PRODUCT CATALOG
CEMENT

PRIS CEMENT INSTRUMENTS

Meet our Team

Contact Details

(0)11 425 3948
(0)11 425 1151

Maria du Toit
Managing Member
maria@pris.co.za
+27 82 466 6469

Kobus Myburgh
Operations Director
kobus61@mweb.co.za
+27 82 893 9379

Sonja Putter
Accounts & Sales
accounts@pris.co.za

Storm Yeo
Sales & Admin
pris.jhb@mweb.co.za

Kleintjie Marais
Sales & Admin
info@pris.co.za

Rynee Pretoruis
Technician

PRIS CEMENT

COMPANY PROFILE
PRIS CEMENT INSTRUMENTS CC

Peter Rassloff Instruments & Services (Cape) cc was found in 1976 in Johannesburg, South Africa, as a service orientated company, servicing and repairing instruments used in the Wheat and Maize Milling Industry. The company progressed rapidly into sales of laboratory/testing equipment needed in that industry, as well as into selected other analytical product.

By 1989 the company moved Head Office to Cape Town and branched out into sales and service of equipment used in the cement/lime factories and subsequently started manufacturing instruments required in these laboratories.

We have established a Johannesburg branch in 2005. In 2015 we have re-located from Cape Town to Johannesburg. In 2009 we have changed the name for the Cement Instruments to PRIS CEMENT INSTRUMENTS CC.

Meantime PRIS has successfully introduced their locally manufactured instruments in that industry in most countries in Southern Africa.
Besides the local manufactured products, we also import high quality equipment from our suppliers in Europe.

PRIS has established a high reputation for quality products, as well as reliable service and repair capability throughout South Africa, Zambia, Zimbabwe, Malawi, Mozambique, Tanzania, Botswana and Swaziland and are also involved in Nigeria and Kenya.

Our Service Technicians travel these countries frequently either on fixed pre-arranged service / calibration contracts, fully equipped with required spares to be fitted on site, as well as often have special call outs for breakdown repairs.

Our qualified Sales Engineer travels these countries at least twice a year to give advice and information on latest equipment available and/or product training.
In house sales and coordinating staff is highly trained and competent in all aspects of product requirements (e.g. EN / ASTM specifications) as well as of shipping and document requirements when export/importing.

FOR ANY PRODUCTS NOT LISTED IN OUR CATALOGUE
PLEASE DON'T HESITATE TO CONTACT US

SCIENTEC RSA

6 STATION AUTOMATIC VICAT, VICATRON RX6

Six Station Automatic Control Data System Direct Computer Controlled System
EN 196-3, 13279-2, 480-2 | ASTM, C191, C187.
The Computer-controlled, VICATRONX 6 can be used to determine the initial and final setting time of cement, mortar pastes and gypsum. This six-station apparatus automatically monitors the
setting process and provides output curves of the process. The test sequence is programmable, and tests can be performed in air or in the water test kit. With programmed test sequences, the unit provides automatic registration of initial set and final set times, as well as providing setting plots of the entire sequence.
The automatic VICATRONX 6 apparatus is a last generation equipment, which enables automatic execution of tests according to the following standard methods:
VICATRONX 6is to be supplied complete with EN Initial and Final needles.
VICATRONX 6 for setting time test on cement/mortar/gypsum. VICATRONX 6 must
execute the test program using a fully automatic test cycle.
With Firmware in the unit which enables (min) five user test profiles to be established.
Unlimited storage of test results. The unit should include an RS232 serial port for connection to PC which, when used m conjunction with the supplied software, enables users to manage test data including graphing and report generation.
The timed cycle of events is to be operator-selectable and penetrations can be selectable at intervals of 30 seconds, 1,5, 15 or 30 minutes.
Fully automatic controlled directly from PC as no need to use digital screen. Test procedures can be customized and stored to match user-defined requirements. Large test space with easy accessibility.
Auto calculation of initial and final setting time at programmable penetration depth

ADVANTAGES:

- • Direct PC controlling saving time for storage or print out
- • Easy programming of customized test profiles, re-callable for future tests, including:
- • Adjustable test start delays
- • Penetration points positions
- • Manual or automatic penetration rate
- • Free or driven dropping mode
- • Holding intervals inside the sample
- • Automatic end- test detection
- • Automatic measurement of initial and final setting time
- • Test data: test number, operator, client, date, hour, cement type, delay
- • Easy calibration menu
- • Clock calendar
- • Multi-language
- • Penetration measurement by encoder

ACCESSORIES:

- Samsung Laptop PC
- VICATRON X6 Software
- VICABATH System for VICATRON X6
- Final Needle
- Initial Needle
- Glass Plate
- Vicat Mould - EN or ASTM
- Cylindrical probe for consistency test
- Additional weight 700 g
- Base Plate for in-water testing kit
- Power: 220 V, 50 Hz, 1 phase
- Dimensions: 450 x 1400 x 950 mm (L x W x H)
- Weight approx.: 125 kg
- 12-station model available, please call.

