

Temco, Inc.

Design Excellence in Core Analysis Instrumentation

Helium Porosimeter HPE-880



To meet the need for a rapid, reproducible, and versatile method to measure porosity, Temco designed an improved Helium Porosimeter. This Porosimeter operates according to Boyles' Law for the determination of the core sample porosity. A quick release clamp allows rapid interchanging of test samples and sample cups. The Porosimeter is designed for the testing of 1", 1½", and 2" diameter core samples. Each sample cup is provided with stainless steel calibration blocks. The pressure and temperature are electronically measured and displayed on the computer.

This instrument can also be provided with a core holder in place of the sample cup, so the porosity of the core plug can be measured under reservoir stress conditions. The core holders are designed for rapid sample changing. Multiple samples can be tested quickly.

For the determination of the bulk volume of the core sample, the instrument is provided with a set of electronic calipers for the measurement of the core diameter and length. Using the measured values, the bulk volume is calculated in the computer software.

This instrument is available with a computer data acquisition and control program for the data collection and analysis. The software allows the end user to measure the bulk volume directly into the computer and then to automatically perform an experiment and calculate the porosity, grain volume, grain density, and pore volume. The test data is stored in a data file for subsequent reporting, graphing, or displaying.

Standard Features

Porosity measurement using Boyles' Law

Core Diameters	1", 1½", and/or 2"
Core Length	0-3"
Working Pressure	100 psig
Pressure Transducer	0-100 psig, 0.1% F.S. Accuracy
Electrical	110 VAC 60 Hz standard, 240 VAC 50/60 Hz optional
Dimensions	15" x 20" x 10" (WxDxH)
Weight	45lbs

Options

- Data Acquisition Software: SmartPore™
- Computer and data acquisition hardware
- Core holder for confining pressure, Model HPE-881



Ordering Information

Model No. HPE-880-1-00	Core diameter 1" only, Electrical: 110 VAC 60 Hz
Model No. HPE-880-1.5-00	Core diameter 1.5" only, Electrical: 110 VAC 60 Hz
Model No. HPE-880-2-00	Core diameter 2" only, Electrical: 110 VAC 60 Hz
Model No. HPE-880-1-01	Core diameter 1" only, Electrical: 220-240 VAC 50/60 Hz
Model No. HPE-880-1.5-01	Core diameter 1.5" only, Electrical: 220-240 VAC 50/60 Hz
Model No. HPE-880-2-01	Core diameter 2" only, Electrical: 220-240 VAC 50/60 Hz
For additional diameters add 1, 1.5, or 2 to the Model Number	
Model No. SmartPore™	Data Acquisition Software
Model No. HPE-881	Confining Pressure Porosimeter
Core Holder Options For HPE-881	
Model No. RCHR-1-3	Core Holder for 1" diameter by 3" core length, 2,500 psi
Model No. RCHR-1.5-3	Core Holder for 1.5" diameter by 3" core length, 2,500 psi
Model No. RCHR-2-3	Core Holder for 2" diameter by 3" core length, 2,500 psi