







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

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# Contents



This wishlist was generated on 29/04/2019, and contains the following Products:

#### 45-6750/06

Gyratory Compactor to EN 12697-31, 10, ASTM D6925, SHRP M-002, AASHTO T312, inc. PC 220-240V 60Hz

46-4120 Ductility Testing Machine



# **Product Sheet**





### Gyratory Compactor to EN 12697-31, 10, ASTM D6925, SHRP M-002, AASHTO T312, inc. PC 220-240V 60Hz

Code: 45-6750/06 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:

# **Product Sheet**



- 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 routinesand calibration

### Specification

Stress Mixture types Machine speed Angle of gyration Electrical supply Sample Sizes

Compressed air supply

Dimensions (WxHxL)

600 kPa nominal, 1000 kPa Max Wet and Dry 30 rpm 0.2 to >2° 220-240 V 60Hz (16 amp) 100 and 150 mm dia 7-10 bar, 350 L p/m 790 x 995 x 1920

#### Accessories



**100mm Dia mould & platens** Code: 45-6750/10





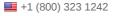
100mm Dia mould & platens inc. specimen temperature measurement

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

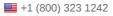


150mm Dia mould & platens

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



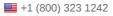
Internal angle measuring device

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



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



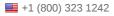
**Specimen Extruder** 

Code: 45-6710



**Specimen Temperature Measurement** 

Code: 45-6750/19



# **Product Sheet**





### **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  $\pm 0.1$ N, 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 Weight Watts Power supply 300 x 1850 x 550 mm 80kg 1000 W 220V 50-60Hz 1Ph

