porosity and permeability tests. Data is saved in .csv file format and can be exported to any spreadsheet software.



M9170 Unit

### Operational Features:

- Porosity range from 0 to 60%
- Permeability measurement range from 0.001 mD to 1000 mD
- Measure low permeability using pulse decay method
- Calculate Klinkenberg-corrected permeability based on multiple tests
- Calculate grain density, inertial coefficients and rock compressibility
- User friendly, Windows®-based system
- Software handles all control, measurement, data collection, calculation, and report generation
- Minimal maintenance required
- Supports nitrogen & helium as testing media (dry compressed air optional)



M9170 PC Software

### Specifications:

Maximum confining pressure:	10,000 psi (690 bar)
Maximum pore pressure:	500 psi (34 bar)
Core Diameter:	1.5" (1" optional)
Core Length:	Up to 3"
Wetted Material:	SS-316 Stainless Steel
Power Requirement:	110/220 VAC, 50/60 Hz

\*Other specifications are available by customized request.