



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

This wishlist was generated on 25/08/2017, and contains the following Products:

2420E

Laboratory CBR, Hand Operated (English)

29-3720

Dynamic Cone Penetrometer 8Kg Hammer (Trl Design).

42-4000

Aggregate Impact Value Apparatus Complete with 16mm Dia X 600mm Long Rod

42-1000/01

Buoyancy Balance 6Kg X 0.1G. Supplied with Support Frame Water Tank & Suspension Hook.

42-4300

150mm Aggregate Crushing Value Apparatus. Supplied Complete with Metal Measure and Tamping Rod.

42-1725

Sand Absorption Cone and Tamper

47-5175

Compact Core Drill

42-5310/01

Los Angeles Abrasion Machine with CE Safety Cabinet W/ Microswitches. 220-240V 50Hz 1Ph.

80-0200/01

ELE Sieve Shaker

46-4605

BS/EN Ring and Ball Apparatus

45-6810/01

Marshall Test 50

46-5295/01

Semi-Automatic Penetrometer

46-4120

Ductility Testing Machine

46-5500/01

Constant Temperature Bath 21 - 56°C

46-4150/01

Rolling Thin-Film Oven 220-240V 50/60 Hz

82-7720/01

Vacuum Pump

46-5290

Standard Penetrometer

88-6302

Glass Specific Gravity Bottle - 50 ml Capacity

45-3825/02

Centrifuge Extractor 3,000 g

24-9260

Swell Plate



Laboratory CBR, Hand Operated (English)

Code: [2420E](#)

Product Group: [Laboratory CBR, Hand-Operated](#)

Set includes:

- EI24-9345. CBR Loading Press x 1
- EI78-0860. Proving Ring, 11,200 lb. x 1
- EI88-4100. Penetration Dial Indicator x 1
- EI24-9229. CBR Molds x 4
- EI24-9238. Spacer Disc x 1
- EI24-9240. Filter Screens x 4
- EI24-9250.Box, Filter Paper x 1
- EI24-9260. Swell Plates x 2
- EI24-9262. Tripod Attachment x 1
- EI88-4100. Dial Indicator x 1
- EI24-9245. Surcharge Weights x 4
- EI24-9244. Slotted Surcharge Weights x 4
- EI24-9063. Compaction Hammer x 1
- EI24-9010. Straightedge x 1
- EI24-9236. Cutting Edge x 1

Standards

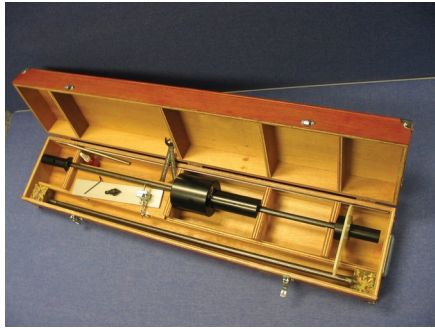
ASTM D1883, AASHTO T193

Alternatives



Laboratory CBR, Hand Operated (Metric)

Code: [2421E](#)



Dynamic Cone Penetrometer 8Kg Hammer (Trl Design).

Code: [29-3720](#)

Product Group: [In-situ Testing](#)

The TRL (Transport Research Laboratory) Dynamic Cone Penetrometer (DCP) is used for rapid in-situ measurement of the structural properties of existing road pavement constructed with unbound materials. The unit incorporates an 8 kg weight with a drop of 575 mm, and a 20 mm diameter cone fitted to the end of the shaft, allowing measurements to be made down to a depth of approximately 850 mm.

Readings are usually taken after a set number of blows, changing the number according to the strength of the layer being penetrated. For good granular bases, readings every five to ten blows are satisfactory, but for weaker sub-base layers and subgrades, readings every one to two blows may be appropriate.

The DCP requires three operators, one to hold the instrument in a vertical position, one to raise the hammer and let it fall and one to record the results. A typical test takes only a few minutes, providing a very efficient method of obtaining information which would otherwise require the excavation of test pits. Where pavement layers have different strengths, boundaries can be identified and layer thickness determined.

Further Information

Supplied complete with all necessary tools, assembly and operating instructions.

Spares/Consumables



Spare Cone for Dynamic Cone Penetrometer.

Code: [29-3720/10](#)



Aggregate Impact Value Apparatus Complete with 16mm Dia X 600mm Long Rod

Code: 42-4000

Product Group: Aggregate Impact Value (AIV)

Heavy duty construction, heavily plated assembly
ensures corrosion resistance.

