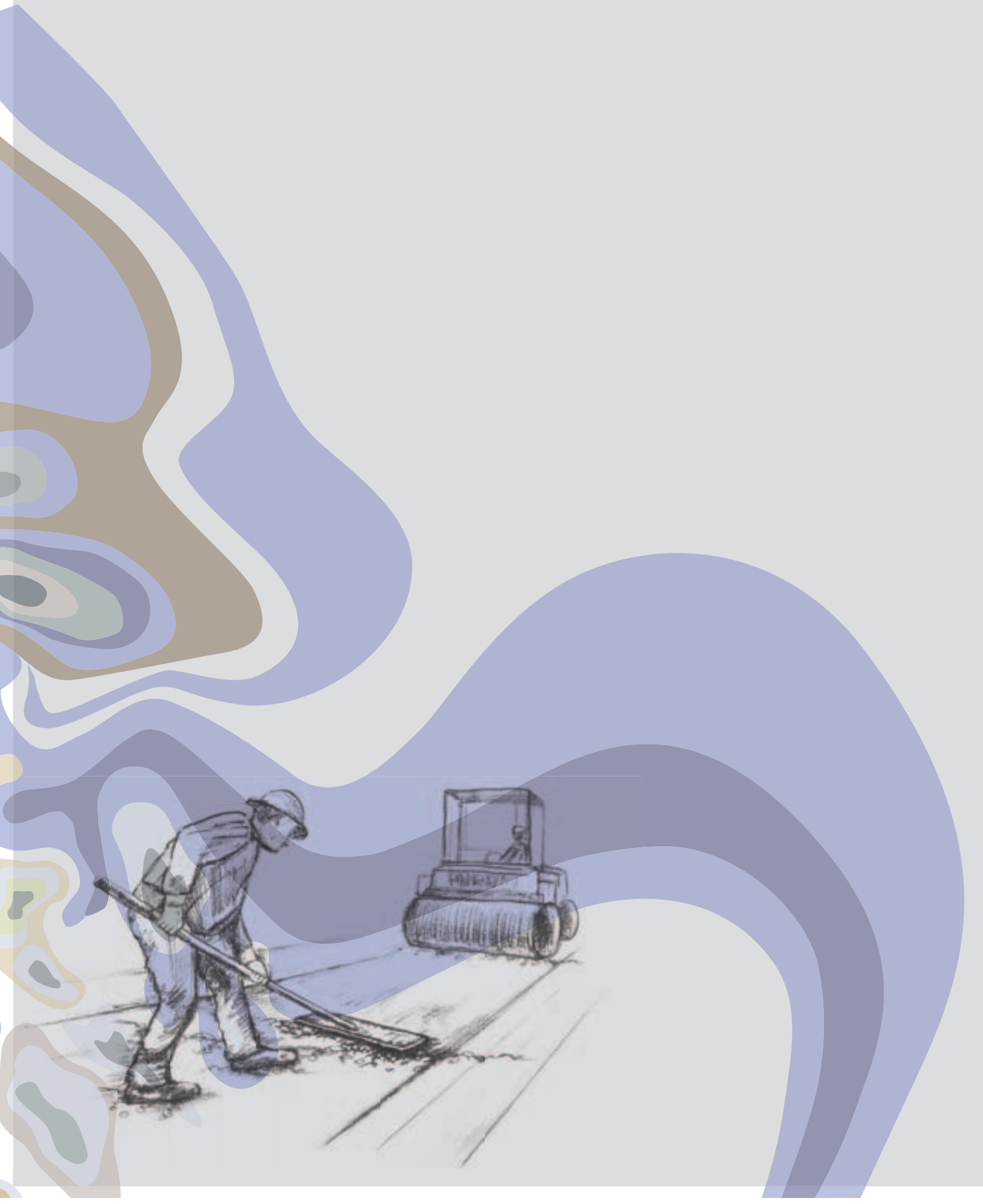
asphalt equipment



production

Asphalt is a sticky, black and highly viscous liquid or semi-solid that is present in most crude petroleum. It is most commonly used in road construction.

The material consists essentially of two ingredients, aggregate and bitumen which is the binder. A number of technologies allow this simple mix to have an almost infinite number of mixtures which may either be specified or designed to suit a particular engineering requirement.

It is therefore important that equipment and test methods are used to determine the different physical and chemical properties of any given asphalt mix. Such parameters include binder content, binder percentage, aggregate grading, void content, resilient modulus, indirect tensile fatigue cracking, creep, softening point, flash and fire point, water content, loss in mass, elongation, elasticity, viscosity and adhesion.

Reflux Extractor

Standards: ASTM D2172, AASHTO T164

The Reflux Extractor is used for the determination of quantitative amount of bitumen in hot-mixed paving mixtures and pavement samples.

The Reflux Extractor is available in two sizes, 1000 gr and 4000 gr capacity models.

The apparatus comprises of a cylindrical glass jar, two wire mesh cones with interlocking frames, a water condenser with inlet/outlet tubes and hot plate.

AS 0101
Reflux Extractor 1000 gr complete
AS 0102
Reflux Extractor 4000 gr complete
AS 0103
Filter Paper for the 1000 gr model (pack of 50)
AS 0104
Filter Paper for the 4000 gr model (pack of 50)
AS 0105
Replacement glass for the 1000 gr
AS 0106
Replacement glass for the 4000 gr

Centrifuge Extractor

Standards: EN 12697-1, ASTM D2172, AASHTO T164A

The centrifuge extractor is used for the determination of bitumen percentage in bituminous mixtures.

