

















IF IT'S WORTH BUILDING, IT'S WORTH TESTING

www.ele.com

Contents



83-4170/01 Muffle Furnace

38-0200/01 ELE Flame Photometer

38-1000 Blaine Air Permeability Apparatus

38-1200 Le Chatelier Flask

38-2695 Pocket Concrete Penetrometer

38-6000 Flow Table

38-2010 Vicat Frame

38-2015/01 Automatic Vicat Apparatus

38-3005 Le Chatelier Mould

38-3800/01 Autoclave

38-3420/01 Le Chatelier Water Bath

38-4600/01 Heat of Hydration Apparatus

38-4600/12

Beckman Thermometer and Reader Glass

38-7087 Air Entrainment Meter



Contents



38-7600 Spray Nozzle Apparatus

39-0035/01

Automatic/Manual 5 litre nominal capacity Mortar Mixer

39-1100 Three-gang Mould

39-1150/01

Jolting Table 220 - 240 V 50 Hz

39-0410 Three-gang Mould

39-1300/01 Humidity Cabinet to En196 320 Litre Capacity

39-7100/01

10kN Flexural/Tensile Testing Machine

39-6160/01

ADR-Auto V2.0 250/25 Cement Machine C/W Compression and Flexural Jigs and Platen Sets









Muffle Furnace

Code: 83-4170/01 Product Group: Furnaces, Loss-on-Ignition, Loss-on-Ignition

Standards

EN 196-2, EN 459-2, EN 13454-2, BS 1016-4, ISO 344, ISO 1171, ASTM D2361, ASTM D2795, ASTM D3714

Specification

External Dimensions (I x w x h)	545 x 385 x 400 mm
Work chamber dimensions (I $x w x h$)	300 x 200 x 120 mm
Internal volume	6.9 litres
Maximum temperature	1200 °C
Electrical supply	220 – 240 V AC, 50 - 60 Hz, 1 ph
Power supply	3500 W
Weight	130 kg





ELE Flame Photometer

Code: 38-0200/01 Product Group: ELE Flame Photometer

Special Note: The Flame Photometer requires a source of moisture-free air at 6 litres/minute at a pressure of 1 kg/cm². It also requires a fuel source for the flame and a regulator (see accessories).

Standards EN 196-21, ASTM C114, TEST 17

Further Information

NOT AVAILABLE FOR SALE IN THE USA

For 220-240 V AC, 50-60 Hz, 1 ph

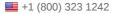
Specification

Dimensions (I x w x h) Readout Sensitivity Na K Ca Reproducibility

Recorder Output

Weight

420 x 360 x 300 mm LED three 12.5 mm digits 3 to 100 ppm 3 to 100 ppm 5 to 100 ppm (optional filter) 1% CV for 20 consecutive samples using 10 ppm, set to read 100 Nominal 1.00 V for a reading of 100.0 8 kg







Blaine Air Permeability Apparatus

Code: 38-1000 Product Group: Blaine Fineness Apparatus, Determination of Fineness Blaine Apparatus

Standards

EN 196-6, EN 459-2, EN 13286-44, BS 4359-2, ASTM C204, AASHTO T153

Specification

Cell

Disk

Plunger Manometer

Filter Paper Fluid Weight Stainless steel; 12.70 ± 0.10 mm i.d. 0.9 ± 0.1 mm thick with 30-40 one mm diam. holes. Stainless steel. U-tube glass with ground joint, stop cock and rubber bulb assembly. 12.70 mm diam. Pure Mineral Oil. Net 7 lbs. (3.2 kg).

Spares/Consumables









Blaine Air Permeability Cell

Code: 38-1000/15



Filter Paper

Code: 38-0652



Manometer U-tube

Code: 38-1000/10





Le Chatelier Flask

Code: 38-1200 Product Group: Specific Gravity (relative density) of Hydration Cement, Le Chatelier Flask

For determining the density of hydraulic cement and lime, supplied complete with calibration certificate. Capacity 250ml. Graduated from 0 to 1ml and from 18 to 24ml graduations. Accurate to 0.05ml.

