

LOT I

16 KN SERVO-PNEUMATIC DYNAMIC TESTING SYSTEM

TWO MODELS AVAILABLE:

B220-01 KIT

DTS-16 WITH MANUAL CROSSHEAD

B220-02 KIT

DTS-16 WITH MOTORIZED CROSSHEAD

The DTS-16 Dynamic Testing System is a servo-pneumatically controlled testing machine utilizing digital control of a pneumatic servo valve to provide accurate loading wave shapes up to 70 Hz. The DTS-16 can be operated in tension, compression dynamic loading and is suited to testing a diverse range of materials such as asphalt, soil, unbound granular materials, fibres and plastics.

The DTS-16 is underpinned by Pavetest's leading edge CDAS digital controller, TestLab software and a full complement of accessories, hardware and software in perfect unison.

MAIN FEATURES

- Compact, robust 2-Column load frame.
- Precision engineered.
- Optional Motorized crosshead positioning.
- Fully configurable to suit a large range of testing applications.
- Digital Servo-Pneumatic control.
- 4 axis control and 16 Channel Control and Data Acquisition System.

The machines includes:

B220-11 20 kN Load frame with manual crosshead,
16 kN Servo-pneumatic actuator with its
LVDT (30 mm stroke), ± 20 kN load cell

or

B220-12 20 kN Load frame with motorized crosshead,
16 kN Servo-pneumatic actuator with its
LVDT (30 mm stroke), ± 20 kN load cell

B206 16 Channel Control and Data Acquisition System
(CDAS) & TestLab software

B270-12 Air reservoir assembly with membrane dryer

It requires pressurized air, minimum 7 bar (not included).



B220-02 KIT

16 kN Servo-Pneumatic dynamic testing system (motorized crosshead)
with **B221N** Temperature controlled cabinet

Model	B220-01 KIT	B220-02 KIT
B220-11	▼	
B220-12		▼
B206	▼	▼
B270-12	▼	▼

TECHNICAL SPECIFICATIONS

Load frame

- Between Columns 345 mm
- Vertical Space 650 mm

Servo actuator

- Capacity ± 16 kN
- Frequency up to 70 Hz
- Stroke 30 mm
- Air supply clean dry air
- Pressure 800-900 kPa
- Minimum rate up to 5 litres/sec

Power Supply: 90-264V 50-60Hz 1ph 240W (B220-11)
 230V 50Hz 1ph 100W (B220-12)
 230V 50Hz 1ph 1450W (B221)

Dimensions: 1262(h) x 400(d) x 470(w) mm B220-11 load frame
 1262(h) x 400(d) x 510(w) mm B220-12 load frame
 2170(h) x 840(d) x 760(w) mm load frame with
 temperature controlled cabinet

Weight: 80 kg load frame B220-11 load frame
 125 kg load frame B220-12 load frame
 160 kg temperature controlled cabinet



B220-02 KIT
DTS-16 detail

B220-12
20 kN Load frame with motorized
crosshead

TECHNICAL FEATURES

■ Optional motorized crosshead.

A motorized crosshead allows an easier test set-up in terms of accessories positioning without using any extension rods.

■ Latest technology.

The DTS-16 advantage revolves around the Control Data Acquisition System (CDAS) and TestLab Software.

■ Durable powder coated aluminium base plate with stainless steel work platen.

■ Air reservoir assembly with membrane dryer.

It allows a great insurance against damages to the servo-valve in case of moisture in the compressed air.

RECOMMENDED ACCESSORIES

B221N Temperature controlled cabinet: -20 °C to +70 °C
to suit DTS-16 or 4PBA

B250-07 KIT Temperature measuring kit comprising:

■ **B292-01** Temperature transducer (-80 °C to +80 °C)
(2 pieces)

■ **B250-10** Dummy asphalt specimen

■ **B250-11** 100 mm "O" ring (3 pieces)

■ **B250-12** Thermal conducting grease (about 56 g)

H009-01EN PC complete with LCD monitor 22", keyboard,
mouse, cables and installation of Testlab software