Comprises:
A removable precision-machined rotor bowl housed in a cylindrical aluminium box.
It is driven by an electric motor fitted with AC drive (inverter) with the double function of speed control up to 3600 r.p.m. regardless of the frequency (50 or 60 Hz) and electrical braking.
The rotating unit is suspended on the base by four calibrated springs, which assure a perfect stability all over the test.
The cover is precisely machined and fitted with solvent resistant gasket to avoid leakages.

AS 0107
Centrifuge Extractor 1500 gr
AS 0108
Centrifuge Extractor 3000 gr
AS 0109
Filter Paper for 1500 gr (pack of 100)
AS 0110
Filter Paper for 3000 gr (pack of 100)

Spares:
AS 0111
Replacement Bowl, 1500 g
AS 0112
Replacement Bowl, 3000 g
AS 0113
Replacement Gasket for 1500 g
AS 0114
Replacement Gasket for 3000 g

Asphalt Mixer

Standards: EN 12697-35, BS 598-107

The Asphalt Mixer is designed for mixing Asphalt samples that can be used for mechanical tests as for example compaction, indirect tensile, Marshall etc.
The bituminous mix must be prepared at prescribed temperature for this reason the mixer can equipped with thermostatically controlled heater.
The mixing head rotates in the 11 different speed positions from 10 to 240 r.p.m. and the beater from 20 to 480 r.p.m.
The user can choose speeds easily by using switch fitted to the machine.

AS 0115
Asphalt Mixer 5 ltr complete with all accessories
AS 0116
Asphalt Mixer 10 ltr complete with all accessories

Spares:
AS 0117
Stainless Steel Bowl 5 ltr
AS 0118
Stainless Steel Bowl 10 ltr
AS 0119
Stainless Steel Beater for the 5 ltr
AS 0120
Stainless Steel Beater for the 10 ltr

Asphalt Mixer with seperate controller

Standards: EN 12697-35, BS 598-107

This Asphalt mixer is designed for mixing of samples and can be controlled externaly using switch key.

The mixing head rotates in the speed of 62 and 125 r.p.m. and the beater 140 and 285 r.p.m.

AS 0121
Asphalt Mixer 5 ltr complete with all accessories

Spares:

AS 0122
Stainless Steel Bowl 5 ltr
AS 0123
Stainless Steel Beater for the 5 ltr

Isomantle Heater

The Isomantle Heater is Used to heat the mixing bowl of (5 litres cap.) and (10 litres cap.) mixer.

It is fitted with an electronic temperature regulator and can be easily fitted to the mixer under the bowl. Max. temperature 180 °C

AS 0124
Isomantle Heater 5 litres cap
AS 0125
Isomantle Heater 10 Litres cap

Manual Marshall Compaction

Standards: ASTM D1559, D5581, BS 598-107, EN 12697-30

The Manual Marshall Hammer Assembly is used to compact Marshall specimens manually.

Comprises:
The assembly consists of Compaction Hammer, Compaction Pedestal, Hammer Guide and Compaction Mould Holder.

AS 0126
Manual Marshall Compactor complete with all accessories

Accessories and Spares:

AS 0127
Compaction Hammer, BS 598

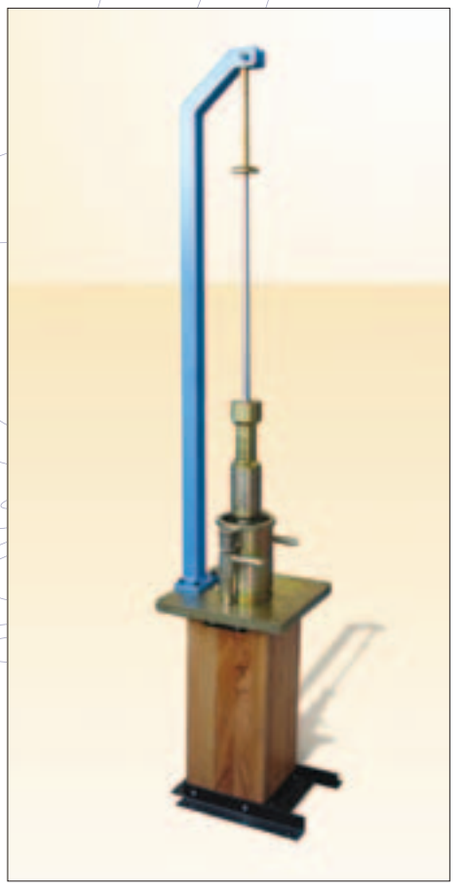
AS 0128
Compaction Pedestal, BS 598 comprising a 300 mm sq x 25 mm thick steel plate

AS 0129
Compaction Pedestal comprising a 12 inch square x 1 inch thick steel plate, ASTM

AS 0130
Steel Block 100 mm diameter x 50 mm height. For heating the compaction hammer foot according to BS 598-107

