



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

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**100 Litre Drying Oven**

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## Asphalt Binder Analyser 220-240V 50/60 Hz

Code: 46-6100/01

Product Group: Ignition Method

Designed to measure the asphalt binder content of hot mix asphalt (HMA) using loss on ignition, in accordance with AASHTO T 308-10, ASTM D6307-10 and BSEN 12697-39:2012.

### Further Information

The integral microprocessor controlled weighing and calculation system is configurable to allow variations to the standard test method. Test result reports are available in both printed and software format. The high temperature afterburner minimises the production of noxious waste fumes. Supplied complete with 2 sets of sample baskets.

#### Features:

- Designed to measure asphalt binder content by loss on ignition
- Avoids health, environmental and waste management issues
- Avoids the expense associated with older solvent extraction methods
- Reduced emissions due to high temperature afterburner
- Controlled via a multi-lingual touchscreen interface
- English, Spanish, French, Chinese, Italian and Russian language display
- Other languages are available to order
- Automatic calculation of final sample weight and binder % result
- Adjustable aggregate correction factor
- Average test times from 20 mins for 6 mm aggregates, to 45 mins for 40 mm aggregates
- Permanent (dot-matrix) printed reports
- USB data output compatible with most spread sheets
- Easy naming, storage and recall of recipes that can be transferred between units
- Simplified menu structure with secure 'Supervisor' and 'Operator' settings
- Metal waste gas extraction pipe
- Factory fitted thermocouple access port, if temperature calibration is to be carried out
- Precise weight measurements, displayed to 0.1g resolution
- Capacity for large sample sizes for more accurate results (max. sample is 4.5kg)

### Specification

Max Temp (°C)	750
Dimensions: Internal (HxWxD)	220 x 450 x 350 mm
Dimensions: External (HxWxD)	980 x 600 x 775 mm

# Product Sheet

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Type  
Thermocouple type  
Max power (W)

Bench-top  
K  
8000



## Rotatest 3000

Code: [45-3815/01](#)

Product Group: [Asphalt Centrifuge Extractors](#)

Centrifuge extractor used to determine the quantitative amount of bitumen in bituminous paving mixtures. Variable speed control from 0 to 3600 rpm through the front panel mounted control knob and brake control included for rapid deceleration.

Precision machined aluminium removable cover with integral cup for adding solvent, with sealed cast aluminium housing.

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

## Standards

EN 12697-1, ASTM D2172, AASHTO T164

## Further Information

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

3000 g capacity. Supplied with 100 Filter Discs. For 220 V AC, 50 - 60 Hz, 1ph.

## Accessories



### Bowl - 2.5 litre

Code: [81-5020](#)



### Desiccator - Non-vacuum

Code: [82-2100](#)





## Evaporating Dish - 100 x 40 mm

Code: [82-1970](#)



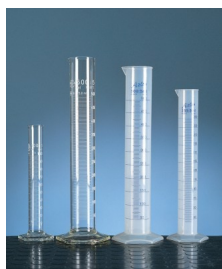
## Filter Discs Pack of 100

Code: [45-3807](#)



## Hotplate

Code: [78-2950/01](#)



## Measuring Cylinder - Glass 100 ml

Code: [82-0380](#)



## Measuring Cylinder - Glass 1000 ml

Code: [82-0500](#)



## Sample Tray - 306 x 306 x 38 mm

Code: [81-4020](#)

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## Silica Gel

Code: [82-7091](#)

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## Volumetric Flask - 100 ml

Code: [82-1000](#)

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## Volumetric Flask - 1000 ml

Code: [82-1060](#)

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## Alternatives



## Muffle Furnace

Code: [83-4170/01](#)

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# Product Sheet

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## Rotatest 1500

Code: [45-3810/01](#)



## Replacement bowl for Rotatest 3000 centrifuge extractor

Code: [45-3815/10](#)

Product Group: [Asphalt Centrifuge Extractors](#)

Holds 3000 g.