FULLY AUTOMATIC VICAT TESTING SYSTEM, 12-STATION, VICATRON RX12

Same as mod. RECX6, but the system is 12-STATION
Weight: 168 kg

AUTOMATIC VICAT DEVICE, VICATRON X

VICATRON X Automatic Control Data System
New Generation BLUETOOTH System
EN 196-3, 13279-2, 480-2, ASTM,C191, C187.
The Computer-controlled, VICATRONX can be used to determine the initial and final setting time of cement, mortar pastes and gypsum. Automatically monitors the setting process and provides output curves of the process.
The test sequence is programmable, and tests can be performed in air or in the water test kit. With programmed test sequences, the unit provides automatic registration of initial set and final set times, as well as providing setting plots of the entire sequence.
The automatic VICATRONX apparatus is last generation equipment, which enables automatic execution of tests according to the following standard methods: Automatic Vicat Apparatus is to be supplied complete with EN Initial and Final needles. Fully Automatic Vicat apparatus for setting time test on cement/mortar/gypsum.
The Automatic Vicat Apparatus must execute the test program using a fully automatic test cycle. With Firmware in the unit which enables (min) test profiles to be established. Unlimited storage of test results. VICATRON X - PC software, enables users to manage test data including graphing and report generation.
The timed cycle of events is to be operator-selectable and penetrations can be selectable at intervals of 30 seconds, 1,5,15 or 30 minutes. Fully automatic controlled directly from Tablet PC as no need to use digital screen. Test procedures can be customized and stored to match user-defined requirements. Large test space with easy accessibility. Auto calculation of initial & final setting time at programmable penetration depth limits.

ADVANTAGES:

- Fully Automatic Single Station System for Fast Results
- Can check on pc software that needle finished points with red colored & not finished points are empty.
- New Generation BLUETOOTH system
- After the test you can mail directly which you selected mail address.
- Easy to test user friendly
- High Precision & Accuracy of penetration as 0.001 mm
- Unlimited data storage.
- Produces temperature vs penetration / deflection for individual stations in real time.
- Automatic computer piloting according to the test standard chosen
- Can do test in water
- Recall mode permits viewing of previously saved results and performs database maintenance.

TECHNICAL DETAILS:

- • Direct Tablet PC controlling saving time for storage or print out
- • Easy programming of customized test profiles, re-callable for future tests, including:
- • Adjustable test start delays
- • Penetration points positions
- • Manual or automatic penetration rate
- • Free or driven dropping mode
- • Holding intervals inside the sample
- • Automatic end- test detection
- • Automatic measurement of initial and final setting time
- • Test data: test number, operator, client, date, hour, cement type, delay
- • Easy calibration menu
- • Clock calendar
- • Multi-language
- • Penetration measurement by encoder

ACCESSORIES:

- 11.6” TABLET PC
- VICATRON X - PC Software
- Final Needle
- Initial Needle
- Glass Plate
- Vicat Mould - EN or ASTM
- Cylindrical probe for consistency test
- Additional weight 700 g
- Power: 220 V, 50 Hz, 1 phase
- Weight approx.: 21 kg

CEMENT

THERMOSTATICALLY VICAT BATH, DIGITAL

The apparatus heats water from room temperature to 20 +/- 0,1°C. The unit consists of a stainless-steel water bath 10 liters capacity with wool insulation, immersion heater with digital thermostat, motor pump, inlet/outlet system to circulate the water into the tank, cooling coil device current water operated, to maintain a constant temperature of the bath when room temperature is slightly higher. Can be used simultaneously for "TWO" VicatronX
Power supply: 230V 1ph 50Hz 1050W
Dimensions: 375x335x420 mm
Weight: 16 kg

IMPORTED MANUAL VICAT TEST APPARATUS

PC CONTROLLED AUTOMATIC BLAINE

MANUAL VICAT TEST APPARATUS (RSA)

The Manual Vicat is supplied with a Plunger, and an Initial and Final setting time needle.

MODIFIED VICAT CONE PENETROMETER

ASTM C780 Annex A.1, C185
The Modified Vicat Cone Penetrometer is used for determining the consistency of mortars for unit masonry by measuring the penetration of a conical plunger into a mortar sample.
Total plunger weight is 200g. The Modified Vicat Cone Penetrometer, is supplied complete with cylindrical measure cup as specified for ASTM C185.

BLAINE TEST APPARATUS, COMPLETE SET

Standard: EN 196:6 / ASTM C204 / AASHTO T153 / BS 4359:2
For determining the terms of a fineness of Portland cement in total specific surface area as expressed in cm2 / g of cement.
Heavy duty electrostatic painted steel frame.