AS 0131
Paper Discs. 99 mm diameter pack of 100

Compaction Mould See AS 0145



Automatic Marshall Compactor

Standards: EN 12697-10, 12697-30, BS 598-107

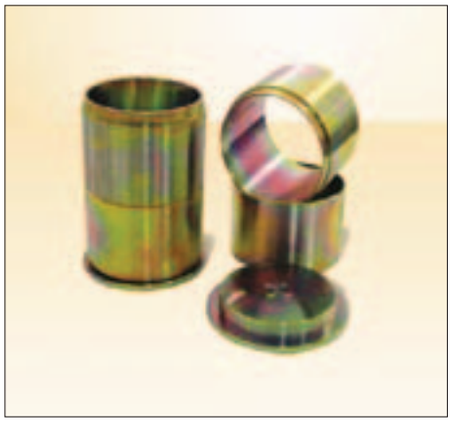
The Automatic Compactor is made of a rugged construction to withstand work.
It provides a consistent and even degree of compaction.
The Compactor comprises of a compaction pedestal, automatic control system, secure base of 300 mm square x 25 mm thick steel plate.

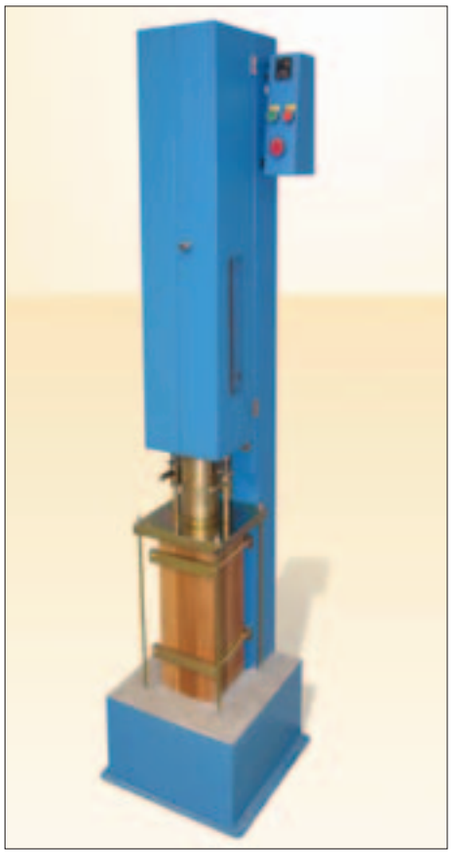
After setting the required number of blows the Automatic Compactor lifts the 4535 g ±20 g hammer and releases it at the desired height of 457mm ±3mm.

The control system comprises of operating light, start / stop switch and a reading counter used to set the desired number of blows.

AS 0133
Automatic Compactor

Compaction Mould See AS 0145
Paper Discs see AS 0131
Steel Block See AS 0130





Marshall Stability Machine

Standards: EN 12697-12, EN 12697-23, EN 12697-34

The Marshall Stability Machine is used to determine the load and flow values of bituminous mixtures.

The Marshall is composed by a robust and compact two-column frame with adjustable upper cross beam driven by an electromechanical ram with a maximum capacity of 50 kN and a data acquisition and processing system.

The Marshall Stability Machine can be hand operated by a lateral hand wheel for calibration purposes.
The mechanical jack raises the lower crossbeam at a constant speed of 50.8 mm/min.

The limit switches are provided for the both, bottom and top limit of travel.
The Automatic measuring system consists of a 50 kN capacity strain gauge load cell is fitted to the upper cross beam to read stability values and 25 mm x 0.001 mm displacement transducer fitted to the Breaking Head.

The Manual measuring system consists of a 50 KN capacity load ring and dial gauge graduated 0.01 mm with 25 mm travel.

The Marshall Stability Machine can be hand operated by a lateral hand wheel for calibration purposes.

The mechanical jack raises the lower crossbeam at a constant speed of 50.8 mm/min.

The limit switches are provided for the both, bottom and top limit of travel.

The Automatic measuring system consists of a 50 kN capacity strain gauge load cell is fitted to the upper cross beam to read stability values and 25 mm x 0.001 mm displacement transducer fitted to the Breaking Head.

The Manual measuring system consists of a 50 KN capacity load ring and dial gauge graduated 0.01 mm with 25 mm travel.

AS 0134
Marshall Stability Machine complete with all accessories
AS 0135
Breaking Head 100 mm
AS 0136
Breaking Head 150 mm

AS 0137
Load Ring assembly complete with dia gauge, 50 KN
AS 0138
S-type Load Cell 50 KN
AS 0139
Flow Transducer
AS 0140
Data Acquisition and Control System
AS 0141
RS232 cable and PC Software
AS 0142
Dial gauge graduated 0.01 mm with 25 mm travel with stem brake unit and flow meter pedestal, BS/EN
AS 0143
Dial gauge graduated 0.001 inches with 1 inch travel with stem brake unit and flow meter pedestal, ASTM
AS 0144
Indirect tensile assembly 100 mm

Compaction Mould

Compaction Mould, Comprising of Base Plate, Mould Body and Collar.
AS 0145
Compaction Mould

Binder Recovery Apparatus

Standards: BS 598-102, BS 5284, EN 12697-1

The Binder Recovery Apparatus comprises of a thermostatically controlled stainless steel heated water bath (with integral shelf), vacuum pump with regulator, gauge and manifold all mounted a sturdy base with anti-vibration rubberised feet. This double sample unit is supplied complete with rubber hose, bungs, two flasks and a set of polyproylene spheres to aid insulation and reduce the risk to the operator from splashes of hot water.
Individual ball valves allow the use of a single sample flask if required.