Standards

BS 812-112

Further Information

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



Buoyancy Balance 6Kg X 0.1G. Supplied with Support Frame Water Tank & Suspension Hook.

Code: [42-1000/01](#)

Product Group: [Particle Density \(specific gravity\) and Water Absorption for Coarse Aggregates](#)

The buoyancy balance system developed by ELE consists of a rigid support frame, incorporating a water tank mounted on a platform. A mechanical lifting device is used to raise the water tank through the frame height immersing the specimen suspended below the balance. The balance supplied may also be used as a standard weighing device, thus providing a versatile and comprehensive weighing system in the laboratory. 6000 g x 0.1 g supplied with frame, water tank and suspension hook.

Standards

EN 1097-6, EN 12697-6, BS 812, ASTM C127, AASHTO T85

Further Information

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

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

Accessories



200 mm Diameter Lid

Code: [79-0010](#)



200 mm Diameter Receiver

Code: [79-0020](#)



200mm Dia BS Sieve 31.5mm Perforated Plate.

Code: [79-1630](#)



200mm Dia BS Sieve 4.00mm Stainless Steel Mesh.

Code: [79-0310](#)



200mm Dia BS Sieve 63 Mic Stainless Steel Mesh.

Code: [79-0070](#)



200mm Dia BS Sieve 63.0mm Perforated Plate.

Code: [79-1670](#)



Digital Pocket Thermometer

Code: [82-5420](#)



Sample Container - Tinned Steel 10 litres

Code: [81-3060](#)



Sample Tray - 406 x 406 x 50 mm

Code: [81-4030](#)



Wire Basket Brass with Handle Nominal 6000Cm³ Capacity with 1.7mm Wire Mesh.

Code: [42-1005](#)



150mm Aggregate Crushing Value Apparatus. Supplied Complete with Metal Measure and Tamping Rod.

Code: 42-4300

Product Group: [Aggregate Crushing Value \(ACV\) and Ten Percent Fines Value \(TFV\)](#)

Comprising of 150 mm nominal diameter steel cylinder, plunger and base plate supplied complete with metal measure and tamping rod.

Standards

BS 812-112

Further Information

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

Accessories



Tamping Rod 16mm Dia X 600mm long hemispherical at both ends.

Code: 34-0130

Alternatives



75mm Aggregate Crushing Value Apparatus. Supplied Complete with Metal Measure and Tamping Rod.

Code: 42-4500



Sand Absorption Cone and Tamper

Code: [42-1725](#)

Product Group: [Sand Absorption Cone and Tamper](#)

Standards

ASTM C128, AASHTO T84

Specification

Mold

Brass; 40 mm top diam. x 90 mm base diam. x 75 mm h.

Tamper

Steel; 1 1/4" diam. working face x 6-5/8" l. (25.4 x 168 mm); 12 oz. (340 g) weight.

Weight

Net 1 lb. (453 g).

Accessories

Tamping Rod.

Code: [42-1720](#)



Alternatives

Sand Absorption Cone.

Code: [42-1700](#)





Compact Core Drill

Code: 47-5175

Product Group: Compact Core Drill Machine

This compact and portable core drilling machine is designed to cut cores up to 150 mm diameter from concrete, asphalt and similar hard construction material.

The machine comprises a vertical support column which carries the drill head/motor assembly.

An integral water swivel is built into the drill head providing a 12 mm connection to an external water supply via 12 mm flexible hose (not supplied). The motor assembly comprises a 4 hp, 2-stroke petrol engine. Speeds of 800 rpm or 1200 rpm may be selected. A ball screw mechanism enables close control over drilling pressure and rapid return when drilling is completed.

The complete assembly is supplied on a rigid metal base frame with levelling facility and is suitable for vertically down drilling applications only.

Standards

EN 12697-32, EN 13280-4, BS 598-104

Further Information

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

Special Note: Requires a continuous clean water supply via a 12 mm flexible hose (not supplied).



Los Angeles Abrasion Machine with CE Safety Cabinet W/ Microswitches. 220-240V 50Hz 1Ph.

Code: [42-5310/01](#)

Product Group: [Los Angeles Abrasion Machine](#)

The machine consists of a closed hollow cylindrical steel drum rotating around its horizontal axis on ball bearing units mounted on a sturdy base framework. Also the full enclosure ensures noise is minimized.

The drum is driven at a speed of between 30 - 33 rpm via an enclosed belt drive arrangement from an electric motor/gearbox unit situated on the base frame. Inside the drum a full length steel shelf is attached, accessed by a dust-proof opening.

