

HİRA TESTING EQUIPMENT



WATER BATHS

STANDARDS: EN 12697-27

Water baths are fully double walled stainless steel made with high quality stone wool insulation.

The specimens are held by a shelf spaced from the bottom.

Complete with digital thermostat and electric stirrer "for continuous water recirculation", ensuring a constant and uniform temperature of 60 ± 1 °C as described in the standards.

Water bath with cooling unit is also available.

Depending on the capacity of the water bath, cooling unit can be under or near the water bath.



HR-G1505

Technical Specifications:

Product Code	Product Name	Capacity (lt)	Int. Dimensions (cm)	Ext. Dimensions (cm)	Weight (kg)	Temperature Range (°C)
HR-G1500	Water Bath with Circulation System	15	16x33x30	30x52x37	14	Ambient to 99.9
HR-G1505	Water Bath with Circulation System	30	16x51x30	30x69x37	17	Ambient to 99.9
HR-G1510	Water Bath with Circulation System	48	16x65x55	30x82x58	24	Ambient to 99.9
HR-G1525	Water Bath with cooling device	15	16x33x30	63x40x60	25	+5 to 70
HR-G1530	Water Bath with cooling device	30	16x51x30	63x40x76	35	+5 to 70
HR-G1535	Water Bath with cooling device	48	16x65x55	65x62x90	45	+5 to 70

Technical Specifications:

Temperature Sensor	Fe - Const
Control System	PID & MP
Temperature Resolution	± 0.1 °C
Pump Capacity	5 lt
Int. Surface Material	Stainless Steel
Ext. Surface Material	Steel with Electrostatic Powder Paint
Power Supply	220 V, 50-60 Hz, 1 ph



HR-G1500

BITUMEN PENETROMETER

STANDARDS: EN 1426, ASTM D5, AASHTO T49

Used to determine the consistency of a bituminous sample under fixed conditions of load, time and temperature. The penetration is expressed in distance of tenths of millimeters vertically penetrated by a standard needle.

Penetration is measured with digital gauge 0,01 mm resolution.

The penetrometer is supplied with stop and release push button, automatic zero timer set, penetration needle, transfer dish and 6 penetration tins 55x35 mm dia.

The other accessories should be ordered separately.

Technical Specifications:

Product Code	Product Name	Dimensions (cm)	Weight (kg)	Power Supply
HR-AS1925	Semi-Automatic Digital Bitumen Penetrometer	20x30x50	10	220 V, 50-60 Hz, 1 ph



HR-AS1925

Spare Parts & Accessories:

Product Code	Product Name	Dimensions (cm)	Weight (kg)	Standards
HR-AS1925/1	Penetration Needle	---	0,0025	EN 1426, ASTM D5, AASHTO T49
HR-AS1925/2	Transfer Dish for HR-AS1925 & HR-AS1950	---	---	---
HR-G0610	Moisture content tin	Ø 5,5 x 3,5	0,02	---
HR-G0608	Moisture content tin	Ø 7 x 4,5	0,03	---
HR-AS1925/3	One-Quarter Scale Cone and Shaft for Lubricating Grease	---	---	ASTM D1403 & ASTM D1831
HR-AS1925/4	One-Half Scale Cone and Shaft for Lubricating Grease	---	---	ASTM D1403 & ASTM D1831
HR-AS1925/5	Brass Penetrometer Cone for Lubricating Grease and Petrolatum	---	---	ASTM D 217 & ASTM D 937
HR-AS1925/6	Resilience Ball Penetration Tool	---	---	ASTM D5329

AUTOMATIC BITUMEN PENETROMETER

STANDARDS: EN 1426, ASTM D5, AASHTO T49, ISO 3997, IP 49

Used to determine the consistency of a bituminous sample under fixed conditions of load, time and temperature.

Base Table, light alloy leveling screws, plated vertical rod are adjustable as micrometric.

The Slide is manufactured from brass. Free fall timer can chosen 0 – 999 second. Measurement Resolution of Optic sensor is 0,01 mm.

Automatic Bitumen Penetrometer has stop - release button.

3 tests are made and the average is taken automatically.

The penetrometer is supplied with penetration needle, transfer dish and 6 penetration tins 55x35 mm dia.

The other accessories should be ordered separately.

HR-AS1950



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Technical Specifications:

Product Code	Product Name	Dimensions (cm)	Weight (kg)	Measuring Range (mm)	Resolution (mm)	Power Supply
HR-AS1950	Automatic Digital Bitumen Penetrometer	25x20x45	15	0-50	0,01	220 V, 50-60 Hz, 1 ph

Spare Parts & Accessories:

Product Code	Product Name	Dimensions (cm)	Weight (kg)	Standards
HR-AS1925/1	Penetration Needle	---	0,0025	EN 1426, ASTM D5, AASHTO T49
HR-AS1925/2	Transfer Dish for HR-AS1925 & HR-AS1950	---	---	---
HR-G0610	Moisture content tin	Ø 5,5 x 3,5	0,02	---
HR-G0608	Moisture content tin	Ø 7 x 4,5	0,03	---
HR-AS1925/3	One-Quarter Scale Cone and Shaft for Lubricating Grease	---	---	ASTM D1403 & ASTM D1831
HR-AS1925/4	One-Half Scale Cone and Shaft for Lubricating Grease	---	---	ASTM D1403 & ASTM D1831
HR-AS1925/5	Brass Penetrometer Cone for Lubricating Grease and Petrolatum	---	---	ASTM D 217 & ASTM D 937
HR-AS1925/6	Resilience Ball Penetration Tool	---	---	ASTM D5329