Accessories:

- 250 ml. Manometer liquid
- 250 pieces of Filter paper / 2-micron pore
- Brass test cell
- Glass Thermometer / -10 + 110 C
- Plastic Funnel

Dimensions: 220 x 180 x h 470 mm
Weight: 11 kg

AUTOMATIC BLAINE

This automatic electronic apparatus with microprocessor is equipped with an automatic air proof device.
The apparatus consists of a flatten closure with a manometer column and with 4 components brass measuring cell.
Depending to the cement porosity and its density, the equipment calculates automatically the mass that you have to test, determines the constant K according to standard cement, records the test results with possibility to elaborate an average value of different tests.
The defining of final Blaine value is automatically given by the apparatus.

Supplied with:

- AUTOBLAINE PC Software
- Blaine cell, made of brass, including plunger and perforated disc.
- Manometric liquid. Bottle of 450 mL.
- Filter paper discs Ø 12,7 mm, degree of filtration medium. Box of 500 pcs.
- Plastic funnel to fill the cell.
- Brush and cleaning brush
- Pasteur plastic pipette for filling the tube.
- Power supply: 230 V 1 phase 50 Hz
- Dimensions: 280 x 325 x 410 mm
- Weight: 20 kg

AUTO BLAINE PC CONTROL UNIT

BLAINE REFERENCE MATERIAL

BLAINE COMPACTION SYSTEM PNEUMATIC

Blaine Test Used to prepare the cell for testing.
The sample placed in the Blaine cell is uniformly compressed before testing changes that may occur during manual clamping thanks to this system It all goes away.
1 Bar Automatic
Compression
Stand System

AUTOMATIC BLAINE, DYCKERHOFF METHOD

New Generation BLUETOOTH PC Data Control System
EN 196-6 | DIN 1164 | BS 4550 |ASTM C 204
This automatic electronic apparatus with microprocessor is equipped with an automatic airproof device. Fully automatic controlled directly from Tablet PC as no need to use screen Advantages of DYCKERHOFF BLAINE Performance results surpass the accuracy, precision, and repeatability of the manual method, since errors in the measurements of time are much lower. The resolution of flow time reading is 0.01 s as hundred time sensitive than others. Can measure porosity value Automatic Operation The operation of DYCKERHOFF BLAINE is automatic regarding:
Automatic calibration with calculation of the K equipment constant. Execution of test: aspiration of fluid into the manometer and accurate measurement of the pass time of the liquid between marks. Displaying, in real time, time, temperature, constant K and step time readings between marks.
Performing of all calculations, showing the results on the PC screen automatically. Unlimited storage of test results.
Onscreen wizard for conducting the tests, including specific protocols for test carried according to EN 196-6. The wizard displays the weight of cement to be introduced into the cell, calculated as a function of the cement density, the porosity of the compacted layer and the volume of the selected Blaine cell.
For calibration is recommended to use a primary standard, such as Standard Reference Material (Portland cement with certified value of the surface area), but other secondary reference cement scan be used on your own lab. (Standard Reference Material ordered separately) Language : English.

Supplied with:

- 11.6 inches Tablet PC & Rantek Dyckerhoff Blaine PC Software
- Blaine cell, made of stainless steel, including plunger and perforated disc.
- Blaine cell support, made of stainless steel, to keep the cell in a vertical pos and facilitate the introduction of the cement sample.
- Extractor rod, to extract the perforated disc and the sample after tested.
- Manometrid liquid. Bottle of 450 mL.
- Filter paper discs Ø 40.8 mm, degree of filtration medium. Box of 100 pcs.
- Clamp for grabbing the filter discs.
- Plastic funnel to fill the cell.
- Brush and cleaning brush
- Pasteur plastic pipette for filling the tube.
- Power supply: 220 V 1 phase 50 Hz
- Dimensions: 280 x 325 x 410 mm
- Weight: 20 kg

Reference material cement: Blaine apparatus SN 2c (Q114)

This reference material cement is used for the calibration of Blaine test Conditioning, For each test, you need maximum 5 gr, so S.N.L proposes to do box of 20 bottles of 5 gr with a sealed with a secure screw cap. Physico-chemical properties of the sample are stable until the bottle is closed and the cap untouched. The certificate of analysis Is produced by l'ATILH paris la défense as following:
I – Participation and execution of tests Each year the "Association Technique de l'Industrie des Liants Hydrauliques" (ATILH) organizes an interlaboratory test campaign involving in particular the participation of the cement production industry laboratories, the cement end-user laboratories and Research and Inspection Centers within the construction materials sector.
This participation is compulsory for laboratories accredited by COFRAC for cement testing. The tests are carried out in accordance with standardized methods where latter exist, otherwise according to everyday traditional methods.
II – Statistical analysis of the results Outliers are eliminated via the STUDENT's test with a confidence level of 98 %. A reiteration is set at this threshold in order to keep only those values which are related to the "Normal or Gaussian" distribution, the latter being entirely defined by 2 parameters: mean and standard deviation. The coefficient of variation symbolized by "V" is the ratio between the standard deviation "σ" and the mean value X.
III – Specific surface and particle size analysis For the calibration of the Blaine permeability apparatus, follow the requirements of the EN 196-6 standard, paying particular attention to the temperature corrections, if any. To determine the volume of the compacted layer, it is not essential to use the Reference Material (but ensure that enough is taken so that the mass of the mercury does not modify the compaction of the powder layer). Reference Material should be used systematically:
a) after 1000 tests.
b) when using another type of manometric liquid, another type of filter paper, a new manometer tube or a new perforated disc.
c) If discrepancies are systematic with the secondary reference cement.