The cylinder incorporates a removable internal shelf, one shelf position is provided to meet the requirements of both the ASTM and EN test standards.

Controls are located easily on the right-hand side of the machine at convenient operator height.

Start and stop push buttons and a subtracting revolution counter allows the user to preset the number of revolutions before an automatic stop.

Standards

EN 1097-2, ASTM C131, ASTM C535, NF P18-573

Further Information

NOT AVAILABLE FOR SALE IN THE USA

Accessories

Set of 12 Abrasive Charges (ASTM).

Code: [42-5300/10](#)



Set of 12 Abrasive Charges EN)

Code: [42-5305/10](#)



Alternatives



Los Angeles Abrasion Machine Meets ASTM and European Standards. 220-240V 50Hz 1Ph.

Code: [42-5305/01](#)



ELE Sieve Shaker

Code: [80-0200/01](#)

Product Group: [ELE Sieve Shaker](#)

The ELE sieve shaker is powered by an electromagnetic drive that has no rotating parts to wear making it maintenance free and extremely quiet in operation.

The unit features a triple Vertical-Lateral-Rotary vibrating action that moves the sample over the sieve producing faster more efficient sieving, while the rapid vertical movements also help keep the apertures from blinding.

The shaker is ideal for laboratory or on site use. It is robust, compact and sufficiently lightweight to be portable. The separate digital microprocessor controlled console unit incorporates a keypad for setting the sieving program and is isolated from any effects of vibration from the shaker.

As standard the shaker includes, timer 0-999 minutes, adjustable vibration intensity and adjustable intermittent or continuous operation.

Further Information

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

The unit accepts up to ten 200 mm or 8 inch, full height, diameter sieves and lid and receiver, or up to six 300 mm or 12 inch diameter sieves and lid and receiver. Complete as specified. Dimensions (l x w x h) 380 x 440 x 1085 mm. For 220 - 240 V AC, 50 Hz 1ph.



BS/EN Ring and Ball Apparatus

Code: [46-4605](#)

Product Group: [Ring and Ball Apparatus](#)

With 2 shouldered pattern rings, 2 ball-centring guides and 2 balls. The apparatus has a support frame and is retained in a heat resistant container.

Standards

EN 1427, BS 2000-58, UNI 4161, UNE 7111, DIN 52011, NFT66-008, AASHTO T53, ASTM D36, BS 2000

Further Information

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

Accessories



Electrical Hotplate with Integral Magnetic Stirrer

Code: [46-4825/01](#)



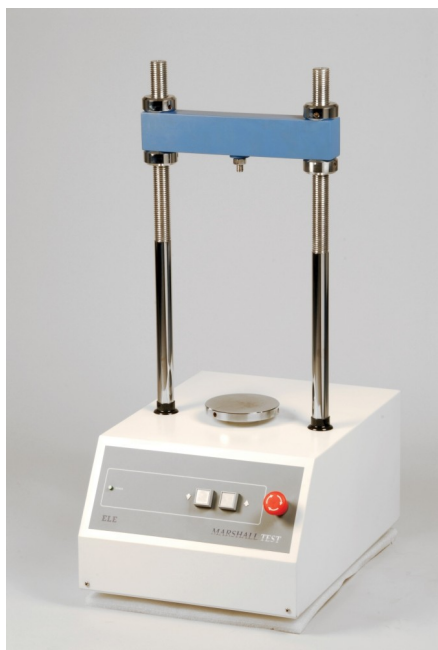
Thermometer

Code: [82-5272](#)



Thermometer

Code: [82-5274](#)



Marshall Test 50

Code: [45-6810/01](#)

Product Group: [Marshall Load Frames](#)

- Geared screwjack and motor drive
- Precise speed
- Internal limit switch for both directions of travel
- Easy to use controls

This bench-mounting mechanical load frame is ruggedly constructed to encompass the strain and loads involved with the test. The unit is compact in size and can be quickly installed on a bench top, requiring only a power point. It has been designed for simple operation, is easy to clean and requires minimum maintenance.

Standards

EN 12697-34

Further Information

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

Load frame, 50 kN capacity. Supplied without Breaking Head. For 220 - 240 V AC, 50 Hz, 1 ph.