### Further Information

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



## Filter Discs Pack of 100

Code: [45-3807](#)

Product Group: [Asphalt Centrifuge Extractors](#)

295 mm internal diameter with a 44 mm diameter hole.

## Standards

EN 12697-1, ASTM D2172, AASHTO T164

## Further Information

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



## Cleveland Flash Cup Apparatus

Code: 46-3310/01

Product Group: [Cleveland Flash Cup Apparatus](#)

The ELE Semi-Automatic Cleveland Open Cup flashpoint Tester is equipped with an electrically heated cup (with a variable control to set temperature rise rate), a button operated and electrically driven sweep arm and a test flame for use on natural gas. Bench mounted, the unit is incorporated in an easy to clean stainless steel case.

## Standards

BS 2000-36, EN ISO 2592, ASTM D92, IP 36

## Further Information

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

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

## Specification

Temperature Range	Ambient to 400°C
Power	500 W maximum
Ramp rate	Variable, manually controlled
Voltage	220/240 V, 50/60 Hz
Size (HxWxD)	33 x 31 x 29 cm
Weight	6.5 kg



## Hubbard-Carmick Specific Gravity Bottle

Code: 46-2190

Product Group: [Hubbard-Carmick Specific Gravity Bottles](#)

Conical type 25 ml.

## Standards

ISO 3838, BS 4699, ASTM D70, AASHTO T228

## Further Information

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



## Hubbard-Carmick Specific Gravity Bottle

Code: [46-2191](#)

Product Group: [Hubbard-Carmick Specific Gravity Bottles](#)

Cylindrical type 24 ml.

## Standards

ISO 3838, BS 4699, ASTM D70, AASHTO T228

## Further Information

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





## 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](#)



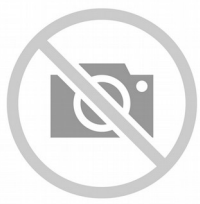
### Penetration Needle

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



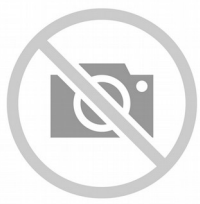
### Penetration Needle

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



## Penetration Tin

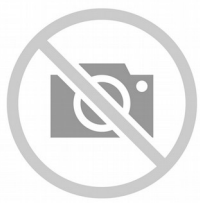
Code: [46-5861](#)



## Transfer Dish

Code: [46-5800](#)

## Spares/Consumables



## ASTM (Non-Certified) Penetration Needle

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



## Penetration Needle

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

Product Group: [Penetration Test](#)

Hardened steel.

## Standards

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

## Further Information

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



## Penetration Needle

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

Product Group: [Penetration Test](#)

Hardened steel, supplied with an UKAS verification certificate. For testing to BS 2000-49 and ASTM D5. (Pack contains 1 needle only).

## Standards

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

## Further Information

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



## Penetration Tin

Code: [46-5861](#)

Product Group: [Penetration Test](#)

For penetrations below 200, approximately 55 mm diameter x 35 mm deep.

## Standards

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

## Further Information

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



## Transfer Dish

Code: [46-5800](#)

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

For use with ELE Penetrometer 46-5295.

## Standards

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



## Penetration Tin

Code: [46-5860](#)

Product Group: [Penetration Test](#)

For penetrations between 200 and 350,  
approximately 70 mm diameter x 45 mm deep.

## Standards

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

## Further Information

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



## Thermometer

Code: [82-5272](#)

Product Group: [Ring and Ball Apparatus, Non Hazardous Glass Thermometers](#)

Mercury-free with a range of -10.0°C to + 210.0°C and graduated every 1°C. Immersion up to 76 mm

## Standards

EN 1427, BS 2000-58

## Further Information

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





## 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



### Magnetic Stirrer

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



### Thermometer

Code: [82-5272](#)



## Thermometer

Code: [82-5274](#)



## Magnetic Stirrer

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

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

Utilises a rotating magnetic field to induce variable speed stirring action. A built-in regulating transformer provides fine temperature control of liquid up to a maximum temperature of +150°C. The unit is suitable for use with the Ring and Ball Apparatus.

