



Blaine Analyser



QCX® ABA100 AUTOMATIC BLAINE ANALYSER

The ABA100 Automatic Blaine Analyser applies the Blaine method to analyse the grinding fineness of powdered materials in plants and laboratories. Typically used in the cement industry, it is well known for efficient and accurate analysis, as well as reliable operator safety.

As the only direct method for determining the active surface and reaction behaviour of cement, the Blaine method is preferred by the cement industry. The key advantage of our analyser is that it is the only automatic Blaine analyser for robotic labs.

Another advantage is that it requires less material. Measured samples can be re-used for further processes, including calibration, meaning you can continue performing accurate analysis even when material availability is low.

As a fully automated Blaine analyser, our process requires no hazardous materials, such as mercury, making it compliant with health and safety regulations. It is also user-friendly, featuring a simple touch panel or remote-control supervisory system.

ADVANTAGES

- **Highly accurate:** as a fully automated system, the Automatic Blaine Analyser takes human error out of the equation.
- **Improved capacity:** automated analysis means your laboratory can perform at a higher capacity and your workers are free to attend to more meaningful and complex tasks.
- **Robotic compatibility:** it can be used as a standalone analyser, or it can be connected to automatic sampling and transport systems for seamless integration into a fully automatic laboratory.

A PROVEN AND RELIABLE PERFORMER, LONG-TERM

How it works

The Automatic Blaine Analyser can be connected to automatic sampling and transport systems, or it can be used as a standalone analyser.

When standalone, your operators simply pour samples into the sample introduction funnel. Samples are then precisely dosed into the measuring tube where they are compacted and subsequently permeated by a defined amount of air.

The rate of airflow through the compacted sample is recalculated to determine the specific surface of the sample with exceptional accuracy.

Possible configuration

The Automatic Blaine Analyser can be integrated into any robotic lab, but is best used with QCX systems, including QCX automatic samplers and sample transport systems.

Specification

Sample material	Dry powder sample, 1,500 – 8,000 cm ² /g, max. 120°C
Sample quantity	70 - 105 cm ³
Sample density	1.6 - 3.5 g/cm ³
Sample frequency	6/hour, lower with certain sample types
Sample temperature variation	For variation higher than 20°C the temperature compensation option is recommended.
Measurement precision	2%
Dedusting	1 m ³ /min, -16 to -31 kPa
Power supply	230V/ 50Hz; max. 0.5 kW 120/230 V; 60Hz; max. 0.5 kW
Compressed air supply	0.6 – 1.0 MPa (Quality 1.4.1 as per ISO 8573-1)
Operating conditions	Temperature: 5°C to 35°C Humidity: 20 – 80%, non-condensing
Weight	Approx. 190 kg
Dimensions (W x D x H)	750 x 595 x 1,580 mm