Standards

EN 196-6, ASTM C128, ASTM C188, E 694, AASHTO T133

Specification

Graduations

Stopper Weight Zero mark represents 250 ml, the capacity of the large bulb; neck graduations from 0-1 ml in 0.1 ml divisions with two extra 0.1 ml graduations above the 1.0 and below the 0 marks; bulb portion of neck holds 17 ml; top portion of neck graduated from 18-24 ml in 0.1 ml divisions; 24 ml capacity. Ground glass. Net 8 oz. (227 g).





Pocket Concrete Penetrometer

Code: 38-2695 Product Group: Concrete Mortar Penetrometer, Concrete Mortar Penetrometer, Setting Time by Penetration Resistance

Supplied complete with belt-loop, canvas carrying case.

Standards ASTM C187, ASTM C191, ASTM C780

Specification

Needle

Range Scale

Dimensions

Carrying Case Weight Steel shaft; 1/20 sq. in. surface area. 0 to 700 psi. Direct-reading; indicator sleeve holds reading until released. 3/4" (19 mm) diam. x 7" (178 mm) long. Canvas, with belt-loop. Net 8 oz. (227 g).







Flow Table

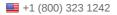
Code: 38-6000

Product Group: Flow and Workability of Mortar Lime

Manufactured from cast bronze as specified in BS and ASTM C230. Complete with Tripod and Baseplate.

Standards BS 4551-1, BS 3892-1, ASTM C230

Further Information





Vicat Frame

Code: 38-2010 Product Group: Vicat Method

Complete with consistency plunger, 10 mm diameter. Requires one initial or final set needle to make up test weight to 300g.

Standards EN 196-3, EN 13454-2, ASTM C187, ASTM C191

Further Information

NOT AVAILABLE FOR SALE IN THE USA

Spares/Consumables

Consistency Plunger

Code: 38-2010/10







Automatic Vicat Apparatus

Code: 38-2015/01 Product Group: Automatic Vicat

Complete with EN and ASTM Initial and Final needles, Consistency Plunger, Windows(R) software and RS232 cable, $1 \times EN$ and ASTM Mould and Glass Plate. Suitable for continuous use in saturated humidity, at a controlled temperature of $20^{\circ}C \pm 1^{\circ}C$.

Standards ASTM C187, ASTM C191

Further Information **NOT AVAILABLE FOR SALE IN THE USA**

For 220 - 240 V AC, 50 - 60 Hz, 1 ph.

Spares/Consumables



ASTM Initial and Final Set Needle

Code: 38-2023



Consistency Plunger Code: 38-2015/16









EN Initial and Final Set Needle

Code: 38-2021





Le Chatelier Mould

Code: 38-3005

Product Group: General Expansion of Dry Hydrated Lime by the Le Chatelier Method, Soundness of Cement Paste by the Le Chatelier Method, Soundness

Comprising a split cylinder fitted with two indicator stems. The mould is supplied complete with two glass plates and a weight 100 g \pm 10 g. Three moulds required for each test.

Standards BS 6463, EN 196-3, EN 459-2

Further Information





Autoclave

Code: 38-3800/01

Product Group: Soundness of Portland Cement by the Autoclave Method

The autoclave provides high pressure steam curing of the specimens and is supplied with a safety valve pressure gauge and controlled heater unit. The pressure vessel is independently certified and certificated. A specimen rack with capacity for 12 specimens included. The unit conforms to the requirements of ASTM C151.

220-240 V 50/60 Hz 1ph

Standards ASTM C151

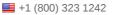
Further Information **NOT AVAILABLE FOR SALE IN THE USA**

Spares/Consumables



Lid Sealing Gasket

Code: 38-3800/13





Le Chatelier Water Bath

Code: 38-3420/01 Product Group: Soundness of Cement Paste by the Le Chatelier Method, Soundness

Manufactured from corrosion resistant material, complete with a removable rack to hold up to twelve moulds and timer unit.