B270-12
Air reservoir assembly
with membrane dryer



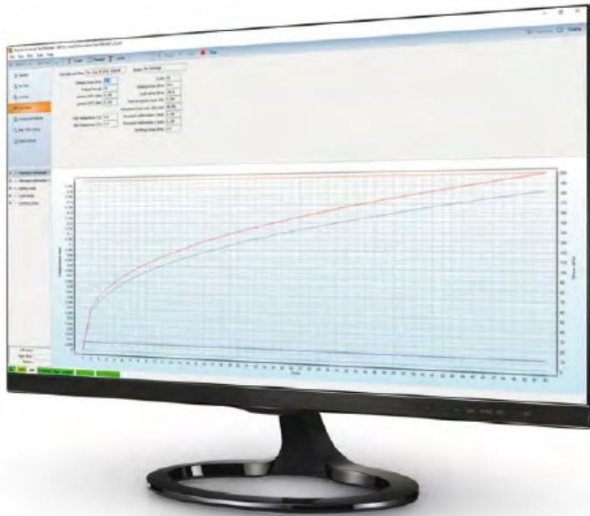
B250-07 KIT
Temperature measuring kit

We can upgrade your existing UTM (also from other manufacturers)

For test configurations and related jigs, please consult p.182-192

B271 KIT CYCLIC TRIAXIAL COMPRESSION - CCT

STANDARD: EN 12697-25 Cyclic compression. Test Method B - Triaxial cyclic compression test



TEST FRAMES

Manual DTS-16 | Motorized DTS-16 (B221)
DTS-30 | DTS-130 (B231 or B232)

B271 KIT Cyclic triaxial compression
Comprises:

B270-01 Triaxial cell, suitable for
Ø 100 mm, up to
200 mm height specimens

B270-02 Triaxial cell external LVDT
mounting jig

B293-01 Pressure transducer
(± 300 kPa)

B270-06 110 mm diameter top loading platen for EN 12697-25B

B270-15 110 mm diameter base pedestal for 100 mm height
specimen



ACCESSORIES

B290-02 Displacement transducer (10 mm) (2 pieces **needed**)

B270-04 Air reservoir assembly confining pressure upgrade kit
(**needed** accessory for DTS-16)

or

B270-03 Air reservoir assembly with confining pressure control
(**needed** accessory for DTS-30/130)

B270-17 Ø 200 mm base plate (**needed** accessory for DTS-30)

B270-18 Membrane stretcher for asphalt specimen Ø 100 mm

B201-53 Ø 100 mm rubber membrane 0.3 mm thickness
(pack of 10)

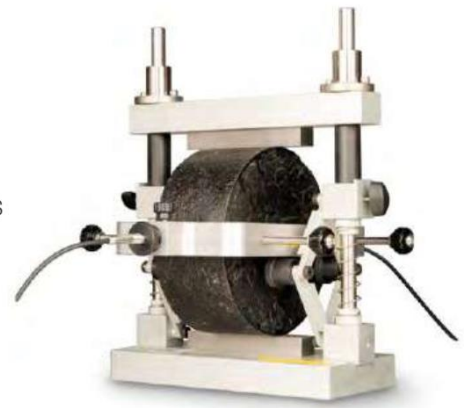
S311-03 Ø 100 mm sealing ring (10 pieces)

S316-03 Ø 100 mm porous disc (2 pieces) needed for AASHTO T307
Requires pressurized air, minimum 7 bar (not included)

DYNAMIC TEST CONFIGURATIONS

B250 KIT INDIRECT TENSILE MODULUS - IDTM

STANDARDS: AASHTO TP31 Resilient modulus of bituminous mixtures by indirect tension
ASTM D4123 Indirect Tension Test for Resilient Modulus of Bituminous Mixtures
AS/NZS 2891.13.1 Resilient modulus of asphalt - Indirect tensile method
EN 12697-26 Annex C - Indirect tension to cylindrical specimens (IT-CY)



TEST FRAMES

Manual DTS-16 | Motorized DTS-16 (B221)
DTS-30 | DTS-130 (B231 or B232)

B250 KIT Indirect Tensile Modulus

Comprises:

- B250-01** Basic IDT Jig
- B250-08** Yoke
- B250-09** Assembly for B250 KIT
- B290-01** LVDT (0.2 mm) (2 pieces)

ACCESSORIES

- B250-03** Asphalt proving ring
- B250-04** 100 mm diameter PVC specimen
- B250-05** 150 mm diameter PVC specimen
- B250-06 KIT** Torque screwdriver (B250-13) with hexagonal head 4 mm (B250-14)

B251 KIT INDIRECT TENSILE FATIGUE - IDTF

STANDARD: EN 12697-24 Annex E – Indirect tensile test on cylindrical shaped specimens



TEST FRAMES

Manual DTS-16 | Motorized DTS-16 (B221)
DTS-30 | DTS-130 (B231 or B232)



B251 KIT Indirect Tensile Fatigue

Comprises:

- B250-01** Basic IDT Jig
- B290-03** LVDT, double ball ended (3.75 mm) (2 pieces)
- B251-01** LVDT mounting strip gluing jig

ACCESSORIES

- B251-51** Pair of LVDT mounting strip to suit 100 mm specimen (**needed** accessory)
- And/or
- B251-52** Pair of LVDT mounting strip to suit 150 mm specimen (**needed** accessory)
- B201-52** 5 Minute, two part epoxy 24 ml

Model	Capacity litres	Inside dimensions mm L D H	Outside dimensions mm L D H	Doors n°	Wattage	Weight kg	Spare grid shelf steel
A008-01 KIT	100	400x420x600	700x515x910	1	1250	45	A008-51
A008-03 KIT	220	600x610x600	900x725x910	1	2050	70	A008-52
A008-05 KIT	440	900x700x700	1250x760x1000	2	3700	95	A008-53
A008-07 KIT	750	900x640x1300	1250x700x1600	2	4950	140	A008-54

MAIN FEATURES

- Forced ventilation airflow.
- Digital temperature control system.
- Temperature precision and uniformity as requested by EN, BS Spec.
- Stainless steel chamber and trays.
- Insulation by 60 mm thick glass fibres.
- Dual thermostat ensuring safe working conditions.



A008-05 KIT

LOT II

CONE PENETROMETER METHOD FOR:

■ LIQUID LIMIT DETERMINATION

STANDARDS: CEN ISO/TS 17892-12 | BS 1377:2 | NF P94-052-1

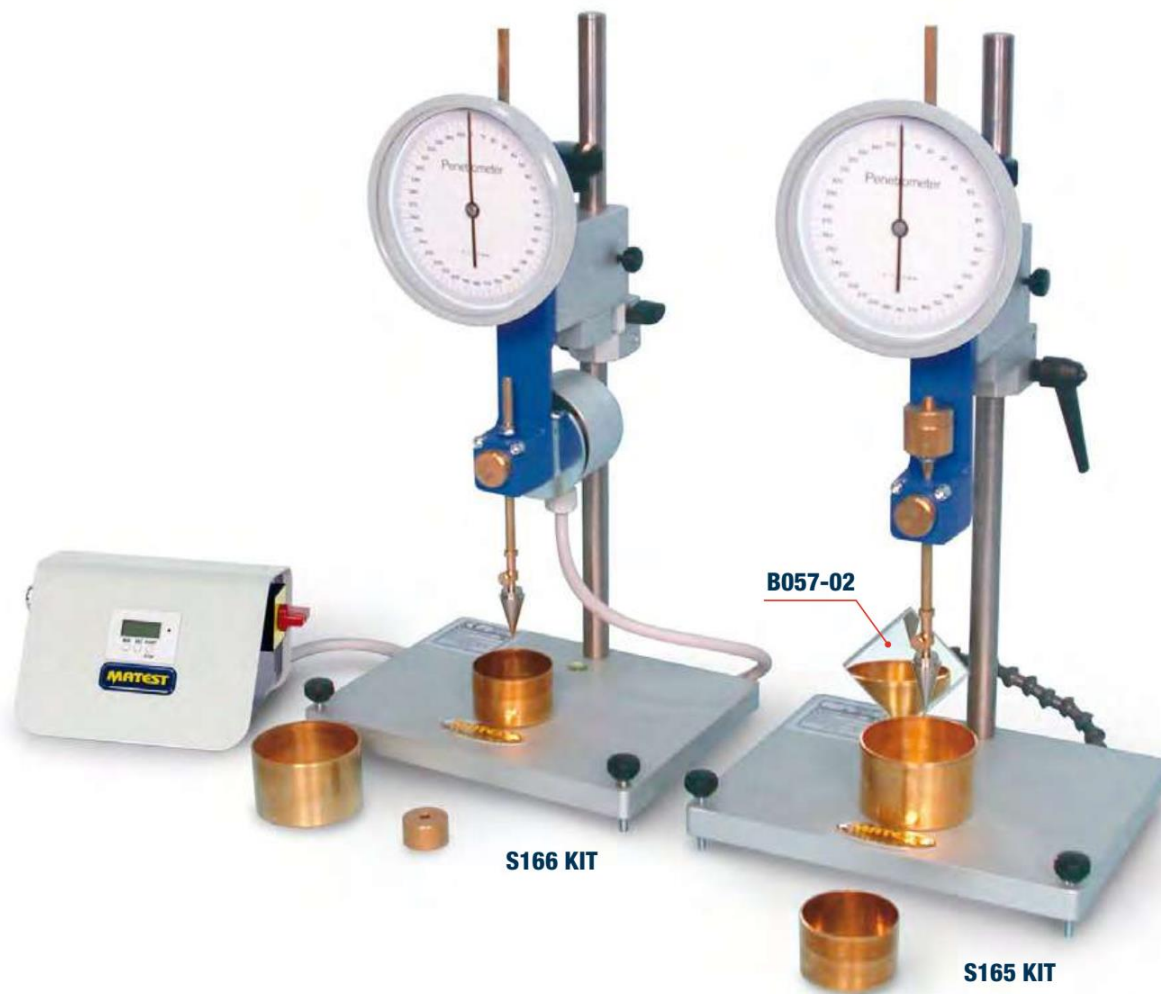
The test is based on the relationship between the moisture content at which clay soils pass from a plastic to a liquid state.

This value is obtained from the penetration capacity of the standard cone allowed to free fall into the sample for a period of 5 seconds.

■ SHEAR STRENGTH DETERMINATION

STANDARD: CEN ISO/TS 17892-06

The cone penetrometer is also suitable to measure the shear undrained strength of undisturbed and reconstituted soil samples as per CEN ISO/TS 17892-06 Standard.



MODELS

S165 KIT CONE DIAL PENETROMETER

The cone penetrometer consists of:

- Aluminium base with levelling screws and spirit level.
- Chromed vertical rod with **micrometric vertical displacement device**.
- Dial gauge 150 mm diameter, graduated in 360°, division 0.1 mm
- Slider, brass made, with free fall, stop and release push button, automatic zero set.
- Stainless steel penetration test cone 35 mm long, 30° angle
- Weight 20 g
- Two brass cups Ø 55x35 mm and 70x45 mm

Dimensions: 220x170x410 mm

Weight: 13 kg approx.

S166 KIT SEMI-AUTOMATIC CONE DIAL PENETROMETER

Basically structured as mod. S165KIT, but equipped with a magnetic controller device with electronic digital programmable timer that automatically releases the plunger head and ensures free falling of the cone during the 5-seconds test.

Supplied complete.

Power supply: 230V 1ph 50-60Hz 200W

Dimensions: 220x280x410 mm

Weight: 15 kg approx.



LIQUID LIMIT CASAGRANDE METHOD

Used to evaluate the relationship between the moisture percentage of a soil sample and the number of blows required to close a groove made into the soil and therefore to determine when a clay soil changes from a plastic to a liquid state.

The unit comprises a removable brass cup which through a cam device drops on a bakelite base (or hard rubber base). Supplied complete with drops counter, but **without grooving tool** which has to be ordered separately.