AS 0147
Binder Recovery Apparatus

Universal Sample Extruder

Standards: EN 12697-1
ASTM D2172, AASHTO T164A

The Universal Sample extruder is designed to easily extrude samples from Marshall moulds.
It has 30kN capacity and supplied complete with manual hydraulic jack.
The extruder can be also used for CBR and Proctor moulds with suitable adaptors.

AS 0146
Universal Sample extruder

Hubbard-Carmick Specific Gravity Bottles

The Hubbard-Carmick Specific Gravity Bottles used with viscous fluids, semi-solid bitumen and emulsions. Made of Borosilicate Glass they come in two shapes.
AS 0148
Hubbard-Carmick Specific Gravity Bottle conical 25 ml
AS 0149
Hubbard-Carmick Specific Gravity Bottle normal 24 ml

Bacon Sampler

Standards: ASTM D140
AASHTO T40

The Bacon Sampler is to obtain samples or sedimentation from the bottom of a container.
The plunger keeps the sampler closed until it strikes bottom, then the sampler opens and fills. The plunger closes again when the bomb is withdrawn, forming a tight seal.
Samples can also be obtained from any depth by attaching a cord to the top of the plunger, raising it will to fill the sampler and lowering it to close the sampler.

AS 0150
Bacon Sampler, 237 ml capacity

Manual Bitumen Penetrometer

Standards: EN 1426, BS 2000-49, ASTM D5, AASHTO T 49

The Penetrometer is used to determine the penetration of bituminous samples under constant load, time and heat. The Penetrometers are intended for measuring the consistency of bituminous materials. Penetration readings are quickly taken from a measuring precision gauge.

Comprises:
The Penetrometer consists of cast iron base with leveling screws, digital penetration measurement gauge 0.01 mm precision
Release button - Automatic zeroing.
Needle, transfer dish and penetration moulds.

AS 0151
Manual Penetrometer complete with all accessories

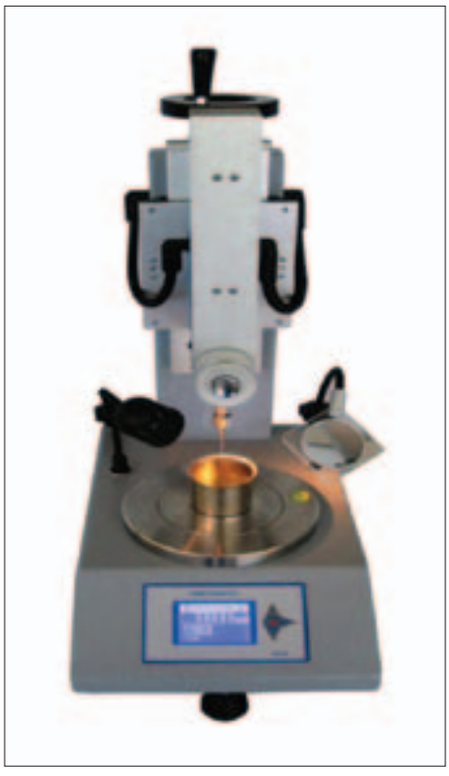
Accessories:
AS 0152
Penetration Needle, hardened steel verification certificate. For testing to BS 2000-49 and ASTM D5
AS 0153
Penetration Needle (unverified)
AS 0154
Penetration Tin for penetrations between 200 and 350
AS 0155
Penetration Tin for penetrations below 200

Semi Automatic Bitumen Penetrometer

Standards: EN 1426, BS 2000-49, ASTM D5, AASHTO T 49

The Semi Automatic and Full automatic Penetrometer gives you better control when used to determine the penetration of bituminous samples. It comes with build in digital controler and readout unit. During the test, depth penetration is permanently displayed both in units and tenth of units (0.01 mm).
An optoelectronic detection of depth penetration with an automated approach and a levelling system for conductive samples are available.

AS 0156
Semi Automatic Penetrometer complete with all accessoriesr
AS 0157
Full Automatic Penetrometer complete with all accessories
AS 0158
Transfer Dish
AS 0159
Weight 50 gr



Softening Point (Ring and Ball) Apparatus

Standards: ASTM D2172, AASHTO T164

The Ring and Ball method of determine the softening point bituminous materials.
The softening point is considered to be the temperature of the fluid when the ball penetrates the specimen and touches the lower plate.
This test method covers the determination of the softening point of bitumen in the range from 30 to 157 °C (86 to 315 °F) immersed in distilled water (30 to 80 °C), USP glycerin (above 80 to 157 °C), or ethylene glycol (30 to 110 °C)

Comprises:
The Ring and Ball Apparatus comprises hotplate with magnetic stirrer, 2 steel balls, ball centering guide, 2 rings, glass vessel and thermometer.

AS 0160
Softening Point (Ring and Ball) Apparatus complete with all accessories
AS 0161
Rings with collars, pack of 2
AS 0162
Thermometer ASTM 15 °C IP 60 °C
AS 0163
Thermometer ASTM 16 °C IP 61 °C
AS 0164
Balls, pack of 50
AS 0165
Pyrex Glass Jar, 85x130mm dia.