## Standards

EN 1427, BS 2000-58

## Further Information

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



## Compaction Pedestal BS 598

Code: [45-6410](#)

Product Group: [Manual Compaction](#)

Comprising a 300 mm sq x 25 mm thick steel plate complete with 4 tie rods and securing nuts. A mould clamp and hammer guide are fitted to the plate. The unit is supplied complete with a laminated hardwood block.

## Standards

EN 12697-30

## Further Information

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



Compaction Hammer

Code: 45-6460  
Product Group: Manual Compaction, Stability  
Compaction Hammer

Satisfies BS 598. The hammer has a 4535 g sliding weight with a free fall of 457 mm.

Standards

EN 12697-30, ASTM D6926, AASHTO T245

Specification

Tamping Face	3-7/8" (98 mm) diam.
Hammer	10 lb. (4.54 kg).
Drop	18" (457 mm).
Construction	Machined steel; cast aluminum handle.
Weight	Net 16 lbs. (7.2 kg).



## AutoComp 100-A

Code: 45-6600/01

Product Group: Automatic Compaction

- Fully automatic, simple to operate
- Built-in safety features
- Uniform compaction
- Automatic blow counter

This ruggedly constructed automatic compactor provides a consistent and even degree of compaction. The unit incorporates a compaction pedestal comprising a laminated hardwood block secured to a concrete base by a 300 mm square x 25 mm thick steel plate. The mechanism lifts the 4535 g hammer and automatically releases it at the specified height of 457 mm. The conveniently positioned control fascia panel comprises of a mains light, start and stop buttons and a direct-reading counter used to set the required number of blows.

During operation the AutoComp 100-A automatically counts down to zero. Dual rammer pick-ups have been incorporated, reducing stress on the machine's internal mechanism.

Particular attention has been paid to operator safety by the inclusion of various in-built safety features.

## Standards

EN 12697-10, EN 12697-30, BS 598

## Further Information

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

## Specification

Dimensions (l x w x h)	535 x 535 x 1880 mm
Compaction foot diameter	98.52 mm

# Product Sheet

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Sliding weight	4535 g
Height of drop	457 mm
Weight	278 kg

## Accessories



### Digital Hotplate

Code: [78-3104/01](#)



### Paper Discs

Code: [45-6462](#)



### Sample Tray - 306 x 306 x 38 mm

Code: [81-4020](#)

## Alternatives



### Compaction Mould

Code: [45-6310](#)



## Digital Hotplate

Code: [78-3104/01](#)

Product Group: [Digital Hotplate](#)

## Further Information

**\*\*Not available for sale in the USA\*\***

## Specification

Dimensions	520 x 360 x 130 mm
Construction	Robust metal with anodised aluminium plate heated surface
Maximum temperature	300 x 1°C
Rated power	1500 W





## Paper Discs

Code: [45-6462](#)

Product Group: [Filter Paper Discs, Accessories for manual and automatic compaction](#)

Non-absorbent, 99 mm diameter, pack of 100.

## Standards

EN 12697-30

## Specification

Weight

Net 2.9 oz. (82 g).



Compaction Mould

Code: 45-6310  
Product Group: Asphalt Compaction Mould,  
Accessories for manual and automatic compaction  
Comprising of mould body, baseplate and combined  
filling/extraction collar.

Standards

EN 12697-30, ASTM D6926, AASHTO T245

Specification

Construction	Machined seamless steel forming mold; base and collar.
Finish	Plated for rust resistance.
Dimensions	4" (101.6 mm) i.d. x 3" (76.2 mm) internal h. with base.
Weight	Net 6 lbs. (2.7 kg).