The instrument is available in two versions:

- hand operated through crank (left or right side)
- motor operated at 120 drops/min speed, ensuring better uniformity and accuracy

MODELS

S170 LIQUID LIMIT DEVICE

Hand operated with **left side crank** and hard rubber base.
STANDARDS: ASTM D4318 | AASHTO T89 | UNI 10014
comparable to: BS 1377:2 | UNE 7377

Weight: 3 kg approx.

S170-05 LIQUID LIMIT DEVICE

Hand operated.
Same as mod. S170, but with **right side crank**.

S170-01 LIQUID LIMIT DEVICE

Hand operated with bakelite base, chromed cup.
STANDARD: NF P94-051-1

S172 LIQUID LIMIT DEVICE

Motor operated with hard rubber base.
STANDARDS: ASTM D4318 | AASHTO T89 | UNI 10014
comparable to: BS 1377:2 | UNE 7377

Power supply: 230V 1ph 50Hz
Weight: 4.5 kg approx.

S172-01

ACCESSORIES

- S173-02** ROUGH BRASS CUP, with central smooth band 10 mm wide, as requested by NF P94-051 Standard, used for soils having low plasticity
- S173-03** GROOVING TOOL, to UNI 10014 - AASHTO T89 Spec.
- S173-04** GROOVING TOOL, to ASTM D 4318 Specifications
- S173-05** GROOVING TOOL, to NF P94-051-1 Specifications
- S173-06** GROOVING TOOL, to BS 1377:2 Specification



S173-01...S173-08

SPARES

- S173-01** Brass cup. (ASTM, BS, UNI, UNE, AASHTO).
- S173-02** Chromed cup. (NF P94-051-1)

LOT III

E136 WATER BATH, DIGITAL

STANDARD: BS 1377:2

For the determination of particle density, pyknometer method, according to BS 1377:2 Specifications, and for general laboratory purposes.

All stainless steel made, with wool insulation and water circulation electric stirrer, the bath ensures an uniform and constant temperature. Complete with digital thermostat and dual safety thermostat with higher thermic threshold ensuring safe working conditions.

A cooling device to be connected to the water net is used when room temperature exceeds the requested one.

Capacity: 40 litres

Temperature range: ambient to 60 °C, accuracy ± 0.5 °C

Internal dimensions: 510x350x230 mm

Overall dimensions: 680x420x420 mm

Power supply: 230V 1ph 50Hz 1200W

Weight: 28 kg approx.



E136

Mobile moisture measuring probe for sand, gravel, crushed stone and other materials

Description



Complete HD2 measurement carrying case set with SONO-M1

The set comprises:

- HD2 display unit
- SONO-M1 moisture probe
- AC adapter (12 V/2 A)
- Travel plug adapter for various countries



The accuracy of the measuring systems is 0.1–0.2%, while products from competitors only achieve 0.5%.



HD2

Robust, battery-operated mobile display unit for various probes: SONO-M1,-M1C,-M2.



SONO-M1

Mobile moisture probe for sand, gravel, crushed stone and expanded clay with integrated TDR electronics. The probe has a diameter of 64mm and uncoated rods with a rod length of 130mm.



SONO-M1C

Mobile moisture probe for conductive materials such as coal, iron oxide, soils and sand containing clay, fly ash, sandstone, furnace slag and other materials. Probe with integrated TDR electronics, 64mm diameter and coated rods with a rod length of 100mm.



SONO-M2

This particularly slim mobile moisture probe for sand, gravel and crushed stone with integrated TDR electronics enables deeper penetration of the aggregate.



Telescopic extension for the SONO-M2

Pull-out telescopic extension of up to two meters.

"Manufacturers of mobile sand moisture measurement meters have previously failed to impress us. But the HD2 from IMKO has exceeded our expectations. After several days of comparison measurements in the laboratory, we can confirm that the HD2 measuring device with the SONO-M1 probe delivers the highest degree of accuracy."

Michael Ackermann, RAGANO Betonfertigteile

TEST SIEVES

STANDARDS: EN 933-2 | ISO 3310-1, ISO 3310-2, ISO 565 | ASTM E 11 | BS410 | NF X11-504 | UNI 2331, UNI 2333 | DIN 4187-1 | UNE 7050

All sieves are made with stainless steel woven wire and frame and meet International Specifications.

