

AUTOMATIC BLAINE

The Automatic Blaine Air Permeability Tester provides accurate and repeatable measurements of powder surface areas, meeting the requirements of standards such as **EN 196-6**, **ASTM C204**, **BS 4550**, and **AASHTO T153**. This instrument is designed for reliable performance, ensuring consistent results for your laboratory applications.



VTR-1016



Vector Automatic Blaine

Precision in Specific Surface Measurement

Overview

The tester features a touch screen control that offers a user-friendly interface, allowing for easy operation and the ability to save an unlimited number of test results. Its intuitive software performs automatic calculations of sample porosity for precise measurements, enhancing both efficiency and accuracy. Equipped with a digital temperature sensor, it provides accurate temperature measurements during testing. The device alerts you if the temperature deviates from the range specified by standards like EN 196-6 and ASTM C204, ensuring compliance and reliability.

This advanced tester finds applications across various industries. In the cement industry, it aids in quality control by measuring the fineness of cement, which affects hydration and strength development. The pharmaceutical industry benefits from its ability to determine the specific surface area of powders, influencing dissolution rates and bioavailability. It is also valuable in the ceramics industry for assessing particle size distribution, which impacts the sintering process and final product properties. Additionally, producers of limestone, gypsum, and lime utilize this device to ensure product consistency and performance.

An essential feature is the automatic volume correction, where the software calculates the weight of the sample based on measured density, desired porosity, and verified volume of the Blaine cell. This minimizes manual intervention and maximizes precision. The instrument's robust design, characterized by durable construction and low maintenance requirements, makes it ideal for daily laboratory use.

Optional Accessories

Calibration Sand: Available in packs of 100 g with specific surface options of 2800 cm²/g, 4000 cm²/g, 5000 cm²/g, and 6000 cm²/g for calibration purposes.

Bulk Compression Stand: Essential for preparing Blaine test cells by applying 1–3 bar of uniform compression to the sample, ensuring accurate results.

Blaine Filters: Available in sizes of 125 mm, 40.6 mm, and 40.8 mm for efficient and versatile testing.



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Easy to Use Software

The Automatic Blaine Air Permeability Tester is equipped with advanced software designed to enhance usability and precision. The intuitive touch screen interface allows users to easily navigate through testing parameters and save an unlimited number of test results for future reference. The software also supports multiple calibration samples, enabling users to store and apply different calibration profiles based on the material being tested. This feature ensures that each test is conducted with the highest accuracy and consistency. Additionally, the software provides record-keeping capabilities, allowing laboratories to maintain detailed records of all testing sessions, making data management and analysis seamless and efficient. This combination of features ensures that the device not only provides accurate results but also simplifies workflow and compliance with testing standards.



TECHNICAL SPECIFICATION

Standards Compliance	EN 196-6, ASTM C204, BS 4550, AASHTO T153
Measurement Range	Specific surface area in cm ² /g
Control Interface	Touch screen control with intuitive software
Temperature Measurement	Digital temperature sensor with automatic alerts for out-of-range readings
Automatic Volume Correction	Yes, based on sample density, desired porosity, and Blaine cell volume
Calibration	Supports multiple calibration samples
Data Recording	Unlimited records storage
Batch Capacity	User-defined, based on the material and sample size
Power Supply	220V, 50–60Hz
Dimensions (W x H x D)	350 x 450 x 450 mm
Weight	30 kg
Components Included	Manometer liquid (250 ml)
	Cell with perforated disc and plunger
	Plastic funnel
	Stainless perforated disc
Software Features	Record multiple test results
	Store multiple calibration samples
	Automatic air flow time measurement
	Touch screen operation with digital results display
Optional Accessories	Calibration sand packs, bulk compression stand, Blaine filters
Compliance	CE Certified, ISO 9001 compliant