Alternatives



## AutoComp 100-A

Code: 45-6600/01



## Steel Block

Code: [45-6463](#)

Product Group: [Accessories for manual and automatic compaction](#)

100 mm diameter x 50 mm height. For heating the compaction hammer foot.

## Standards

EN 12697-30

## Further Information

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

## Accessories



### Water Bath

Code: [45-6490/01](#)

## Spares/Consumables



### Baseplate

Code: [45-6310/11](#)



## Compaction Mould Body

Code: [45-6310/10](#)

### Alternatives



## Water Bath

Code: [45-6490/01](#)



## 30 L Heating Bath with Led Display Cover

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

Product Group: [Accessories for manual and automatic compaction](#)

### 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



#### Breaking Head (Marshall)

Code: [45-6850](#)

### Alternatives



#### Breaking Head (Marshall)

Code: [45-6850](#)





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

Code: 23-4200

Product Group: [Soil Extruders, Accessories for manual and automatic compaction](#)

Adaptor plates will be supplied; extrudes samples from BS Compaction Mould, Proctor Mould 100 mm, Core Cutter and Marshall Mould. Maximum extrusion force 20kn.

## Standards

BS 1377-1

## Further Information

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

## Accessories

### Steel Block

Code: 45-6463



## Alternatives





## 38mm Hand Operated Hydraulic Sample Extruder with Trimming Knife 38mm Split Former & Cutting Tool.

Code: [23-4090](#)



## Cbr/Core Cutter Extruder Frame and Hydraulic Jack Extrudes 150mm/6 Inch Diameter Specimens.

Code: [23-4250](#)



## Marshall Test 50

Code: [45-6810/06](#)



## Marshall Test 50

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



## Bench-Mounting Mixer 5 Litre Capacity Complete with Bowl Beater and Whisk. 220-240V 50Hz 1Ph.

Code: [23-6191/01](#)

Product Group: [Sample Mixers](#), [Mixing](#), [Sample Mixers](#)

The mixer has two electrically switched mixing speeds which obviates the need to switch off during speed selection. The mixing head comprises a beater which contra-rotates about a central shaft using planetary gearing. A lever-acting lifting device facilitates the insertion and removal of the bowl. This mixer is suitable for the mixing of soil samples, mortar, bituminous mixtures and associated materials where comparatively small samples are being prepared. Supplied with stainless steel bowl, beater and whisk.

## Standards

BS 598-107, BS 1377-1, BS 1924-1

## Further Information

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

## Specification

Dimensions	545 x 380 x 550 mm
Beater Speeds (rpm) low, intermediate, high	136, 281, 580
Central shaft speeds (rpm) low, high	60, 124, 255
Rated power	500 W
Weight	20.2 kg

## Accessories



## Isomantle Electric Heater

Code: [45-5580/01](#)

## Spares/Consumables



### **Stainless Steel Bowl 4.73 Litres.**

Code: [23-6191/10](#)



## Isomantle Electric Heater

Code: 45-5580/01

Product Group: Sample Mixers, Mixing, Sample Mixers

For use with 23-6191 Bench Mounting Mixer.

## Standards

EN 12697-35

## Further Information

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



## Stainless Steel Bowl 4.73 Litres.

Code: [23-6191/10](#)

Product Group: [Sample Mixers](#), [Mixing](#), [Sample Mixers](#)

For use with the 5 Litre Bench Mounted Mixer -  
[23-6191/01](#)



## Automatic Asphalt Compactor - Spares Kit 220V

Code: 45-6600/K1

Product Group: Spares kit for the Autocomp 100-A

### Further Information

The Kit Includes  
Quantity

Pick Up Issue 3  
2

Roll Pin ; M8 X 40MM  
3

Countdown Micro Switch; SAIA-Burgess CR1Q ; Alternative BURPN4-1 ; Now  
Cherry GPTCNH01 ; 15A Button  
1