Perforated plates are made of tinned steel, both square and round holes.

The sieves are available in the following diameters: 200 - 250 - 300 - 315 - 400 - 450 mm and 8"-12".

Their apertures are clearly marked on the label, including the serial number for the identification and traceability of the sieve.

Each sieve is supplied complete with certificate of conformity.

HOW TO BUY WOVEN WIRE MESH SIEVES

STANDARDS: ISO 3310-1 | EN 933-2, | BS410 | UNE 7050
DIN 4187-1 | NF X11-504 | UNI 2331, 2333
ASTM E11

The available openings of the woven wire mesh sieves are listed in the next pages and are coded from n° 00 to 77.

The buyer has to add to this number:

- A052-...** for the frame Ø 200 mm
- A051-...** for the frame Ø 250 mm
- A053-...** for the frame Ø 300 mm
- A054-...** for the frame Ø 315 mm
- A055-...** for the frame Ø 400 mm
- A050-...** for the frame Ø 8"
- A043-...** for the frame Ø 12"



A052-...

 **Note:** It is possible to test approx. 1000 g of material by using Ø 200 mm sieves; and 3000 g with Ø 300 mm sieves.

HOW TO BUY PERFORATED PLATE SIEVES

“Square Hole”

STANDARDS: EN 933-2 | ISO 3310-2 | BS 410 | DIN 4187-1


The available openings of the perforated plate square hole sieves are listed in the next page, and are coded from n° 01 to 37

The buyer has to add to this number:

- A031-...** for the frame Ø 200 mm
- A032-...** for the frame Ø 300 mm
- A033-...** for the frame Ø 400 mm



A031-...

 **Note:** EN 933-2 Standard specifies that “sieves with opening 4 mm and over shall be perforated plate square hole”. Below 4 mm they shall be woven wire.

HOW TO BUY PERFORATED PLATE SIEVES

“Round Hole”

STANDARDS: UNI 2334

The available openings of the perforated plate round hole sieves are listed in the next page, and are coded from n° 01 to 38

The buyer has to add to this number:

- A037-...** for the frame Ø 200 mm
- A038-...** for the frame Ø 300 mm



A037-...

LOT IV

C372M ULTRASONIC PULSE VELOCITY TESTER, HIGH PERFORMANCE

WITH MICROPROCESSOR FOR COMBINED ULTRASONIC AND REBOUND HAMMER DATA ACQUISITION AND PROCESSING
 STANDARDS: EN 12504: part 4 | BS 1881:203 | ASTM C597 | NF P18-418

MAIN FEATURES

- Touch screen LCD display 800x480 pixel.
- Windows operating system like a standard PC.
- Flash memory 128Mb, expandable with SD card to illimited memory.
- Time measuring from 0 to 9999,9 μ S resolution.
- Possibility to combine the ultrasonic measurement with rebound index (SonRed method).

This is an instrument using the most modern technologies; it has a 7" WVGA colour touch screen, 128 MB, SD card, USB, working system Windows CE.

Ultrasonic tests:

The appliance allows measuring the ultrasonic impulse **speed** inside the material (by knowing the distance between the probes). It measures the **distance between the probes** (by knowing the speed of the ultrasonic impulse to go through the tested material). It measures the required **time** by the ultrasonic impulse to go through the tested material.

Young's modulus for soils is also measured (by knowing the distance between the probes, the density of the tested material and the shear-speed).

Young's modulus for concrete is measured by knowing the distance between the probes, the density of the tested material and the poisson ratio.

Calculation of the **crack depth**.

Zero calibration with deuration of the time for the impulse to go through the probes.

Calibration of a defined time value.

Infinite filing capacity of the test dates and the graph tracing of the tests on SD card or extractable and expandable.
 Possibility to use the instrument with two exponential probes, or with one standard probe and one exponential probe.
 Possibility to connect the instrument to internet for consultations or extractions, like a common PC.
 Visualization of the shape of the transmitting wave while it goes through the material checked, by transforming the instrument into a real oscilloscope.

Combined ultrasonic and rebound hammer determination (sonreb method):

The C372M ultrasonic tester houses an integral data logger for data acquisition, processing and store of rebound hammer values.