Manual Cleveland, Flash and Fire Point, Open Cup

Standards: ASTM D92, DIN 51376 ISO 2592

The Cleveland test method describes the determination of the flash and fire point of petroleum products such as bituminous material with flash points above 79 °C (175 °F) and below 400 °C (752 °F)

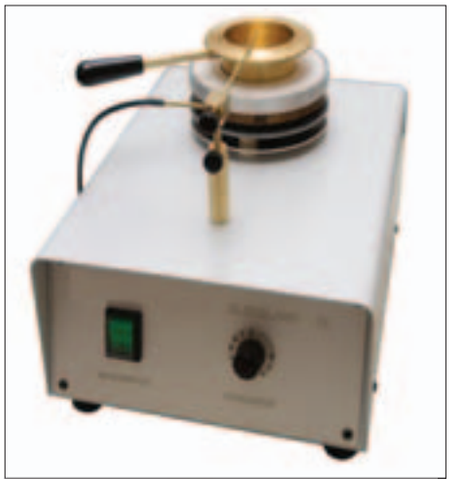
Electrically heated by electronic regulator, mounted on a case painted with anti-acid epoxidic products.

Calibrated brass cup, gas ignition device fitted with a pivot manually passing through the cup. Fitted with pincers for thermometer.

The Semiautomatic type is controlled by digital timer.

AS 0166
Cleveland, Flash and Fire Point complete
AS 0167
Semi Automatic Cleveland, Flash and Fire Point complete

Accessories:
AS 0168
Gas Cylinder Empty, 3kg
AS 0169
Gas Reducer
AS 0170
Rubber Tube Joint and Tube, 5 meter
AS 0171
Thermometer ASTM 11 °C IP 28 °C
Spares:
AS 0172
Gas Ignition Device,Pack of 3
AS 0173
Calibrated Brass Cup



Digital Automatic Cleveland, Flash and Fire Point, Open Cup

Standards: ASTM D92, DIN 51376 ISO 2592

The Digital Automatic Cleveland test Flash and Fire Point on Bituminous products, gas oils, fuel oils, lubrificants.
Suitable for flash and fire point detection on different substances and waste materials, having a flash point over 79°C.
The sample is warmed up according the methods. When the sample reaches the selected test temperature, the flame is passed automatically above the sample.

When the flash point is reached, the detection is done by an ionisation detector. For fire point detection, the sample continues to be heated until permanent flame is detected by the second probe, then the auto extinguisher will be placed on the top of the test cup.

Measuring Parameters
- Temperatures: in °C
- Measuring range: +79°C ... +400°C
- Resolution: 0.06 °C
- Accuracy: ± 0.1 °C

The Software is Windows Based (Windows 2000, XP, Vista) and is able to manage up to 10 analytical heads simultaneously.

- User friendly interface
- All analytical parameters recoded
- Customisable analysis parameters and methods
- Customizable results report
- Printable graphs and results

AS 0174
Digital Automatic Cleveland, Flash and Fire Point complete

Digital Abel Flash Point

Standards: EN 924 EN 13736, IP 170 IP 491 IP 492 ISO 1516 ISO 3679 ISO 13736

The Digital Abel Flash Point test method determines the closed cup flash point fo petrolium products such as Bitumen and other liquids havin flash point between -30°C and 71°C inclusive.

Electrically heated by electronic regulator, mounted on a case painted with antiacid epoxidis products.
Calibrated brass crucible, cover with gas ignition device allowing to ignite the testing sample by a manual glideopening.
Motor stirrer, air bath and water bath are made croniumplated cooper.
Digital thermometer with thermocouple.
With internal cooling coil.

AS 0175
Digital Abel Flash Point complete
AS 0176
Low Temperature Thermostatic Bath and Circulator up to -45°C
AS 0177
Gas Cylinder Empty, 3 kg
AS 0178
Gas Reducer 30 mbar
AS 0179
Rubber Tube Joint and Tube, 5 meter
AS 0180
Thermometer IP74°C
AS 0181
Thermometer IP75°C
AS 0182
Thermometer IP2°C

Digital Automatic Abel Flash Point

Standards: EN 924 EN 13736, IP 170 IP 491 IP 492 ISO 1516 ISO 3679 ISO 13736

The Adel Flash point is used on petroleum products having a flash point between -18°C and 71°C (kerosene and solvents).

Suitable for flash point detection on different substances such as bitumen and other solvents.

The sample is warmed up according to the methods.

When the sample reaches the selected test temperature, the shutter is opened and the ignition system introduces itself automatically.

If the flash point is reached, the detection is done by an ionisation detector.

If not, the shutter closes again and the sample continues to warm up until the next test temperature.

AS 0183
Digital Automatic Abel Flash Point complete

Distillation of Cut-Back Asphaltic (Bituminous) Product

Standards: ASTM D 402

Gas-heated, 500ml side arm distillation flask, Ø117mm chimney with insulated metal shield, insulated cover split in two halves, Ø100mm lamp screen, two sheets of 16 mesh gauze, 100ml cylinder lamp, empty tube glass cooler, nozzle extensor made in glass, 500ml ball.

Supported on a height adjustable platform.

AS 0184
Gas Distillation of Cut back Asphaltic Apparatus

Dean and Stark Apparatus

Standards: ASTM D95

The Dean and Stark Apparatus
3 places test method covers the determination of water in the range from 0 to 25 % volume in petroleum products, tars, and other bituminous materials by the distillation method. Mantle heater with steel rod and clamp, 500ml flask, condeser and graduated 10ml receiver.