Hex Socket Cap Head Screw M5 X 16 Lg High Tensile  
8

M5 Full Nut. BZP  
8

Spacer  
3

Anti Surge Fuse for Digital Console 240V.  
5

A/S Fuse ; RS541-3906 50MA X 30MM  
5

Tongue for Marshall Compactor (1108A0033)  
1

Connecting Link Spring Set for Chain Assy of 45-6600/01 Bitumen Compactor.  
2

Tongue Spring for EI45-6600/01 and 02.  
1

Foot Mkv (1108B0071)  
1





## MultiPlex 50 Load Frame

Code: [25-3700/01](#)

Product Group: [Data Logging with the DSU](#), [CBR Load Frames](#), [Marshall Load Frames](#), [Triaxial Load Frames](#), [Data Logging with the DSU](#)

Compact bench mounting load frame designed for performing laboratory CBR, unconfined compression, Quick Undrained Triaxial and Marshall Stability Tests. Has a variable speed of 0.5 to 50.8mm per minute and features rapid approach of platen.

## Standards

EN 12697-34, BS 598, BS 1377, BS 1924, ASTM D1883, EN 12697-23, EN 12697-24, EN 13286-47, AASHTO T193, ASTM D2850, ASTM D4767, AASHTO T296, AASHTO T297, ASTM D6927

## Further Information

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

## Specification

Dimensions (l x w x h)	550 x 400 x 1470 mm
Max vertical clearance	800 mm
Horizontal clearance	265 mm
Platen diameter	133 mm
Platen travel	100 mm
Platen speed range	0.5 to 50.8 mm/min
Rapid approach speed	40 mm/min
Weight kg	100, (shipping 113 kg)

## Accessories



## 50kN Clamped Boss Load Ring

Code: [78-0860](#)





## 50kN S-type Load Cell

Code: [27-1559](#)



## Bracket and Adaptor. Dual Purpose Mounting Bracket for CBR Penetration Gauges EL24-9184/EL24-9186

Code: [24-9188](#)



## Cbr Penetration Piston (Adjustable).

Code: [24-9183](#)



## CBR Penetration Transducer 50mm Travel Fitted with 5 Pin Din Plug.

Code: [27-1705](#)



## Clamped Boss Load Ring - 10.0 kN

Code: [78-0460](#)



## Clamped Boss Load Ring - 2.0 kN

Code: [78-0060](#)

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## Clamped Boss Load Ring - 28.0 kN

Code: [78-0760](#)

---



## Clamped Boss Load Ring - 3.0 kN

Code: [78-0160](#)

---



## Clamped Boss Load Ring - 4.5 kN

Code: [78-0260](#)

---



## Penetration Dial Gauge BS

Code: [24-9186](#)

---



## Penetration Piston

Code: [24-9182](#)

---



## Penetration/Swell Dial Gauge ASTM.

Code: [24-9184](#)

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### Alternatives



## Cbr-Test 50 Machine 50kN Capacity BS and ASTM Supplied with Stabilising Bar.

Code: [24-9150/06](#)



## Cbr-Test 50 Machine 50kN Capacity BS and ASTM Supplied with Stabilising Bar.

Code: [24-9150/01](#)



## Digital Tritest 50 Load Frame

Code: [25-3518/01](#)



## Breaking Head (Marshall)

Code: [45-6850](#)

Product Group: [Accessories for the Marshall test](#)

Complete with gauge disc. Supplied without flow meter.

## Standards

EN 12697-34

## Accessories



### 250 Asphalt Probe

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



### 30 L Heating Bath with Led Display Cover

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



## 50kN S-type Load Cell

Code: [27-1559](#)

### Alternatives



## 250 Asphalt Probe

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



## 30 L Heating Bath with Led Display Cover

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



## 50kN S-type Load Cell

Code: [27-1559](#)



## Flow Transducer

Code: [45-6820/11](#)

Product Group: [Electronic Instrumentation](#), [Electronic Instrumentation](#), [Electronic Instrumentation](#)

Pre-calibrated, for use with 45-6850 Breaking Head.