Mean value X
Dispersion characteristics Reproducibilitys V (%)
Particle density (g/cm3) with pycnometer method 3,15 0,02 0,66
Blaine Specific Area (cm2/g) with EN 196-6 4206 74 1,75

STAINLESS STEEL LABORATORY TEST SIEVES

EN 933-2 | ISO 565, 3310-1, 3310-2 | ASTM E11 | BS 410-2

- All Sieves provided with into special cartoon box
- Material is Stainless Steel 304
- Test sieving has been used for particle measurement for generations in the Agricultural, Bio-Industry, Chemical, Cosmetics, General, Industrial, Fertilizer, Foods, Minerals, Pharmaceuticals, Plastics and Metal, Products industries. Total quality

control and ensures the sieves we produce are all manufactured with their exact apertures, right in the middle of the correct tolerance band. All Test Sieves are serialized to meet the highest grade quality assurance systems for traceability of measurement devices. The serial number is etched on each sieve and contained serial number information. Clean your sieves with a specialized cleaning brush.

VARIOUS STAINLESS STEEL LABORATORY TEST SIEVES

200mm STAINLESS STEEL LABORATORY TEST SIEVES

75mm STAINLESS STEEL LABORATORY TEST SIEVES

DRY SIEVING PAN & LID

WET SIEVING PAN & LID

ULTRASONIC CLEANING BATH

Tank capacity : 1 Liter to 100 Liter
Power Supply voltage : 220V 50/60 Hz
Heating Power: 300 Watt
Generator Power: 45 Watt
Total Power: 345 Watt
Thermostat: 30-90 C
Operating frequency: 32 khz + -5
Completely Stainless / Inox made
Accessories to be supplied with the device;
Weight: 3.5 kg

MOTORIZED SIEVE SHAKERS

EN 933-10 | EN 933-2 | EN 932-5 | ISO 3310-1
It accepts sieves having diameter. 200 - 250 - 300 - 315 mm, and 8" ...12".
This simple and low-cost Sieve Shaker is activated by an electric motor and can hold up to 12 Sieves Ø 200 mm or 8 Sieves Ø 300 mm plus pan and lid. It is also possible to perform wet sieving tests (with wet sieving accessories).
Provided of timer 0 - 60 minutes
Power supply: 220V 1ph 50Hz 125W
Dimensions: 350 x 400 x 950 mm
Weight: 26 kg approx.
MOTORIZED SIEVE SHAKER 200 MM & 8 INCHES
MOTORIZED SIEVE SHAKER 200 MM & 8 INCHES & 300 MM & 12 INCHES

ELECTROMAGNETIC SIEVE SHAKERS

EN 932-5 | ISO 565, 3310-1, 3310-2 | ASTM E11, 323 | BS 410-1, 410-2
TRIPLE MOTION SYSTEM
Precision Sieve Shaker is fitted with a very efficient clamping device that ensures sieves are held firmly without over-tightening and allows them to be quickly removed and replaced. Non-corrodible and non-metallic springs makes the shaker a maintenance-free device. The shaker is fitted with an electronic timer which can be preset to any duration up to 99 minutes. Sieve shaker has been specially designed to operate with heavy samples without loss of performance. It is equipped with a dynamic power source which ensures the right vibration is imparted to the sieves and sample for fast, accurate and reproducible tests.
Vertical movement is fixed to ensure the sample spends max. time on the sieve surface.
The unique vibratory action also helps keep the apertures clear and free from binding.
Technical Specifications
Sieve Capacity:
15 pieces of 200 mm (8") sieves + pan and cover
10 pieces of 300 mm (12") sieves + pan and cover
Dimensions: 830 x 930 x 1450 mm
Weight (approx.): 73 kg
Power supply: 220 V 1 ph 50/60 Hz
ELECTROMAGNETIC SIEVE SHAKER
200 MM, 8 INCHES, 300 MM, 12 INCHES ANALOG / DIGITAL
ELECTROMAGNETIC

FREQUENCY METER FOR SIEVE SHAKERS

HEAVY DUTY ALPINE TEST SIEVES

ASTM E11 | DIN ISO 3310 | BS ISO 3310

The Alpine Air Jet Sieve and our corresponding test sieves are used in different industries like pharmacy, chemical or food industry.

- Finest dry bulk materials can be analyzed with this machine.
- Fabricated according to valid standards,
- Manufactured special design smooth solid aluminum CNC finishing frame and strength by stainless steel circular sieve frame + stainless steel mesh.
- A particularly smooth surface of frames prevents cross-contamination.
- An extremely stable sieve structure guarantees a long life.
- The sieve fabric retains its tension exceedingly well even after intensive use.