The acquisition of the rebound values is performed with manual or automatic mode.

a) Manual mode:

Rebound values measured with a standard concrete hammer are manually input into the ultrasonic Tester.

b) Automatic mode:

The digital Matest test hammer mod C386N is directly connected to the ultrasonic tester through a cable. The measured rebound values are automatically transmitted to the C372M tester.

The measures of the velocity of ultrasonic pulses and the rebound values, gives estimates of dynamic modulus of elasticity and Poisson's Ratio, and provides informations on possible voids, cracks and strength of the structure.

It is possible to evaluate the compressive strength of the concrete, useful to estimate formwork striking times.

The combined test allow to rectify different inaccuracies that are typical of the simple rebound hammer test, and obtaining estimates on the compressive strength of the concrete, that cannot be obtained with the ultrasonic test, granting high accuracy and reliability of the results.

C372M



The standard appliance includes:

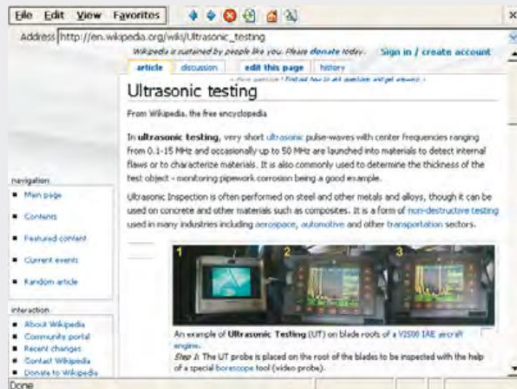
- Instrument in basic configuration (ARM Cortex-AS 400MHz, 128 MB Flash Memory, 128 MB Ram) in a practical and elegant palmer container.
- Two 55 kHz probes with connecting cables.
- Calibrating cylinder and contact paste
- Strong anti shock case holding the instrument and the accessories.
- Battery pack Li-Ion 11.1V 3000mA.h
- External feeder 230V/24V and battery charger

Dimensions: 400x300x180 mm

Weight: 3 kg approx.

**C372M + C386N****C372M with case**

Display of graphic function



Display of internet function



Electronic card: detail

ACCESSORIES

- C370-08** EXPONENTIAL TRANSMITTING/RECEIVING PROBES (couple), **55 kHz** Nominal Frequency.
- C372-10** TRANSMITTING/RECEIVING PROBES (couple), **150 kHz** Nominal Frequency, indicated for homogeneous, compact, high density concrete.
- C372-11** TRANSMITTING/RECEIVING PROBES (couple), **24 kHz** Nominal Frequency, indicated for heterogeneous, low density concrete.
- C370-09M** COUPLE OF CABLES (each 10 m long) to connect the probes to the tester. Used to test voluminous/large structures.

**C372-10**

SPARES

- C370-02** Transmitting/receiving probes (couple), 55 kHz
- C370-04M** Couple of cables (each 3.5 m long) to connect the probes to the tester.
- C370-07** Tube of grease to better coupling the probes to the material under test.

**C370-02****C370-08**

LOT V



B058 **THERMOSTATICALLY CONTROLLED WATER BATH** **FOR PENETROMETER**

Provides water at the required temperature of 25 ± 0.1 °C.

The unit consists of a stainless steel water bath 10 litres capacity with wool insulation, immersion heater with digital thermostat, motor pump with connections, cooling coil device, current water operated, to maintain a constant temperature of the bath when room temperature is slightly higher.

The bituminous sample is immersed into the water bath, and placed on the penetrometer only at the time of the test, by eventually using the transfer dish (accessory mod. B057-03).

Power supply: 230V 1ph 50-60Hz 350W

Dimensions: 375x335x420 mm

Weight: 12 kg approx.



B058 detail

ACCESSORY

B058-01

WATER BATH DISH with incorporated thermostatic coil, to be connected to the bath mod. B058. It keeps the temperature of the bitumen sample directly on the penetrometer, by avoiding to transfer it.