## Standards

EN 12697-34

## Further Information

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



## 50kN S-type Load Cell

Code: [27-1559](#)

Product Group: [Load Measurement](#), [Electronic Instrumentation](#), [Force measurement](#), [Electronic Instrumentation](#)

Maximum working capacity of 50 kN and excitation 10 V ac/dc with an output of 2.7 mV/V nominal.

Aluminium alloy and stainless steel construction with IP65 environmental protection.

## Standards

EN 12697-34

## Further Information

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

## Accessories



## Breaking Head (Marshall)

Code: [45-6850](#)



## S-Type Load Cell 5 kN.for Triaxial Tests. Fitted with 5 Pin Din Plug.

Code: [27-1551](#)

## Alternatives



## Breaking Head (Marshall)

Code: [45-6850](#)



## S-Type Load Cell 5 kN. for Triaxial Tests. Fitted with 5 Pin Din Plug.

Code: [27-1551](#)





## DSU Electronic Readout and Control System 110 V AC 60 Hz

Code: [27-1300/02](#)

Product Group: [Data Logging with the DSU](#),  
[Electronic Instrumentation](#), [Electronic Instrumentation](#), [Data Logging with the DSU](#)

- Download the full brochure here  
[/Page/catalogue-download/NTRmZS9UaGUgTkVXIE RTVSBVU0EucGRm]
- Download the full DS7.2 geotechnical software brochure here  
[/Page/catalogue-download/NTRmZS9OZXcgRfM3IF NvZnR3YXJlIFVTQTY5LnBkZg==]
- 4 channel automatic control and data-logging unit
- Automatic, dual-frame control
- Performs CBR, Marshall, Unconfined Compression, Direct and Residual Shear, One-Dimensional Consolidation and Unconsolidated Undrained tests
- LAN connection - software can be running anywhere on your server
- Never lose data from power fails - 2 gigabytes of non-volatile memory

The Data System Unit (DSU) is a versatile instrument designed to accommodate the general logging requirements of geotechnical and materials testing engineers. It's intelligent interface allows the user to work with a range of different sensors.

## Further Information

The DSU has two distinct modes of operation. The first is referred to as DS mode (DataSystem) for operation with ELE International's established DS7 geotechnical testing software.

### DS MODE

- Up to four one dimensional consolidation tests
- Up to two CBR tests
- One direct/residual shear test
- One triaxial quick un-drained test

### DU MODE

- Up to two Marshall tests
- Up to two CBR tests
- Up to two Unconfined compression tests
- Automatic frame control

## OVERVIEW

- Touch Screen data entry for standalone operation, Marshall/CBR/Quick un-drained
- Automatic single and dual frame control (with multiplex 50 frame)
- Log memory of 2 gigabytes
- Non-volatile memory
- Ethernet TCPIP link and serial comms support
- Market leading signal stability
- Certificate and manual calibration features

Become a member of the ELE International web site, add this new product to a wishlist to receive a quote! Click here [\[Login\]](#)

This product is now available in the USA and Canada!

## Accessories



### Cable, Safety/ID

Code: [27-1300/11](#)



### Dual Frame Comms Cable

Code: [27-1300/10](#)



### PC Cable

Code: [27-1300/12](#)

## Alternatives



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

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



## Marshall Test 50

Code: 45-6810/01



## Marshall Test 50

Code: 45-6810/06



## Flow Meter ASTM

Code: [45-6890](#)

Product Group: [Accessories for the Marshall test](#)

Dial gauge graduated 0.001 inches with 1 inch travel.  
Supplied with stem brake unit and flow meter pedestal.

## Standards

EN 12697-34

## Further Information

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



## Attachment Required for 6000 g

Code: [45-9315/10](#)

Product Group: [Rice Test Vibrator](#), [Rice Test Vibrator](#),  
[Specific Gravity \(Rice\) Test with 6,000 gram Vacuum](#)  
[Pyknometer](#)

Accessory

## Standards

EN 12697-5



## Rice Test Vibrator

Code: [45-9315/01](#)

Product Group: [Rice Test Vibrator](#), [Rice Test Vibrator](#)

The Rice Test Vibrator is used with the 45-9300 6000 g Vacuum Pyknometer. Adjustable clamps hold the pyknometer securely to the base during vibration.