POLY CARBONATE LID OF ALPINE TEST SIEVES

The Air Jet Cover for 200 mm or 203 mm Sieves is constructed of clear poly carbonate, and is a universal cover for 200 mm or 203 mm sieves.

Features:

Made of clear poly carbonate
For use with 200 mm or 8 in sieves
200 MM POLY CARBONATE LID OF ALPINE TEST SIEVES
203 MM POLYCARBONATE LID OF ALPINE TEST SIEVES

ALPINE AIR JET SIEVING SYSTEM

New Technology BLUETOOTH Version. The Air Jet Sieving machine is particularly suitable for sieve cuts of powdered materials which require Vefficient dispersion and deagglomeration.

Application Examples:ceramics, chemical products, cosmetics, food, minerals, pharmaceutical materials, pigments, plastics, powder coating, rubber, toner, washing powder, ...

Product Advantages: Direct is a fully automated computer-controlled time setting + operating pressure (psi) selected in the desired range and the device stops automatically after the selected time.The outer case of the device is made of electrostatic painted steel. Internal screening chamber body is machined from solid aluminum. With the help of special compartment on the inner container screening test sieves can easily extracts is a feature. Aluminum inner screening chamber height 50 mm. Cover is made from plexiglass provides the ability to make observations during the test. Sieving with air jet technology for dispersion and deagglomeration of fine powders. Open Mesh Function to reduce the number of near-mesh particles high flexibility through adjustable nozzle speed. Operation with air jet sieves, 203 mm Ø(8") or 200 mm Ø (with adapter), Provided with Air jet software, easy evaluation, and documentation of results. Electronic adjustment of all process parameters (time, vacuum, speed) by Tablet PC silent operation due to integrated silencer. Air jet produced by a powerful industrial vacuum cleaner 3000 Watt. Fulfills all criteria for measuring equipment related to ISO 9001 Easy operation, ergonomic design

Specifications

- Applications: separation, fractioning, particle size determination
- Field of application: chemistry / plastics, construction materials, environment / recycling, food, geology / metallurgy, glass / ceramics, medicine / pharmaceuticals
- Feed material: powders
- Measuring range: 14 µm - ~ 4mm
- Sieving motion: dispersion by air jet
- Max. batch / feed capacity: 0.3 - 100 g
- Max. number of fractions: 1(by using a cyclone: 2)
- Speed: Electronic controlled by Tablet PC
- Time display: Electronic controlled by Tablet PC (00:01 - 99:59 min)
- Suitable for dry sieving
- Serial interface or BLUETOOTH Control
- Suitable sieve as selectable 200 mm or 203 mm diameters
- Max. height of sieve stack: 1 sieve (25 mm (1")

Accessories:

- 11.6 " Tablet PC
- Alpine Tablet PC Software
- Plexiglass made Cover
- Rubber Hammer
- Power Supply Cable
- Computer Charging Cable
- Electrical supply: 220 V, 50Hz, 1 phase
- Net Weight: 32 kg

Air Jet Apparatus (RSA)

Vacuum Sieving Apparatus for residues of below 90 microns (Replaces "wet" sieving method). Uses 200 mm round standard sieves. Fast and accurate

HIGH CAPACITY AIR JET VACUUM UNIT

Fly Ash Apparatus: Micro Sieving (RSA)

A major requirement for Fly Ash is consistency of fineness.
Two test methods are described. EN 451 requires fineness to be determined using a wet sieving technique and a 45µm sieve, this is the definitive method. A quick yet accurate method for daily production control has been developed using vacuum sieving and a 45 µm sieve mesh. This technique has the advantage of speed and can readily be correlated to the reference method.

Le Chatelier Flask

EN Test of specific gravity (relative density) of hydraulic cement under temperature condition

Le Chatelier Expansion Tester

This apparatus measures the flexibility of the Le Chatelier Moulds in mm, tovensure that they are still in prescribed tolerance.

LE CHATELIER MOULD + GLASS PLATE

EN 196-3, 450-1, 459-2 | EN ISO 9597
Used for determining the expansion of cement. The mould consists of a spring tensioned split cylinder 30 mm internal diameter, 30 mm high with two indicator stems which measure 165 mm from the points of the center line of the cylinder.
The Le Chatelier Mould is supplied complete with;
Le Chatelier Mould. 50x50 mm Glass Plate. 100 gr Weight, 1 pcs.
Weight (approx.): 0.3 kg

Le Chatelier Expansion Tester (RSA)

DIGITAL LE CHATELIER BATH

EN 196-3, 450-1, 459-2 | EN ISO 9597

The Digital Le Chatelier Water Bath is used with Le Chatelier moulds for the determination of the soundness of cement paste fly ash for concrete and lime. The internal chamber is manufactured from stainless steel and the insulated exterior case of the bath is manufactured from electrostatically painted steel.