AS 0185
Dean and Stark Apparatus complete
AS 0186
Flask, 500ml, tapered joint 24/40, pack of 3

Loss on Heating Oven (TFOT)

Standards: EN 12607-2, EN 13303, BS 2000-45, 460-2, ASTM D6, D1754, AASHTO T47, T179

The Loss on Heat Oven test method is used for determining the loss in mass, the effect of heat and air on a film of semisolid bituminous materials. Completely made from stainless steel, natural ventilation, internal support (on request) rotating at 5-6rpm controlled by a geared motor located on the oven top, digital thermoregulator PID with overtemperature alam and probe, double wall locking door with toughned glass window.

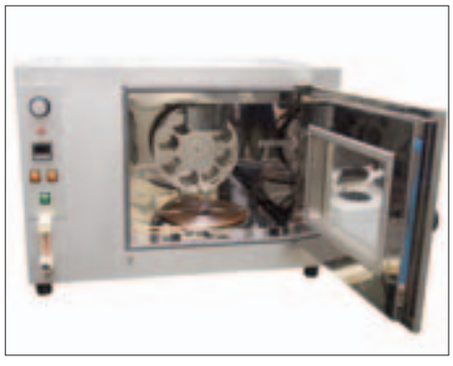
AS 0187
Loss on Heat Oven
AS 0188
Rotating Shelf
Accessories:
AS 0189
Brass Sample container ASTM D6
AS 0190
Stainless Steel Sample container D1754
AS 0191
Support ASTM D1754
AS 0192
Thermometer ASTM 13°C IP 47°C

Rolling Thin Film Oven (RTFO)

Standards: BS 2000, EN 12607-1, ASTM D2872

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

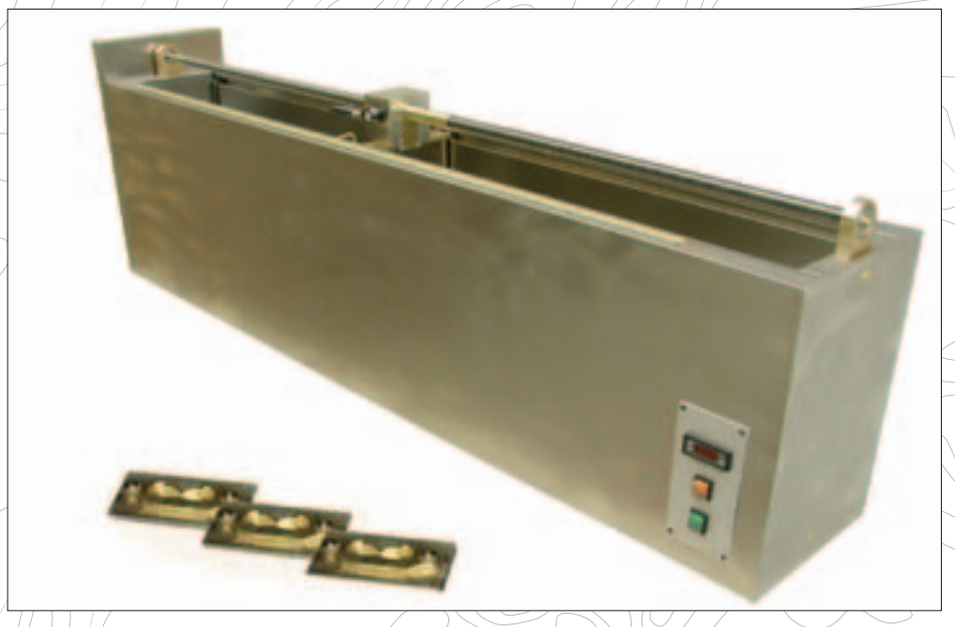
Completely made from stainless steel, forced ventilation, aluminium carriage rotating at 15rpm - circular and vertical - with 8 places for glass containers, internal fan controlled by a 1,725rpm motor, copper coil with nozzle preheating the air, flowmeter with regulator valve, digital thermoregulator PID with overtemperature alrm and probe, double wall locking door with toughned glass window.



AS 0193
Rolling Thin Film Oven
Accessories:
AS 0194
Glass Sample Containers
AS 0195
Thermometer ASTM 13°C IP 47°C
AS 0196
Drive belt, pack of 2

Ductility Testing Machine

Standards: EN 13398, EN 13589, ASTM D113, AASHTO T51



The Ductility Testing Machine used for determining the ductility of bituminous materials by measuring the elongation of briquette mould with molten bitumen in it whic is pulled apart at a specified speed and at a specified temperature. Unless otherwise specified, the test shall be made at a temperature of 77 + 0.9°F (25 + 0.5°C) and with a speed of 5 cm/min + 5.0%.

Three-place stainless steel structure with a 1.500mm stroke, transmission of 10 revolutions on square-thread traction rod, 5cm/min speed, ¼ Hp one-phase geared motor, stainless steel tank with white bottom, insulated walls, armoured stainless steel heater controlled by a digital thermoregulator with overtemperature alarm and probe, cooling coil, traction brass carriage holding moulds, circulation pump for stirring the liquids.