Accessories



250 Asphalt Probe

Code: [47-0202/10](#)



30 L Heating Bath with Led Display Cover

Code: [45-6550/01](#)



50kN Clamped Boss Load Ring

Code: 78-0860



50kN S-type Load Cell

Code: 27-1559



Breaking Head (Marshall)

Code: 45-6850



Flow Meter BS/EN

Code: 45-6880

Alternatives



Digital Asphalt Thermometer

Code: 47-0202



DSU Electronic Readout and Control System 110 V AC 60 Hz

Code: 27-1300/02



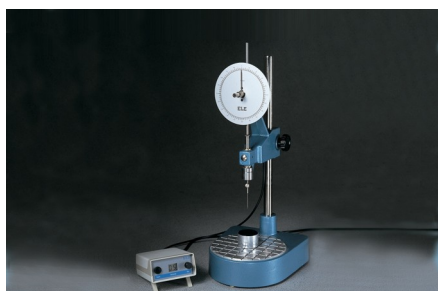
DSU Electronic Readout and Control System 220 - 240 V AC 50/60 Hz

Code: [27-1300/01](#)



Proctor/Core Cutter Extruder Frame and Hydraulic Jack. Extrudes 100mm/4 Inch Diameter Specimens

Code: [23-4200](#)



Semi-Automatic Penetrometer

Code: [46-5295/01](#)

Product Group: [Penetration Test](#)

As 46-5290 but incorporates Digital Automatic Controller which releases the needle assembly. The time set is displayed by a bright, easy to read display.

Standards

BS 2000-49, EN 1426, EN 13179-2, ASTM D5, AASHTO T49, IP 49

Further Information

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

Accessories



Constant Temperature Bath 21 - 56°C

Code: [46-5500/01](#)



Penetration Needle

Code: [46-5340/C](#)



Penetration Needle

Code: [46-5360/10](#)



Penetration Tin

Code: [46-5861](#)



Transfer Dish

Code: [46-5800](#)

Spares/Consumables



ASTM (Non-Certified) Penetration Needle

Code: [46-5290/10](#)



Ductility Testing Machine

Code: 46-4120

Product Group: Ductility Testing

The Ductility Testing Machine is used to determine the ductility of bituminous materials in a briquette mould by measuring the breaking elongation at a constant speed of 50 mm/min. It is designed for testing 3 specimens simultaneously. The Internal tank is made of stainless steel. The bath is fitted with an immersion heater in order to obtain (in normal conditions), the 25°C test temperature.

The Ductility Testing Machine comprises of speed control and water circulator to maintain the homogenous water temperature.

Elongation measurement through the motor encoder.

3 simultaneous load measurements with 18-bit resolution.

Speed control with servo AC motor between 0.01 to 100 mm/min.

Ethernet connection for computer interface.

Has 3 load cells with an accuracy of $\pm 0.1N$, with a maximum capacity of 300 N.

Failure conditions can be downloaded to the unit.

Complies with EN13398, ASTM D113, ASTM D6084 and AASHTO T51 standards.

Specification

Dimensions	300 x 1850 x 550 mm
Weight	80kg
Watts	1000 W
Power supply	220V 50-60Hz 1Ph



Constant Temperature Bath 21 - 56°C

Code: [46-5500/01](#)

Product Group: [Penetration Test](#)

A bench mounting bath specially designed for the conditioning of bitumen samples prior to penetration tests. Incorporating a highly accurate thermostat, the bath maintains a temperature between 21 and 56°C \pm 0.1°C (at ambient). An integral cover and deep tray for penetration testing are supplied as standard.

Further Information

Not available for sale in the USA



Rolling Thin-Film Oven 220-240V 50/60 Hz

Code: 46-4150/01

Product Group: [Asphalt and Bitumen Ovens](#)

The Rolling Thin-Film Oven (RTFO) procedure provides simulated short term aged asphalt binder for physical property testing. Asphalt binder is exposed to elevated temperatures to simulate manufacturing and placement ageing. The RTFO also provides a quantitative measure of the volatiles lost during the ageing process.

The exterior is constructed from sheet steel finished in an easy clean powder coated paint and the interior chamber is made from stainless steel.

The control system comprises of a microprocessor digital controller and overheat thermostat with calibrated scale and tamper-proof lock.