REFRIGERATED LE CHATELIER BATH

Same as mod. REC160, in additionally Cooling system

Weight: 50 kg

PAT TEST KIT

EN 459-1 | BS 890 | BS 1191

SOUNDNESS OF HYDRATED LIME AND GYPSUM PLASTERS

Utilized for the determination of the soundness of hydrated lime, gypsum and building plasters.

WATER FLOW SIEVES APPARATUS

D.M. 3.6.68

Used to determine the fineness of cement. It consists of a spraying unit with feed cock and gauge; brass sieve body 85 mm dia. and 95 mm high with two stainless steel cloth
disks having an opening 0.18 and 0.09 mm. A cement sample of 25 g is placed inside the sieve and washed for two minutes by means of the spraying unit put on top of the sieve.
The residue of the retained cement is obtained by drying the sieve at 110 °C.

Weight: 3 Kg

WET SIEVING APPARATUS

EN 451-2 | ASTM C430

The set, brass made, consists of:
Sieve dia. 50 mm with stainless steel mesh opening 0.045 mm
Spray nozzle 17.5 mm ID with 17 holes dia. 0.5 mm Pressure gauge dia. 80 mm range 0-160 kPa, div. 5 kPa,
Fittings and connectors.

Weight: 3 kg

MEASURER 400 ML

AASHTO T137 | ASTM C185

Designed to determine the air content of freshly mixed mortars by the density method.
Steel made, internal diameter 76.2 x 88.1 mm height.

SAMPLE SPLITTERS / RIFFLE BOXES

EN 932-2 | ASTMC702 | BS 812:1, 1377:1, 1924:1
Riffle boxes are used for dividing aggregates into 2 equal homogeneous quantity for testing. The Riffle Box is electrostatically painted and manufactured to meet the relevant International standard both in the slot width and number of slots.
Riffle Box; 7 mm slot width, complete w/2 containers.
Riffle Box; 13 mm slot width, complete w/2 containers.
Riffle Box; 19 mm slot width, complete w/2 containers.
Riffle Box; 25 mm slot width, complete w/2 containers.
Riffle Box; 31,5 mm slot width, complete w/2 containers.
Riffle Box; 37,5 mm slot width, complete w/2 containers.
Riffle Box; 50 mm slot width, complete w/2 containers.
Riffle Box; 63,5 mm slot width, complete w/2 containers.
Riffle Box; 75 mm slot width, complete w/2 containers.

Spinning/Vibration Rifflers–Various Capacities

Micro sample splitting

These very accurate sample splitters have 10 sample containers which are mounted on a speed adjustable turn table. The sample to be splitted is placed into a stainless steel hopper which is mounted above an adjustable vibration chute feeder, which separates the sample finely into the rotating containers. Sizes / Capacities available:Micro Spinning Riffler: 1.5 kg. Capacity – 9 x glass jar containers5 kg. capacity – 10 stainless steel containers15 kg. capacity – 10 stainless steel containers50 kg. capacity – 8 stainless steel containers

DRY POWDER MIXER

Dry Spiral Mixer can mix all different material. The conical shape of both ends enables uniform mixing and easy discharge.
The Double Cone Mixer is an efficient and versatile machine for mixing dry powder and granules homogeneously. The upper inlet is used for material feeding and material is concentrated and removed at the lower outlet. The mixing barrel can be tilted freely at the angle of degrees for discharging and cleaning purpose.
The automatic stopping device can be set within the range of 0-60 minutes for automatic stopping. Cleaning the machine is convenient and fast without adhesion.
It can be used for Pharmaceutical, Food, Chemical and Cosmetic products etc.
Suitable for even mixing of plastic powders, plastic pigments, foods, creams, and pepper.
Power Supply: 220 V, 50 Hz, 1 phase
Dimensions: 850 x 600 x 1100 mm (w x d x h)
Weight: 145 kg (approx.)

LOS ANGELES ABRASION BALL SET

ASTM
5 pcs. 47.6 mm nominal dia. (440 g each), 7 pcs. 46 mm nominal diameter. (400 g each) stainless steel, set of 12.

LOS ANGELES ABRASION BALL SET

EN
47.6 mm nominal diameter. approximately 440 g stainless steel, set of 11.

LOS ANGELES ABRASION TESTER

ASTM C131 | ASTM C535 | AASHTO T96 | CNR No.36
The Los Angeles Abrasion machine is used to determine the resistance of aggregates to abrasion.The filling aperture is provided with a cover and a safety stop button is prominently positioned.
The machine is fitted with a revolution counter and steel tray for specimen unloading.
Heavy steel cylinder and base frame. Safety Stop button. Full length opening with dust-proof cover plate. Includes steel tray for specimen unloading.
Designed to determine the resistance of aggregates to abrasion, the Los Angeles Abrasion Machine consists of a closed hollow cylindrical steel drum rotating around
its horizontal axis on ball bearing units mounted on a sturdy base framework. Drum internal diameter of 711 mm. Drum 508 mm in length.
The drum is driven at a speed of between 30-33 rpm via an enclosed drive system. The controls located on the side are placed at a convenient height and consist of prominent.
Start and Stop buttons along with a subtracting revolution counter system.
The steel tray for sample removal is located on the frame under the drum.
Los Angeles Abrasive Balls has to be ordered separately.
Power Supply: 220 V, 1 phase, 50Hz
Dimensions: 1000 x 800 x 1000 mm
Weight (approx.): 400 kg

