

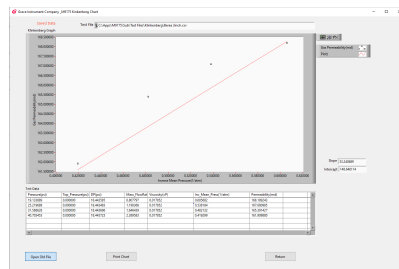
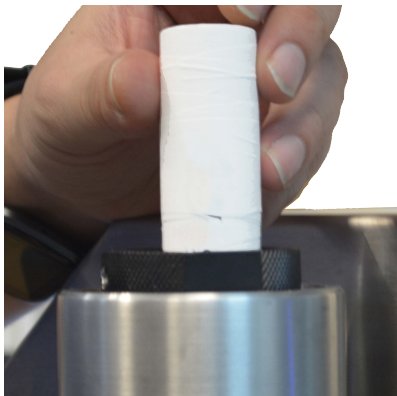


M9175 STEADY STATE PERMEAMETER

- Permeability measurement range from 0.03 mD to 10 D.
- Measures high permeability cores using steady flow method.
- Calculates Klinkenberg-corrected permeability based on multiple tests.
- Calculates grain density, inertial coefficients, and rock compressibility.
- **FREE** advanced, user-friendly software, compatible with all versions of Windows, included with each unit.
- Intuitive operation—user friendly, step-by-step software. Automates almost entire testing process, maximizing workflow efficiency.
- Software handles all control, measurement, data collection, calculation, and report generation.
- Easy-to-clean and minimal maintenance required.
- Compatible with nitrogen testing media (helium optional).
- Quick confining pressure build up and release.
- Easy to load, remove, and change core samples.
- Hassler-type core holder.
- Pressure transducer accommodates high differential pressure.
- Separate DP transducer accommodates low differential pressures.
- High accuracy under low and high pressures.
- Complementary 1-year warranty. Optional extended warranty also available.
- *Grace Instrument* is an ISO 9001:2015 certified company.

M9175 Steady State Permeameter

**Nitrogen tank shown for display purposes only (sold separately by other vendors).*



Loading Core Samples is Easy

M9175 Software

PRODUCT DESCRIPTION

Advanced, Cost-Effective Device Designed for Easy Installation and Fast Operation

The *Grace Instrument M9175 Steady State Permeameter* is a robust solution for measuring gas permeability of a high permeability core sample under confining pressures up to 1,000 psi. Using the steady state method, the *M9175* calculates permeability by measuring the differential pressure and flow rate of testing media as it flows through a core sample. Innovative design allows for easy setup, use, and cleaning. Standard unit is compatible with nitrogen testing media (helium optional)*.

Versatile Device Supports High Permeability and Klinkenberg-Corrected Permeability

The M9175 measures gas permeability of high permeability cores using the steady state flow method. The gas at the entrance valve is initially pressurized. All valves are then opened, allowing the gas to flow through the core. At steady-state flow conditions ($dP/dt=0$ and $dq/dt=0$), the gas pressure and flow rate are measured and used to calculate the permeability using the integrated form of Darcy's Law for compressible fluids.

Permeability has been demonstrated to be a function of reciprocal pressure. The M9175 is also able to calculate the Klinkenberg-corrected permeability using gas permeability measurements at different pressures.

Preconfigured PC Includes Complementary, Advanced Grace Instrument M9175 Software

Advanced, easy-to-use software is included **free** with each unit. **No software installation or setup is required!**

M9175 software is intuitive and compatible with all versions of Windows. A preconfigured computer, including all necessary hardware and software components, will be set up by *Grace Instrument*. The software comes preinstalled on the PC by a *Grace Instrument* technician for your convenience.

This intuitive, user-friendly software automates testing and accurately records results from the unit to the PC, simplifying the testing workflow. Valves are automatically opened and closed, and almost all other testing procedures are fully automated step-by-step from start to finish. The user only needs to make very minimal regulator adjustments during testing, maximizing workflow efficiency. M9175 software automatically measures, collects, and calculates data for the user. It can also calculate Klinkenberg-corrected permeability using gas permeability measurements at different pressures.

Data is saved in .csv file format and can be conveniently exported to Excel or any other spreadsheet software for further manipulation and analysis.

The software also generates charts and reports. In particular, Klinkenberg and low permeability data have special chart views for easy comparison.

Tabletop Device Easy to Clean and Maintain

This device fits easily on a standard tabletop or lab workbench. The chassis of this device is easy to wipe down. Cleanup between tests is quick and easy.

The Grace Instrument Quality Promise

The *Grace Instrument M9175 Steady State Permeameter* is a powerful testing tool, allowing the user to analyze permeability precisely and accurately for numerous applications, including core flooding, permeability, core analysis, and more. Engineered with the latest in core technology, this reliable, long-lasting testing device features modern features and a design that have been successfully used by laboratories and large corporations worldwide.

Custom pressure, automation, specifications, and other solutions are also available! Contact *Grace Instrument* to learn more. Our team is readily available to answer any questions you may have and guide you to find the ideal custom solution for all your testing needs.

A complementary 1-year warranty is included with each unit. Optional extended warranties are also available.

Grace Instrument is an ISO 9001:2015 certified company.

**Testing media options vary depending on user's selected specifications.*

SPECIFICATIONS

Condition	New
Maximum Confining Pressure	1,000 psi (69 bar)
Maximum Pore Pressure	500 psi (34 bar)
Permeability Range	0.03 mD to 10 D
Core Diameter	1" and/or 1.5" (Depends on user's selected configuration.)
Core Length	Up to 3"
Wattage	200 W
Voltage	Varies per unit. Either a 110-120V AC OR 220-240V AC configuration (not both).* *Please check electrical labeling on your unit to verify which voltage configuration applies.
Frequency	50/60 Hz
Dimensions	24" W x 26" D x 20" H
Weight	150 lbs.
What's Included	<ul style="list-style-type: none">• Core Holder• Mass Flow Meter (0-3 SLPM)• High Precision Transducer• DP Transducer• PC with Grace Instrument M9175 Software• Keyboard• Mouse
Warranty	1-Year Warranty (Extended warranty also available.)