Further Information

- Complies to the requirements of ASTM D2872
- Internal dimensions (mm): 380 high x 480 wide x 440 deep
- External dimensions (mm): 800 high x 710 wide x 660 deep (add 40mm for door handle)
- Double wall construction with high density thermal insulation
- Non-rusting grade 304 stainless steel interior
- Easy clean powder painted steel exterior in light grey (RAL 7035) textured finish
- Top mounted fan constructed with an air plenum as described in ASTM D2872
- Fitted with a squirrel-type fan blade for better uniformity of air and temperature distribution
- Equipped with air jet for blowing heating air into each bottle at its lowest point of travel
- Base mounted elements
- Vented to atmosphere
- Single front opening, side hinged door with positive quarter turn latching mechanism
- Double glazed window in door for viewing the test chamber

Top mounted controls comprise:

- Dual display microprocessor digital control
- Independent overheat thermostat
- Mains switch
- Flow meter to control air flow
- Indicator lamps
- 1500 watts
- Supplied with built-in 305mm diameter vertical circulator carriage for 8 sample containers
- Glass samples rotate at 15 rpm \pm 0.2rpm (glass containers supplied separately)
- Temperature is controlled and pre-set at 163°C \pm 1°C

Specification

Max Temp (°C)	163°C \pm 1°C (preset)
Dimensions: Internal (HxWxD)	380 x 480 x 440 mm

Product Sheet

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



Dimensions: External (HxWxD)	800 x 710 x 660 mm
Insulation	Double wall
Internal material	304 stainless steel
Max power (W)	1500



Vacuum Pump

Code: [82-7720/01](#)

Product Group: [Vacuum Pumps](#)

Further Information

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

Specification

Type	Single stage
Pump	Oil filled rotary
Ultimate vacuum	Better than 0.1 mbar
Displacement	42 litres per minute (2.4 m ³ /hour)
Electrical supply	220 – 240 V AC, 50 - 60 Hz, 1 ph
Weight	12.7 kg



Standard Penetrometer

Code: 46-5290

Product Group: [Asphalt Penetrometer](#), [Bitumen Penetration Test](#), [Penetration Test](#)

Penetration readings are quickly taken using this simple to operate apparatus. The 150 mm diameter dial is graduated in 400 divisions of 0.1 mm. Supplied without needles and penetration tins.

Standards

BS 2000-49, EN 1426, EN 13179-2, IP 49, ASTM D5, AASHTO T49

Further Information

Model shown with sample container; not included, order separately.

Specification

Dial Indicator	6" (150 mm) diam.; 400 mm x 0.1 mm.
Plunger Weight	47.5 g.
Needle	ASTM Style (non-certified); one included.
Plunger Release Weight	Manual mechanism. Net 18 lbs. (8.2 kg).

Accessories



ASTM (NIST Certified) Penetration Needle

Code: 46-5297



Constant Temperature Bath 21 - 56°C

Code: 46-5500/01



Penetration Needle

Code: [46-5360/10](#)



Penetration Tin

Code: [46-5861](#)



Penetration Tin

Code: [46-5860](#)



Transfer Dish

Code: [46-5800](#)

Spares/Consumables



ASTM (Non-Certified) Penetration Needle

Code: [46-5290/10](#)



Glass Specific Gravity Bottle - 50 ml Capacity

Code: 88-6302

Product Group: Glass Specific Gravity Bottles

Alternatives



Glass Specific Gravity Bottle - 100 ml Capacity

Code: 88-6304



Glass Specific Gravity Bottle - 25 ml Capacity

Code: 88-6300



Glass Specific Gravity Bottle - 250 ml Capacity

Code: 88-6306



Centrifuge Extractor 3,000 g

Code: 45-3825/02
Product Group: Asphalt Centrifuge Extractors

Standards

ASTM D2172, AASHTO T164

Further Information

120vAC, 60 Hz, 1Ø.

Specification

Control	Variable speed, 0-3,600 rpm; brake for fast stopping.
Motor	1/6 h.p.
Cover	Aluminum; removable, with integral cup for adding solvent.
Housing	Aluminum; removable, sealed.
Bowl	Aluminum; removable.
Filter Discs	10 included.
Dimensions	18" w. x 18" d. x 19" h. (457 x 457 x 483 mm).
Weight	Net 140 lbs. (63.5 kg).

Accessories



Biodegradable Solvent

Code: 45-3845

Alternatives



Centrifuge Extractor 1,500 g

Code: [45-3820/02](#)



Swell Plate

Code: [24-9260](#)

Product Group: [Expansion \(swell\) Test Equipment, Swell Plate](#)

With adjustable stem.

Standards

ASTM D1883, AASHTO T193

Specification

Base Plate	5 15/16" diam. (150.8mm); perforated.
Contact Head	Adjustable; locks on stem with knurled nut.
Construction	Aluminium
Weight	Net 2-1/2 lbs. (1.1 kg).