Further Information **NOT AVAILABLE FOR SALE IN THE USA**



www.ele.com +44 (0) 01525 249 200





Heat of Hydration Apparatus

Code: 38-4600/01 Product Group: Heat of Hydration Cement For 220 - 240 V AC, 50 Hz, 1 ph.

Standards BS 4550

Further Information

NOT AVAILABLE FOR SALE IN THE USA

Spares/Consumables



Beckman Thermometer and Reader Glass Code: 38-4600/12



Dewar Flask Code: 38-4600/10



Glass Paddle for Stirrer

Code: 38-4600/13





Beckman Thermometer and Reader Glass

Code: 38-4600/12 Product Group: Heat of Hydration Cement Spare: range 6°C ± 0.01°C

Standards BS 4550

Further Information





Air Entrainment Meter

Code: 38-7087 Product Group: Air Content of Mortar, Masonry Cement and Lime by the Pressure Method

0.75 litre capacity, complete with integral pump.

Standards EN 413-2, BS 459-2

Further Information





Spray Nozzle Apparatus

Code: 38-7600 Product Group: Fineness of Fly Ash (Wet Sieving)

Comprising a spray nozzle 17.5 mm ID with 17 holes as specified in EN451, a vacuum pressure gauge, 160 kPa graduated at 5 kPa divisions and fittings to attach the apparatus to a standard domestic water supply. Supplied without sieve.

Standards BS 3892-1, EN 451-2, ASTM C430

Further Information







Automatic/Manual 5 litre nominal capacity Mortar Mixer

Code: 39-0035/01

Product Group: Automatic/Manual 5 Litre Nominal Capacity Mortar Mixer

- New Microprocessor control
- New mix program selector
- Complies with latest EN Standards update
- Choice of automatic mixing cycles
- Sand and water dispenser supplied as standard

This mixer is designed to mix mortars and cement pastes to the requirements of the above Standards. The mixing paddle has a planetary motion and is driven by a motor with a microprocessor based speed and program controller. The mixer can be operated either in an automatic or manual mode. When the mixer is used in the manual mode, the two mixing speeds can be changed by means of a rocker switch, without switching off the motor. In the automatic mode any one of the preset mixing programs may be selected.

Standards

EN 196-1, EN 196-3, EN 413-2, EN 459-2, EN 1744-1, EN 13279-2, EN 1015-2, EN 13395-1, EN 13454-2, ISO 679, BS 3892-1, BS 3892-3, BS 6463-103, BS 4551-1

Further Information

NOT AVAILABLE FOR SALE IN THE USA

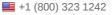
Complete with bowl and paddle, sand and Water dispensers. For 220 - 240 V AC, 50 - 60 Hz, 1 ph.

Specification

Dimensions (I x w x h) Speeds (rpm) Low, High

Rated Power Bowl Capacity Weight 530 x 350 x 580 mm Paddle: 140 ± 5, 285 ± 10 Mixing Head: 62 ± 5, 125 ± 10 180 W 5 litres approx. 54 kg

Spares/Consumables











Bowl

Code: 39-0031/11

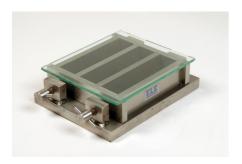


Paddle

Code: 39-0031/10







Three-gang Mould

Code: 39-1100 Product Group: Moulding of Prisms

For $40.1 \times 40 \times 160$ mm mortar prisms. This mould is manufactured to a very high specification. Supplied with glass plate.

Standards

EN 196-1, EN 413-2, EN 459-2, EN 1015-10, EN 13454-2, ISO 679, BS 3892-1, BS 4551-1

Further Information **NOT AVAILABLE FOR SALE IN THE USA**

Spares/Consumables



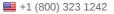
Glass Plate

Code: 39-1100/10



Mortar Sand

Code: 39-1170









Jolting Table 220 - 240 V 50 Hz

Code: 39-1150/01 Product Group: Jolting Table Supplied without moulds.

