



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

Contents

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This wishlist was generated on 14/01/2020, and contains the following Products:

45-3815/01

Rotatest 3000

45-6750/01

Gyratory Compactor to EN 12697-31, 10, ASTM D6925, SHRP M-002, AASHTO T312, inc. PC 220-240V 50Hz

45-6810/01

Marshall Test 50

46-4120

Ductility Testing Machine

46-5290

Standard Penetrometer

46-7003/01

Saybolt viscometer two place unit with furol and universal orifices

80-0200/01

ELE Sieve Shaker



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](#)



Silica Gel

Code: [82-7091](#)



Volumetric Flask - 100 ml

Code: [82-1000](#)



Volumetric Flask - 1000 ml

Code: [82-1060](#)

Spares/Consumables



Replacement bowl for Rotatest 3000 centrifuge extractor

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

Alternatives

Product Sheet

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Muffle Furnace

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



Rotatest 1500

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



Gyratory Compactor to EN 12697-31, 10, ASTM D6925, SHRP M-002, AASHTO T312, inc. PC 220-240V 50Hz

Code: 45-6750/01

Product Group: Gyratory Compaction

One of the best methods of laboratory compaction is considered to be Gyratory for not only the material's assessment of compactibility, but also the production of test samples. The method achieves this by the application of a vertical stress, typically 600 kPa via platens to a mass of asphaltic mixture inside a 100 or 150mm diameter mould. Whilst platens are kept parallel and horizontal, the longitudinal axis of the mould is gyrated at a fixed angle to the vertical axis.

During the test process, the height of the specimen is measured automatically and the mixture density and void content are calculated.

Compaction data is displayed in real time (graphical and tabular) and is available for download to MS Excel(tm). The operator has the ability to choose whether to compact for a certain number of gyrations or until a target mixture density or void content is achieved.

Further Information

Features:

- Full compliance to EN 12697 part 10 and 31
- Configurable to comply with SHRP Superpave
- Both 150mm and 100mm moulds can be tested without any modification
- Automatic mould insertion and retraction
- Cold mix (emulsion) materials can be compacted, with fluid collection facility
- Data acquisition and control via host desktop PC
- Export compaction data to MS Excel(tm)
- UKAS traceable factory calibration
- Can accept moulds up to 300mm in height

Product Specification:

- High stability steel frame with low flex and distortion
- A 95mm pneumatic cylinder
- Safety gates with interlock
- Specimen table
- Accurate stress control via high precision regulator
- High quality inverter for accurate speed control
- Specimen height measurement via linear potentiometer
- Highly durable wheels for ease of movement
- 16bit control and data acquisition
- PC included

Software:

- User-friendly, intuitive and reliable Windows(tm) software
- 2 methods of compaction - no. of gyrations and target density
- User guided step-by-step through compaction
- Real-time display of current height, density and void content
- Software communicates with the gyratory compactor via USB interface
- Utilities are included for transducer check, diagnostic routines and calibration

Specification

Stress	600 kPa nominal, 1000 kPa Max
Mixture types	Wet and Dry
Machine speed	30 rpm
Angle of gyration	0.2 to >2°
Electrical supply	220-240 V 50Hz (16 amp)
Sample sizes	100 and 150 mm dia
Compressed air supply	7-10 bar, 350 L p/m
Dimensions (WxHxL)	790 x 995 x 1920

Accessories



100mm Dia mould & platens

Code: [45-6750/10](#)



100mm Dia mould & platens inc. specimen temperature measurement

Code: [45-6750/23](#)



100mm Dia mould & platens, slotted for emulsion mix

Code: [45-6750/20](#)



100mm Dia split mould

Code: [45-6750/27](#)



100mm filter papers (pack of 100)

Code: [45-6750/24](#)



150 mm filter papers (pack of 100)

Code: [45-6750/22](#)



150mm Dia mould & platens inc. specimen temperature measurement

Code: [45-6750/21](#)



150mm Dia mould & platens

Code: [45-6750/12](#)



150mm Dia mould & platens, slotted for emulsion mix

Code: [45-6750/15](#)



2 deg. angle plate

Code: [45-6750/17](#)



Calibration kit for internal angle lead

Code: [45-6750/11](#)