PRO CABINET FOR L.A. ABRASION

The Security Cabinet, manufactured from Heavy Duty Electrostatic Painted Steel made, internally lined with sound-proofing material for noise reduction, conforming to CE Safety directive.
The cabinet must be ordered with the Los Angeles machine if required, as the electronic control unit will be installed on the safety cabinet at the time of manufacture.
The cabinet is equipped with an electric safety device which automatically stops the rotation of the drum when the door is opened, conforming to CE directives.
Dimensions: 1100 x 1180 x 1250 mm
Weight: 260 kg approx.

STD CABINET FOR L.A. ABRASION ' DOUBLE DOOR '

The Soundproof & Security Cabinet, manufactured from Heavy Duty Electrostatic Painted Steel made, internally lined with sound-proofing material for noise reduction, conforming to CE Safety Directive.
The cabinet must be ordered with the Los Angeles machine if required, as the electronic control unit will be installed on the safety cabinet at the time of manufacture.
The cabinet is equipped with an electric safety device which automatically stops the rotation of the drum when the door is opened, conforming to CE directives.
Weight (approx.): 170 kg

BULK CEMENT SAMPLER

ASTM C183 | AASHTO T127 | EN 196-7
Bulk Cement Sampler, Ø35x1500 mm Bulk Cement Sampler is used to collect cement samples from bulk storage or bulk shipments.
Weight: 1.5 kg

PACKAGED CEMENT TUBE SAMPLER

ASTM C183 | AASHTO T127 | EN 196-7
Packaged Cement Tube Sampler, Ø38 x 580 mm
Packaged Cement Tube Sampler is made of brass and used for collecting cement samples from packages.
Weight: 2.5 kg

BULK DENSITY OF LIME

EN 459-2 | DIN 1060
The apparatus allows a sample to fall from a known height into a volumetric container. Consisting of a hopper, one liter cylindrical container and spring loaded trap.
Weight: 5 Kg approx.

Clinker Mass Unit / Bulk Density

Consisting of stainless-steel funnel of 2000 ccm which is mounted on a stand at a fixed height and has a slide opening at the bottom end of the funnel.
Beneath the slide opening stand a calibrated stainless-steel beaker of 1000 ccm. Method: Place st.st. Beaker onto scale, tare scale to 0,0g. Fill funnel with sample up to top and scrape level. Open slide thus 2000 ccm of sample falls (always from same height and same speed) into 1000 ccm beaker compressing the sample. Scrape top of beaker level. Place beaker back onto scale. Reading divided by a factor equals bulk density. E.g. Gram per cm^3.

BULK DENSITY OF CEMENT

Used to determine the bulk density of cement as specified by the “Commission des méthodes d’essai des matériaux de construction”. It consists of a sieve funnel, an unit weight measure 1 liter capacity, a tripod, and straightedge.
Overall dimensions: 350 x 350 x 520 mm
Weight approx.: 3 kg

Cyclone Pulverizer

Laboratory Pulverizer working on a three bladed cross beater system rotating at 14 000 rpm., pushing the material through a sieve with holes of 1,2 mm Ø and collecting the sample through a cyclone system in a 500 ml glass/ plastic jar.
Dust free operation. Sample fineness - below 120 microns. 220 volt - 50 Hz

FLOW CONE TEST APPARATUS

Used for determining the flow properties of mortars, grouts, muds and many other type of fluid materials. The apparatus comprises a metal stand supporting the stainless steel cone having inside dimensions of 150 mm inside upper dia. x 280 mm height. When fit with the 10 mm nozzle the total height is 350 mm. The apparatus, as prescribed by EN445, is supplied complete with 150 mm dia. sieve 1.5 mm opening, 10 mm dia. nozzle with fitting bush and 1 liter cap. cup. It can also be fit with other nozzles 8, 9, 11, and 13 mm int. dia.
Weight approx.: 10 kg

VARIOUS DRYING OVEN SIZES (RSA)

Digital temperature setting and control “Scientec RSA” With forced convection fan and stainless steel racks.
Temperature adjustable from 5ºC above ambient to 160ºC
Various sizes /Digital or Analogue Control / Electronically

VACUUM OVEN

VACUUM CHAMBER FURNACES

MUFFLE FURNACE

ASHING FURNACE

BENCH TOP FUME HOOD

FLOOR STANDING FUME HOOD

STAND FLOORING BIOSAFETY CABINET

BENCH TOP BIOSAFETY CABINET

LAMINAR FLOW CABINET

CHEMICAL CABINET

FLAMMABLE STORAGE CABINET

GROUT FLOW CONE APPARATUS

Grout Flow Cones measure the flowability of hydraulic grout used in preplaced aggregate concrete.
Flowability is measured by time of discharge of a 1.725L sample of grout through the 0.5in (12.7mm) ID discharge tube orifice from the cone. Constructed of cast aluminum, the Grout Flow Cone has 7in (178mm) top ID and comes with an adjustable point gauge assembly to indicate initial sample level.