Standards

EN 196-1, EN 413-2, EN 459-2, EN 1744-1, EN 1015-10, EN 1015-11, EN 13454-2, ISO 679, BS 3892-1, BS 4551-1

Further Information **NOT AVAILABLE FOR SALE IN THE USA**

Spares/Consumables



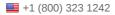
Mortar Sand

Code: 39-1170



Scraper

Code: 39-1130







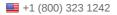
Three-gang Mould

Code: 39-0410 Product Group: Moulding of 50 mm and 100 mm Specimens

For 50mm mortar cubes. Manufactured from cast iron with simple cube release mechanism.

Standards BS 1881-131, ASTM C109

Further Information







Humidity Cabinet to En196 320 Litre Capacity

Code: 39-1300/01 Product Group: Humidity Cabinet BS EN, Prism Moulds and Inserts

For 220 - 240 V AC, 50 Hz, 1 ph.

Standards

EN 196-1, EN 459-2, BS 3892-1

Further Information

NOT AVAILABLE FOR SALE IN THE USA

10 Reinforced Shelves and Circular Chart Recorder

Specification

Capacity	320 litres
Dimensions External, Internal	660 x 635 x 1745 mm,
	490 x 510 x 1275 mm
Temperature Range	+5.0°C to +60°C
Fluctuation (better than)	± 0.2°C
Variation (better than)	± 0.5°C
Recorder:	7 day,
Circular chart type,	0 – 50°C,
Temperature,	0 – 100% RH
Humidity	
Rated power	850 Watt
Number of shelves	10



ELE

Weight

200 kg

Spares/Consumables



Replacement Circular Charts

Code: 39-1300/10





10kN Flexural/Tensile Testing Machine

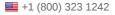
Code: 39-7100/01 Product Group: 10 kN Flexural/ Tensile Testing Machine

This single lever machine is designed for flexural tests on 40.1 x 40 x 160 mm mortar prisms and tensile tests on mortar briquettes. The rate of applied loading for flexural testing is to EN196-1. Load is applied by a weight travelling along the beam at a constant rate, driven by a motor/gearbox. Readings are made by means of a cursor visible through a window in the moving weight. Failure of a specimen triggers a switch mechanism and brings the weight to a halt immediately. To prevent overloading, a sensor is incorporated in the weight and automatically stops the machine at its maximum capacity of 10 kN. Supplied complete with flexural and tensile jaws.

Standards EN 196-1

Further Information **NOT AVAILABLE FOR SALE IN THE USA**

For 220 - 240 V AC, 50 Hz, 1 ph.





ADR-Auto V2.0 250/25 Cement Machine C/W Compression and Flexural Jigs and Platen Sets

Code: 39-6160/01

Product Group: ADR-Auto V2.0 250/25 Compression Machine, Activity Index

- 250 kN maximum capacity
- Calibration accuracy to BS EN ISO 7500-1; ASTM E4
- Automatic loading cycle
- 25 kN low capacity frame supplied as standard
- Tests a wide variety of specimen sizes
- · Tests mortar, lime, cement and Fly Ash
- Complete with compression/flexural jigs and platen sets

• Supplied with Windows(R) download software as standard

The ADR-Auto 250/25 Machine provides consistent automatic testing of a wide range of specimens. The machine comprises a standard ELE 250/25 kN load frame and ADR-Auto console and incorporates all the features included in the ADR-Auto series concrete testing machines.

As standard the machine is supplied with platens fitted to the load frame, compression jig with 40 mm and 50mm/2 inch square platen sets and flexural jig for testing $40.1 \times 40 \times 160$ mm prisms.

The availability of the 25 kN low capacity load frame as standard extends the test capability of the machine for low strength compression or flexural testing. The automatic loading cycle is controlled by a closedloop microprocessor hydraulic system incorporated with the display in the ADR-Auto console attached to the load frame. A serial output port is built into the system, enabling test data to be stored in memory (up to 500 test results) for subsequent downloading to PC or suitable printer.

Standards

EN 196-1, EN 459-2, EN 1744, EN 1015-11, EN 13454-2, BS 3892-1, BS 4551-1, ASTM C109

Further Information

NOT AVAILABLE FOR SALE IN THE USA

For 220 - 240 V AC, 50 Hz, 1 ph.