Dimensions \varnothing 151x90 mm

Precision balance KERN 572 · 573



All-rounder e.g. as precision balance in the laboratory or in harsh industrial applications

Features

- Thanks to the many typical laboratory functions, such as, for example, recipe function, percentage determination, GLP record keeping, combined with the high level of precision, the KERN 572 is a reliable partner for day-to-day work in the laboratory
- The robust version, typical industrial functions, such as piece-counting, vibrationfree weighing and the large weighing ranges also make these balances ideal for all industrial applications, where a high level of precision is required
- Freely programmable weighing unit, e.g. display direct in special units such as length of thread g/m, paper weight g/m², or similar

- The robust aluminium diecast housing maintains the stability, protects the weighing technology elements and is robust enough to cope with everyday use
- Ring-shaped draught shield standard, only for models with weighing plate size **A**, weighing space $\phi \times H$ 157×43 mm
- Model with resolution > 240,000 Pt.: Level indicator to level the balance precisely
- Loop for underfloor weighing, standard for models with [d] < 0,01 g
- Protective working cover included with delivery

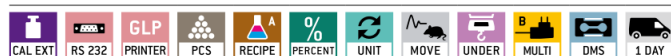
Technical data

- Large backlit LCD display, digit height 18 mm
- Dimensions weighing surface, Stainless Steel
A ϕ 106 mm
B ϕ 150 mm
C W×D 160×200 mm, see larger picture
- Net weight **A**, **B** approx. 2,4 kg **C** approx. 2,8 kg
- Overall dimensions W×D×H 180×310×85 mm
- Permissible ambient temperature 10 °C/40 °C

Accessories

- Protective working cover, scope of delivery: 5 items, KERN 572-A02S05
- Rechargeable battery pack external, operating time up to 30 h without backlight, charging time approx. 10 h, KERN KS-A01
- Loop and hook for underfloor weighing, for models with [d] ≥ 0,01 g, KERN 572-A03
- **I** Large glass draught shield with 3 sliding doors for easy access to the items being weighed. Weighing space W×D×H 150×140×130 mm, for models with weighing plate size **A**, KERN 572-A05

STANDARD



OPTION



Model	Weighing capacity [Max] g	Readability [d] g	Reproducibility g	Linearity g	Resolution Points	Weighing plate	Option	
							DAkkS Calibr. Certificate	DAkkS KERN
572-30	240	0,001	0,001	± 0,003	240.000	A	963-127	
572-31	300	0,001	0,002	± 0,005	300.000	A	963-127	
572-32	420	0,001	0,002	± 0,005	420.000	A	963-127	
573-34	650	0,01	0,01	± 0,03	65.000	B	963-127	
572-33	1600	0,01	0,01	± 0,03	160.000	B	963-127	
572-35	2400	0,01	0,01	± 0,03	240.000	B	963-127	
572-37	3000	0,01	0,02	± 0,05	300.000	B	963-127	
572-39	4200	0,01	0,02	± 0,05	420.000	B	963-127	
572-45	12000	0,05	0,05	± 0,15	240.000	C	963-128	
572-55	20000	0,05	0,1	± 0,25	400.000	C	963-128	
573-46	6500	0,1	0,1	± 0,3	65.000	C	963-128	
572-43	10000	0,1	0,1	± 0,3	100.000	C	963-128	
572-49	16000	0,1	0,1	± 0,3	160.000	C	963-128	
572-57	24000	0,1	0,1	± 0,3	240.000	C	963-128	



DIGITAL THERMOMETERS

Complete with depth stainless steel probe, for temperature measurements of liquid, fluid, semisolid, granular materials, air. The probe is directly connected to the digital unit.

Model	Temp. range °C	Resolution °C	Accuracy °C	Probe dimensions Ø x length
V150	-50 +150	0.1	± 0.3	3x105 mm
V151	-50 +220	0.1	± 0.3	5x125 mm
V152	-40 +550	1	± 2	3x130 mm

V153

DIGITAL THERMOMETER, including remote probe connected to the instrument with a cable 1 metre long.

Temperature range: -50 +150 °C

Resolution: 0.1 °C. Accuracy: ± 0.3 °C

Stainless steel probe Ø 3x160 mm

