Tinius Olsen’s Automatic Blaine Apparatus is an automated version of Blaine apparatus and follows international standards. It is used to determine the fineness of cement using the Blaine air-permeability apparatus, in terms of specific surface expressed as total surface area in square centimetres per gram, or square metres per kilogram, of cement.

**APPLICABLE STANDARDS**
- ASTM C204, AASHTO T153, BS 4359, 4550, UNI 7374, EN196, NF P15 442, UNE 80.106

**STANDARD FEATURES**
- **TO-391-301** One Air Permeability Apparatus (Blaine type) consisting of one manometer tube mounted on a stand with sensor
- **TO-391-302-01** Data Acquisition System with vacuum pump fitted in a box at 110VAC, 60Hz
- **TO-391-302-02** Data Acquisition System with vacuum pump fitted in a box at 220VAC, 60Hz
- **TO-391-302-03** Data Acquisition System with vacuum pump fitted in a box at 220VAC, 50Hz
- **TO-39001** Permeability cell with plunger
- **TO-39003** Perforated metal disc
- **TO-39006** Rubber tube
- **TO-39007** Filter paper discs (set of 12)
- **TO-39008** Dibutylphthalate liquid
- **TO-39009** Punch
- **TO-39010** Non-perforated metal disc
- **TO-39011** Syringe fitted with nylon tube
- **TO-320-5529** RS232 cable

**OPTIONAL ACCESSORIES**
- **TO-39001** Permeability cell with plunger
- **TO-39003** Perforated metal disc
- **TO-39006** Rubber tube
- **TO-39007** Filter paper discs (set of 12)
- **TO-39008** Dibutylphthalate liquid

**Key features**
- Single touch operation.
- Automatic control of fluid movement.
- Automatic sensing to ensure error-free, repeatable, measurements.
- Automatic measurement of temperature during the test.
- Automatic formula correction for the calculation of the Blaine value with variation in temperature (as per ASTM and EN).
- Facility to configure and monitor various cement types.
- Timing accuracy up to 200msec.
- Storage of up to 10,000 data points.
- Easy, tamper-proof calibration using a lockable ball valve.

**ORDERING INFORMATION**

**BS/EN Standards**
- **TO 391-3-EN-01** Automatic Blaine apparatus with standalone data acquisition at 110VAC, 60Hz
- **TO 391-3-EN-02** Automatic Blaine apparatus with standalone data acquisition at 220VAC, 60Hz
- **TO 391-3-EN-03** Automatic Blaine apparatus with standalone data acquisition at 220VAC, 50Hz

**ASTM Standards:**
- **TO 391-3-ASTM-01** Automatic Blaine apparatus with standalone data acquisition at 110VAC, 60Hz
- **TO 391-3-ASTM-02** Automatic Blaine apparatus with standalone data acquisition at 220VAC, 60Hz
- **TO 391-3-ASTM-03** Automatic Blaine apparatus with standalone data acquisition at 220VAC, 50Hz

**PACKAGING INFORMATION**
- Net weight: 20kg; gross weight: 50kg
- Packaging dimensions: 76 x 53 x 84cm