

## UNIVERSAL EXTRUDER

STANDARDS: EN 12697-30, 13286-2, 13286-47; AASTHO T245, T134, T180, T193; ASTM D1559, D698, D1557, D1883; BS 598-107, 1377-4, 1924-2

Used to extrude samples having dia. 4", 6", 100 mm and 150 mm. It can therefore extrude CBR, Marshall and Proctor specimens.

The extruder is actuated by a 50 kN hydraulic jack, having ram travel of 130 mm + 90 mm screw.

Supplied complete with adaptors.

### Technical Specifications:

Product Code	Product Name	Dimensions (cm)	Weight (kg)
HR-AS1800	Universal Extruder	Ø 30 x 54	30



HR-AS1800

## MARSHALL STABILITY TEST MACHINE WITH LOAD RING

STANDARDS: EN 12697-34, 12697-23, 12697-12, 13108, ASTM D1559, AASHTO T245

The HR-AS5005 50 kN Capacity Marshall Stability Test Machine with Load Ring is used to determine the maximum load and flow values of bituminous mixtures. The machine comprises of a robust and compact two column frame with adjustable upper cross beam. The unit is a bench mounting compression frame with motor and worm gear housed within the base unit.

Platen rate is 50.8 mm/min also maintained under load thanks to an overpowered electric motor.

For safety, the up and down travel of the lower platen is limited the use of limit switches. Rapid adjustment of the platen is controlled using the buttons on the panel. The machine can be hand operated by a lateral hand wheel for calibration purposes.

The Marshall Stability Test Machine with Load Ring is supplied complete with 50 kN capacity Load Ring with 0,01 mm resolution Analog Dial gauge, 30 x 0.01 mm Dial Gauge and Breaking Head (Stability Mould) for Ø 4" Marshall samples.

Breaking Head (Stability Mould) for Ø 6" Marshall samples, Indirect Tensile Splitting Device for Ø 4" Marshall samples, Indirect Tensile Splitting Device for Ø 6" Marshall samples, Loading Strips, Ø 100 mm, for Tensile Splitting Device, Loading Strips, Ø 160 mm, for Tensile Splitting Device and Indirect Tensile Test Jig for Compacted Bituminous Samples with 30x0,01 mm Analog Dial Gauge for Ø 100 mm (4") & Ø 150 mm (6") samples should be ordered separately.



HR-AS5005

### Technical Specifications:

Product Code	Product Name	Dimensions (cm)	Weight (kg)	Power Supply
HR-AS5005	Marshall Stability Test Machine with Load Ring	47x61x95	89	220 V, 50 Hz, 1 ph
HR-AS5005/60Hz	Marshall Stability Test Machine with Load Ring	47x61x95	89	220 V, 60 Hz, 1 ph

### Spare Parts & Accessories:

Product Code	Product Name
HR-AS5000/1	Breaking Head (Stability Mould) for Ø 4" Marshall samples
HR-AS5000/2	Breaking Head (Stability Mould) for Ø 6" Marshall samples
HR-G5003	Load Ring, 50 kN capacity with 0,01 mm resolution Analog Dial gauge
HR-G0876	Dial Gauge, 30 x 0,01 mm
HR-AS5000/3	Indirect Tensile Splitting Device for Ø 4" Marshall samples
HR-AS5000/4	Indirect Tensile Splitting Device for Ø 6" Marshall samples
HR-AS5000/5	Loading Strips, Ø 100 mm, for Tensile Splitting Device
HR-AS5000/6	Loading Strips, Ø 160 mm, for Tensile Splitting Device
HR-AS5000/7	Indirect Tensile Test Jig with 30x0,01 mm Analog Dial Gauge for Ø 100 mm (4") & Ø 150 mm (6") samples