## Standards

EN 12697-5, ASTM D2041, AASHTO T209

## Further Information

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

## Specification

Dimensions	495 x 30 mm (height x base diameter)
Motor	1/20 hp, 1.6 amp
Weight	5.5 kg
Motor	1/20 h.p.; 3000 vpm; 1.6 amp.
Dimensions	19-1/2" (495 mm) h.; 12 " (30 mm) base diameter.
Weight	Net 14.3 lbs. (6.5 kg).

## Accessories



## Attachment Required for 6000 g

Code: [45-9315/10](#)

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### Alternatives



## Rice Test Vibrator 115vAC, 50/60 Hz

Code: [45-9315/02](#)



## Timer Clock

Code: [81-0518](#)

Product Group: [Rice Test Vibrator, Watches and Clocks](#)

Accessory

## Standards

EN 12697-5

## Further Information

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





## Vacuum Pyknometer Apparatus

Code: 45-9305/01

Product Group: Vacuum Pyknometer

- Large capacity design minimises segregation effects
- Lightweight polycarbonate construction
- Transparent top for visual observations

The Vacuum Pyknometer is a large capacity unit used in the Rice Test for determining the maximum specific gravity of bituminous paving mixtures.

The Pyknometer has a total volume of approximately 10 litres and will conveniently accept samples of 6000 grams to minimise segregation effects. The unit is constructed of lightweight polycarbonate, with the upper half being transparent for visual observation of the effects of the vacuum.

The Vacuum Pyknometer Apparatus consists of a 6000 g pyknometer, vacuum pump with control valves/gauges, water trap and connection tubing.

## Standards

EN 12697-5

## Further Information

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

Supplied complete with 6000 g pyknometer, vacuum pump with control valves/gauges, water trap and connection tubing. For 220 - 240 V AC, 50 Hz, 1ph.

## Specification

Dimensions	273 x 406 mm (outside diameter x height)
Capacity	Approx. 10 litres, 6000 g sample weight
Connections	Water inlet valve; quick disconnect for vacuum gauge and hose
Weight	3.6 kg

## Alternatives

# Product Sheet

[www.ele.com](http://www.ele.com)  
+44 (0) 01525 249 200



## Vacuum Pyknometer, 6000 g

Code: [45-9300](#)



## Vacuum Pyknometer, 6000 g

Code: 45-9300

Product Group: Vacuum Pyknometer, Vacuum Pyknometer (6,000 Gram), Specific Gravity (Rice) Test with 6,000 gram Vacuum Pyknometer

The Vacuum Pyknometer is a large capacity unit used in the rice test for determining the maximum specific gravity of bituminous paving mixtures. The Pyknometer has a transparent top for observation and a lightweight polycarbonate construction.

The Pyknometer has a total volume of 10 litres and will conveniently accept samples of 6000 grams to minimise segregation effects.

## Standards

EN 12697-5, ASTM D2041, AASHTO T209, AASHTO T283

## Specification

Capacity	Approximately 10 liters; 6,000 g (13 .2 lbs.) sample weight.
Construction	Lightweight polycarbonate with transparent upper half.
Gauge	2" (50.8 mm) diam., 30" x 0.5" Hg.
Aspirator	Plastic; 3/8" pipe thread (included).
Connections	Water inlet valve; quick disconnect for vacuum gauge and hose.
Dimensions	10-3/4" (273 mm) o.d. x 16" (406 mm) h.
Weight	Net 8 lbs. (3.6 kg).