AS 0197
Ductility Testing Machine
AS 0198
Refrigerated Ductilometer
ASTM D113
AS 0199
Refrigerated Ductilometer
EN 13589 EN 13398

AS 0200
Ductility Briquette Mould, ASTM
AS 0201
Ductility Briquette Mould, EN 13589
AS 0202
Ductility Briquette Mould, EN 13398
AS 0203
Mould Storage

Emulsified Asphalts Apparatus

Standards: ASTM D244, D6997

The Emulsified Asphalt test methods and practices cover the examination of asphalt emulsions composed principally of a semisolid or liquid asphaltic base, water, and an emulsifying agent. Aluminium alloy boiler with annular gas lamp for heating, connection glass tube with protection shield, glass condenser for water circulation, 100ml graduated cylinder, supporting ring, bases with rods, pliers.

AS 0204
Emulsified Asphalt Apparatus

AS 0205
Thermometer ASTM 7°C pack of 2

Digital Viscometer Bath

Standards: ASTM D445, D446, D341, D2270

The Digital Viscometer Bath is used for measuring oils viscosity by Cannon-Fenske, Ubbelohde and similar capillary.

Working temperature from ambient to 150°C ±0.1°.
Borosilicate tank, cover with 5 holes 50.8mm, stainless steel control box on the cover.
Digital thermoregulator PID with overtemperature alarm and probe, cooling coil for improved control near to ambient temperature, stainless steel heater, motor stirrer, with stand-by stainless steel covers, protection Lexan jacket.

AS 0206
Digital Viscometer Bath, 5 places
AS 0207
Digital Viscometer Bath, 7 places

Accessories:
AS 0208
Viscometer Holders for Cannon Fenske, for transparent liquids, pack of 5
AS 0209
Viscometer Holders for Cannon Fenske, for opaque liquids, pack of 5
AS 0210
Viscometer Holders For Ubbelohde, pack of 5
AS 0211
Syringe Metallic

Large Digital Viscometer Bath

Standards: ASTM D445, D446, D341, D2270

The Large Digital Viscometer Bath Structure is made of stainless steel, cover with 5 holes or 7 holes, 50.8mm, temperature control by digital thermoregulator PID stability ±0.02°C and display resolution 0.01°,adjustable high and low temperature cut-out, low level liquid alarm, cooling coil, stand-by stainless steel covers, light.

AS 0212
Large Digital Viscometer Bath, 5 places
AS 0213
Large Digital Viscometer Bath, 7 places
Accessories:
AS 0214
Silicone Oil Kinematic viscosity 50 mm2/s at 25°C, -50 to +300°C, pack of 25 litres
AS 0215
Viscosity Charts ASTM D341, D2270 pack of 50

Digital Saybolt Viscometer

Standards: ASTM D88 E102, AASHTO T72

The Digital Saybolt Viscometer a device used to measure the viscosity of a fluid such as asphalt. Calibrated brass oil cup with stainless steel flowing orifice, polished and calibrated 1.76mm dia Universal and 3.15mm dia Furol.

Digital thermoregulator PID with overtemperature alarm and PT 100A probe, stirrer, cooling coil, 18/8 stainless steel water bath, insulated double wall and front opened jacket.

Monitoring the time required for the flow of specific volume to fill a 60cc container flask.

The time recorded in seconds at three different temperatures. It has 2 sample testing capacity with digital display.

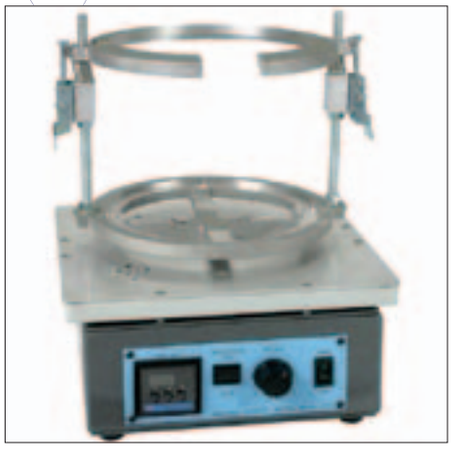
AS 0216
Digital Saybolt Viscometer, 2 places
AS 0217
Digital Saybolt Viscometer, 3 places
AS 0218
Digital Saybolt Viscometer, 4 places
AS 0219
Saybolt Viscosity Flask 60 ml
AS 0220
Set of Glass Thermometers 6 pcs
AS 0221
Filter funnel With stainless steel wire mesh

Rice Test Vibrator Apparatus

Standards: ASTM D2041

The Rice Test Vibrators provide consistent shaking of vacuum pycnometers. Comes with vibrating rate control and timer.
Easy to allow quick placement and removal of Pyknometer.

AS 0222
Rice Test Vibrator Apparatus



Vacuum Pyknometer, 6000 g

Standards: ASTM D2041, AASHTO T209, T283

The Vacuum Pyknometer is a 10 ltr, 6000 gr capacity unit used in the Rice Test to determine the maximum specific gravity of bituminous.
A transparent cover for easy observation of sample testing, perforated plastic shelf, water inlet valve and tube, quick disconnect, vacuum hose and aspirator with fitting

AS 0223
Vacuum Pyknometer, 6000 g
AS 0224
Vacuum Pyknometer Set
AS 0225
Residual-pressure Manometer

Percentage Refusal Density (PRD)

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

The Percentage Refusal Density is the ratio of the initial dried density of the sample to the final density (refusal density) expressed in percentage.

