

New

VISCOLab 5000: μ Sample Viscometer



Product Description

The VISCOLab 5000 requires only 75 μ L of sample for accurate and repeatable results: the smallest sample requirement for any automated viscosity measurement system available today. The sample is simply introduced to the measurement chamber via pipette. Then the VISCOLab 5000 takes over, controlling the temperature, measuring the viscosity, processing the data and reporting the results on the screen or optional printer. The tests are performed at the desired temperature through an imbedded Peltier cell without requiring temperature-control fluids. Cleaning is simple and verified through the device's self-tracking.

Technology Overview

The core of the system is a Cambridge Viscosity electromagnetic viscometer. The VISCOpro electronics continuously drives a piston with a magnetic field through the fluid to measure viscosity. The VISCOLab software controls and monitors the tests and ensures stability and accuracy of the measurement. Internal to the sensor is a RTD to provide accurate temperature measurements.

Key Features

- > 75 μ L per measurement
- Accurate results
- Simple to use
- Easy to clean
- Statistical analysis of viscosity measurements
- Integrated Peltier temperature control
- Easy integration into LIMS programs

Introduction of test sample to temperature-controlled measurement chamber.



Cambridge Viscosity

Specifications

Sample Size	<75 micro-liters
Throughput Time	< 20 minutes per test
Viscosity Accuracy	+/- 1% reading at calibration points; +/- 3.5% of reading throughout range
Viscosity Repeatability	+/- 1% of reading
Viscosity Range	0.5-20cP @ ambient; extended with sample pre-heat (i.e. 0.5-50 cP with sample pre-heat to 40°C)
Temperature Range	0°C-100°C
Temperature Control Accuracy	+/- 0.05°C
Benchtop Dimensions	21 in. (depth) x 20 in. (combined length)
Wetted Materials	316L SS, Teflon

Measurements

Results of typical measurements made with the VISCOlab 5000 compared with NIST-traceable calibration fluids.