

HUMBOLDT

Blaine Apparatus



Blaine Air Permeability Apparatus

ASTM C204; AASHTO T153

The Blaine Air Permeability Apparatus determines the fineness of Portland cement in terms of specific surface area expressed as the total surface area in square centimeters per gram of mortar or cement. The Blaine works by drawing a definite quantity of air through of bed of cement exhibiting a definitive porosity value. The number and size of the pores in a prepared bed of definite porosity is a function of the size of the particles and determines the rate of airflow through the bed. This procedure is outlined in ASTM C204, Method A and AASHTO T153. The Humboldt Blaine Air Permeability Apparatus consists of: calibrated U-tube manometer, ground glass joint, stainless steel test cell and plunger, rubber aspirator bulb and perforated disc. Includes an 8 oz. (226.8g) bottle of red manometer fluid, filter paper, wood block for holding test cell during filling and a funnel. Mounted on finished wood panel with rubber-footed base. To perform this test, NIST Portland Cement #114R is required by the ASTM standard for calibration. See Accessories H-3817 and H-3817.20.

Blaine Air Permeability Apparatus H-3810

Ship wt. 7lbs. (3.1kg)

H-3810 Accessories & Replacement Parts

Description	Model
Rubber bulb	H-3811
Cell and plunger	H-3812
Cell and plunger, Calibrated	H-3812CAL
Perforated brass disc	H-3813B
Perforated stainless steel disc	H-3813S
Manometer fluid, 8oz (240ml)	H-3814
Manometer u-tube, calibrated	H-3815
Filter paper discs, medium retentive, 1.27cm, pkg 1000	H-3816.1M

Portland Cement Fineness Standard, SRM 114R

This Standard Reference Material (SRM) is used in calibrating fineness testing equipment according to ASTM Standard Methods. The SRM unit consists of a glass vial with plastic caps containing powdered cement (each vial is contained in a sealed foil bag). Each vial contains approximately 5g of cement.

SRM 114R 1 vial H-3817
SRM 114R, package of 20 H-3817.20

Ship wt. 0.5lbs. (0.2kg)

Blaine Apparatus, Semi-Automatic

ASTM C204; AASHTO T153, EN 196; BS 4550

Determines fineness of cement in terms of specific surface expressed as total surface area square centimeters per gram. To obtain the most accurate results, the test should be performed in a temperature-controlled environment. The Semi-automatic Blaine Apparatus provides more accuracy and precision than provided by the manual Blaine Apparatus. The device uses an automatic pump and timer to evaluate the time precisely. Calibration of this unit is done by using various reference sands. Unit includes: the unit with an electric pump and timer; measuring cell, filter papers (12.8mm, 1000pk.; fill oil (50ml); plug; thermometer; brush and funnel.

Blaine Apparatus, Semi-Automatic
120/220V 50/60 Hz H-3056.3F

Ship wt. 15lbs. (6.8kg)

H-3056.3F Accessories & Replacement Parts

Description	Model
Calibration Sand, Coarse, 125g	H-3056.2
Calibration Sand, Fine, 125g	H-3056.4
Fill Oil, 50ml	H-3056.5
Light Grease	H-3056.10
U-Shaped Tube for H-3056.3F	H-3056.6
Filter Papers, 12.8mm (1000)	H-3056.1
Measuring Cell and Plunger, 1.8cm ³	H-3056.11
Perforated Disc	H-3056.8
Tamper	H-3056.13

Blaine Apparatus



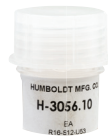
H-3058.3F



H-3059.3F



H-3056.5



H-3056.10



H-3058.5



H-3058.1

Electronic Blaine Apparatus, Dyckerhoff

The Electronic Blaine Apparatus, Dyckerhoff system is a semi-automatic device with pump and time registration for the rapid determination of specimen characteristics. This device is a semi-automatic cement air permeability tester used for the determination of the specific surface or Blaine value. Once the test material is set inside the chambers, the test procedure is able to measure the time for the user. Measuring cell dia. is 41 mm (1.6"). Volume of measuring cell is 73 cm³. Unit includes apparatus, measuring cell, filter papers ø41mm 500pk, fill oil 150ml, tamper and dust filter ø13mm.

Electronic Blaine Apparatus, Dyckerhoff H-3058.3F



Ship wt. 47lbs. (21.3kg)

PC-Controlled Blaine Apparatus, Dyckerhoff

The PC-controlled, electronic Blaine Apparatus, Dyckerhoff system provides an automatic test procedure and evaluation, complete with software, for one cell. Once the test material is set inside the chamber, the test procedure is able to measure the values for the user. This device provides quick test preparation, which does not require the operator to determine the weighed quantity, as precise as he would for the standard procedure. After test preparation, the device can perform the test automatically and the software records all information without need of supervision. Apparatus and software are able to measure the final result for the user. Measuring cell dia. is 41 mm (1.6"). Volume of measuring cell is approximately ca. 73cm³. Comes complete with apparatus, measuring cell, filter papers ø41mm 500pk, fill oil 150ml, tamper and dust filter ø13mm, software.

Does not include required PC.

PC-Controlled Apparatus, Dyckerhoff H-3059.3F



Ship wt. 47lbs. (21.3kg)

H-3058, H-3059 Accessories & Replacement

Description	Model
Calibration Sand, Coarse, 600g	H-3058.7
Calibration Sand, Fine, 600g	H-3058.8
Fill Oil, 150ml	H-3056.5
U-Shaped Tube for H-3059.3F or H-3058.3F	H-3058.6
Filter Papers, 41mm (500)	H-3056.10
Foam Plugs, Dust Filters (10)	H-3058.5
Precision Digital Gauge	H-3059.6
O-Ring for Measuring Cell	H-3058.2
Perforated Disk, ø40 x 1.5mm	H-3058.4