## Accessories



### 1/4" O.D Plastic Tubing

Code: 45-9301/14



## Drierite Desiccant

Code: [45-9315/14](#)



## Filtering Kit

Code: [45-9301](#)

## Alternatives



## Vacuum Pyknometer (2,000 gram)

Code: [45-9310](#)



## Vacuum Pyknometer Apparatus

Code: [45-9305/01](#)



## Digital Asphalt Thermometer

Code: [47-0202](#)

Product Group: [Digital Asphalt Thermometer](#)

Comprises a hand-held digital thermometer with an operating range of -99 to +1372 °C with a switchable resolution between 0.1 and 1.0 °C. Operates on a 9V battery and utilises K-type thermocouple sensors.

## Standards

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

## Further Information

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

## Specification

Range	-50 to 1000°C
Resolution	Switchable 0.1 or 1.0°C
Weight	300 g

## Accessories



### 250 Asphalt Probe

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



## Breaking Head (Marshall)

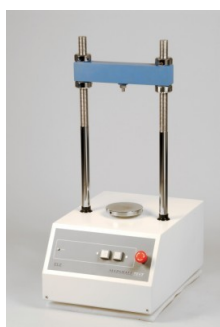
Code: [45-6850](#)



## Vibrating Hammer

Code: [47-0455/01](#)

## Alternatives



## Marshall Test 50

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



## Marshall Test 50

Code: [45-6810/06](#)



## 535 Asphalt Probe

Code: [47-0202/11](#)

Product Group: [Digital Asphalt Thermometer](#)

Has a heavy-duty and reinforced needle probe. It is built with a t-shaped polyethylene handle and has a maximum tip temperature of 250°C and a 500 mm long probe.

## Standards

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

## Further Information

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

## Specification

Max Reading	250°C
Length of probe	500 mm
Tip diameter (needle point)	6 mm



## 250 Asphalt Probe

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

Product Group: [Digital Asphalt Thermometer](#)

Has a heavy-duty and reinforced needle probe. It is built with a t-shaped polyethylene handle and has a maximum tip temperature of 250°C and a 300 mm long probe.

## Standards

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

## Further Information

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

## Specification

Max Reading	250°C
Length of probe	300 mm
Tip diameter (needle point)	6 mm

## Accessories



### Breaking Head (Marshall)

Code: [45-6850](#)



### Vibrating Hammer

Code: [47-0455/01](#)



## Alternatives



### Breaking Head (Marshall)

Code: [45-6850](#)



### Vibrating Hammer

Code: [47-0455/01](#)



## Buoyancy Balance

Code: [34-8100/09](#)

Product Group: [Hardened Concrete - Buoyancy Balance, Percentage Refusal Density \(PRD\)](#)

## Standards

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

## Further Information

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

## Accessories



### Cradle

Code: [34-8105](#)



## Cradle

Code: [34-8105](#)

Product Group: [ELE Bouyancy Balance, Hardened Concrete - Buoyancy Balance, Percentage Refusal Density \(PRD\)](#)

## Standards

EN 12697-32, EN 13280-4, BS 598-104, EN 1097-6

## Accessories



## Vibrating Hammer

Code: [47-0455/01](#)

## Alternatives



## Vibrating Hammer

Code: [47-0455/01](#)



## 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).



## Core Barrel 150 mm

Code: [47-5605](#)

Product Group: [Core Barrels](#)

## Standards

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

## Further Information

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



## Core Barrel 100 mm

Code: [47-5565](#)

Product Group: [Core Barrels](#)

## Standards

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

## Further Information

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



## 100 Litre Drying Oven

Code: [78-1225/01](#)

Product Group: [Oven Drying Method](#), [Oven Drying Method](#), [Oven Drying Method](#)

### Standards

BS 2648, BS 598, BS 1377, BS 1924

### Further Information

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

### Alternatives



## 150 Litre Drying Oven

Code: [78-1235/01](#)



## 225 Litre Drying Oven

Code: [78-1250/01](#)



## 425 Litre Drying Oven

Code: [78-0135/01](#)



## 50 Litre Drying Oven

Code: [78-1215/01](#)