Display, Shear Force

Code: [45-6750/18](#)



Internal angle measuring device

Code: [45-6750/13](#)



Internal angle measuring device inc. asphalt Hot Mix Simulator (HMS – Hot Mix Simulator)

Code: [45-6750/14](#)



Option for 300mm mould height (cannot be retro-fitted)

Code: [45-6750/16](#)



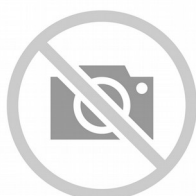
Small air compressor for 45-6750

Code: [45-6750/28](#)



Spacer 100mm to compact 63mm height on 45-6750

Code: [45-6750/25](#)



Spacer 150mm to compact 63mm height on 45-6750

Code: [45-6750/26](#)



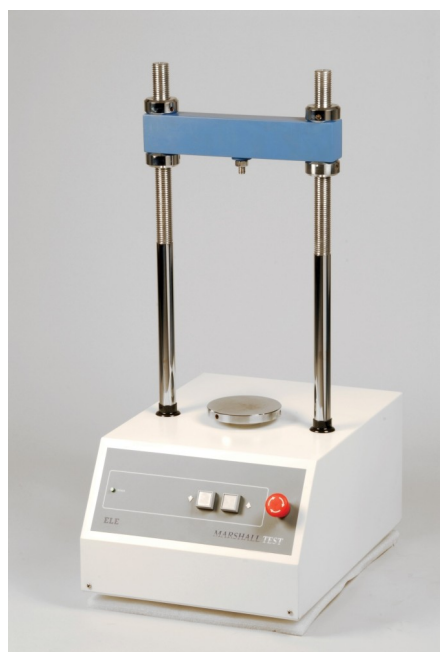
Specimen Extruder

Code: [45-6710](#)



Specimen Temperature Measurement

Code: [45-6750/19](#)



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 minimal maintenance.

Standards

EN 12697-34, EN 12697-23, BS 598-107, ASTM D6927, ASTM D6931

Further Information

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

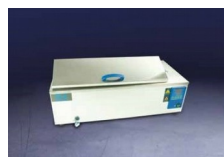
Load frame, 50 kN capacity. Supplied without Breaking Head. For 220 - 240 V AC, 50 Hz, 1 ph.

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](#)



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 EN 13398, ASTM D113, ASTM D6084, AA SHTO T51, EN 13589, EN 13703, AASHTO T300.

Specification

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

Accessories



Base plate for Briquette Mould

Code: [46-4120/11](#)



Single Briquette Mould, ASTM + AASHTO

Code: [46-4120/10](#)



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: [46-5860](#)



Penetration Tin

Code: [46-5861](#)



Transfer Dish

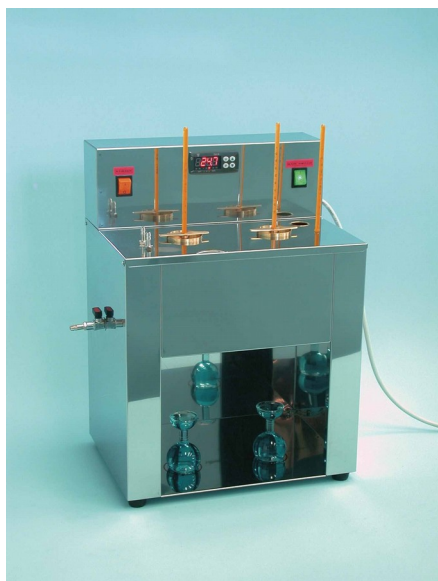
Code: [46-5800](#)

Spares/Consumables



ASTM (Non-Certified) Penetration Needle

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



Saybolt viscometer two place unit with furol and universal orifices

Code: [46-7003/01](#)

Product Group: [Saybolt-Furol Viscosity](#)

Used to determine the viscosity of petroleum products at specified temperatures between 70 to 210 °F. Stainless steel made, the Saybolt viscometer is supplied complete with two filter funnels and two withdrawal tubes.

Please note thermometers must be ordered separately.

Specification

Power supply	230 V 1ph 50-60 Hz 500 W
Dimensions	270 x 270 x 550 mm
Weight	12 kg



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.