The sample bulk density is obtained by weighing in air and water; it is then heated in a split mould and compacted to refusal using a vibrating hammer.

The final density is then determined by weighing in air and water.

AS 0226
Percentage Refusal Density complete with accessories
AS 0227
Split Mould and Baseplate
AS 0228
Vibrating Hammer
AS 0229
Small Tamping Foot 102 mm dia
AS 0230
Large Tamping Foot 146 mm Dia
AS 0231
300mm Shank, For Tamping foot

Rate of Spread Balance

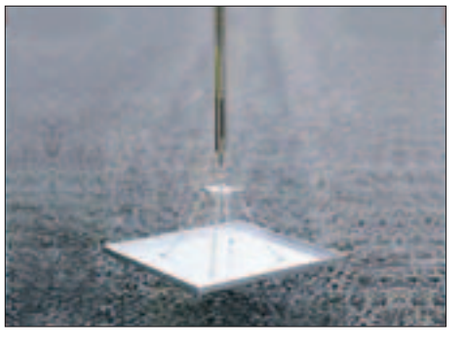
Standards: BS 598-108, EN 12272-1

The Rate of Spread Balance determine the spread of coated chippings. This is determined using the calibrated spring balance and the rate of spread of tray.

The spring load balance will accept rates of spread between 4 and 16kg/m^2.

Comprises:
Rate of Spread Tray, manufactured from aluminium, 300mm square complete with four chains and lifting eye attached to a spring balance.

AS 0232
Spring Balance
AS 0233
Tray and Four Chains



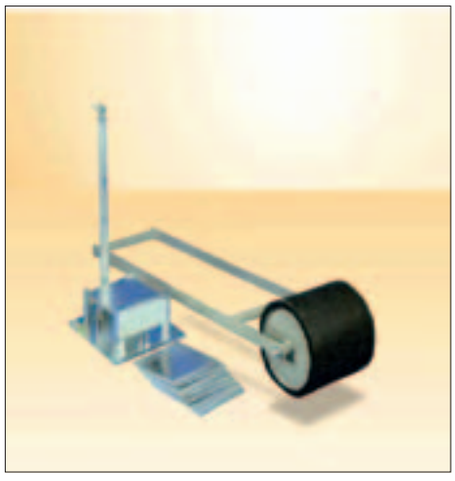
Vialit Plate, Adhesion Test Apparatus

Standards: EN 12272-3

The Vialit Plate Adhesion Apparatus is designed to assess the adhesion property of aggregates to bitumen.

The apparatus consists of a metal basement with three vertical pointed rods to hold the test plate; vertical rod 50 cm high with a shot at the upper end for the steel ball to drop; a 512 g steel ball; 6 metal test plates, hand operated rubber lined roller with lead shots ballast.

AS 0234
Vialit Plate



Benkelman Beam Apparatus

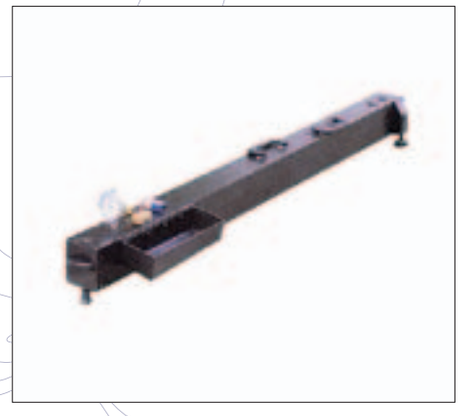
Standards: AASHTO T256

The Benkelman Beam Apparatus is designed to determine the deflection of a flexible pavement or road surface under moving wheel loads.

Comprises:
The equipment is light weight and made of aluminium for easy portability and use at any test location, the length of the Benkelman beam is 250cm and net weigh is 15 kg.

One end of the beam rests at a point under investigation while the beam is pivoted in the centre. The free end carries a dial gauge to record the deflections while the other end is kept on a stable platform.

AS 0235
Benkelman Beam Apparatus complete with all accessories



Traveling Beam Device

Standards: EN 1426, BS 2000-49, ASTM D5, AASHTO T 49

The Travelling Beam Device is used for detecting surface irregularities in both concrete and asphalt pavement.

Comprises:
The apparatus comprises of a 3-meter length beam with rigid wheels at the extremes and the middle, which can detect any vertical deviation of the surface from a straight-line between the two wheels at the ends of the machine.

Measuring capacity of the device is ±25 mm with 5mm increments. It comprises manual dye marker which can mark irregular surfaces of the road.

AS 0236
Traveling Beam Device complete
AS 0237
Autographic Recorder.
AS 0238
Charts for Autographic Recorder. Pack of 10 rolls
AS 0239
Fibre-tipped Pen

Rolling Straightedge Apparatus

Standards: AASHTO T256

The Rolling Straightedge measures depressions on the pavement surface on analogue scale 0-12mm + 0.25mm. The straightedge also has an odometer for accurate determination of distance travelled in units of 1 metre.

The Rolling Straightedge is pushed at 1-2km/h and the number of irregularities, their length and distance from start, are recorded.

The national specifications for surface regularity are then compared and the pavement accepted or rejected and or remedial work undertaken.

AS 0240
Rolling Straightedge Apparatus