REACTIVITY TEST APPARATUS OF LIME

EN 459-2 | NF P98-102
This apparatus is used for determining the reactivity on slaking of ground quicklime. The equipment consists of a Dewar vessel 1000 ml capacity complete with cover, electric stirrer 300 rpm. complete with stirring paddle (propeller), base with stand and digital thermometer range -50 +300°C. approx. readability, 0.1°C., accessories.

Lime Reactivity Tester (RSA)

When Lime is mixed with water it will
immediately release kinetic energy. The instrument works fully automatically and consists of a stainless-steel stand on which the reactivity vessel can be clamped, which also has a built in stirrer @ 2000 rpm and a “K” type temperature probe. The control unit records the increase in temperature and time of the water/lime mix from 20ºC to 60ºC

SLAKING VESSEL

EN 459-2
YIELD OF LIME-BUILDING LIME. This insulated vessel is used to determine the yield of lime by leaving the lime sample to slake into. Stainless steel made, double walled insulated with glass fibers, the cylinder has inside dimensions Ø 113 by 140 mm deep.
Supplied complete with cover.
Weight: 4 kg approx.

WATER RETENTION APPARATUS

ASTM C91 | ASTM C110
Used to determine the water retention value of cement and lime putty.
The unit comprises: water aspirator, mercury column manometer, three-way stopcock, metal perforated dish, glass funnel, mercury valve, pack of filter paper, 1 kg of mercury, accessories: the whole assembled on stand.

CEMENT AIR METER 1 LITER

EN 413-2, 459-2, 1015-7
The Mortar Air Entrainment Meter, 1 Liter is used for determining the air content of cement paste, cement mortar and lime mortar. The air entrainment meter is manufactured from machinery solid high class aluminum, the upper part, and the lower test pot are held together with an air-tight seal which are easily adjusted by using the two spring clamps. The pressure gauge is installed in the head of the meter and the scale works in the 0-20 volumetric % range. The air is compressed with a hand pump installed in the system and the smart configuration of the test and correction buttons enables fast and simple testing. Dimensions: 210 x 215 x 325 mm
Weight (approx.): 4 kg

MARSH FUNNEL TEST KIT

Field tool used to measure the viscosity of drilling mud. Brass 12-mesh screen covers half of the top and is designed to remove any foreign matter and drilled cuttings from the fluid.

SAND CONTENT KIT

The Sand Content Kit is a simple, accurate and inexpensive sieve analysis apparatus for determining the sand content of drilling muds.

4-SCALE MUD BALANCE

The 4-scale Metal Mud Balance features a Computer Numerically Controlled (CNC) all-machined manufacturing process, instead of the old die-cast molded method which has been used for years. This uniform method of construction results in a much stronger, more rugged instrument that sets the industry standard for accuracy, and is easier to calibrate.

MUD FILTER PRESS

Measuring filtration behavior and wall-coke building characteristics of fluids is essential to drilling fluid control and treatment. This apparatus is the most effective means of determining the filtration properties of drilling muds and cement slurries. It consists essentially of a mud reservoir mounted in a frame, a pressure source, a filtering medium and a graduated cylinder for receiving and measuring filtrate. CO2 cartridges not included.
Overall dimensions: 200 x 230 x 480 mm (approx.)
Weight: 10 kg (approx.)

6 SPEED CRANK RHEOMETER

The Hand Crank Rheometer is a direct indicating, manually operated, rotational viscometer. The instrument is powered by a hand crank, which drives the spindle through a precision gear train.
The shift cam selects between fixed speeds of 300 and 600 RPM.
A Knob on the hub of the shift cam determines gel strength.
Features Suitable for field and lab use Ultimate in portability Reliability
Small footprint if used in laboratory

GILLMORE TEST APPARATUS

ASTM C91 | ASTM C141 | ASTM C266 | AASHTO T154 | ASTM C1398

Use to determine the setting time of cement.

The apparatus consists of two horizontal arms which carry two weighted steel needles precisely machined to meet the requirement. The initial needle 2.12 mm dia., weighs 113 g and the final needle 1.06 mm dia., weighs 453,6 g.

Weight approx.: 2.5 kg

FUNNEL GROOVE APPARATUS

EN 13395-2 | UNI 8997

CONSISTENCY OF GROUTS

Used to determine the consistency of the expansion premixed cement mortars for anchorages, mixed with water classified of super-fluid type. It consists of a metal groove with a funnel fixed on the end.

Supplied complete with graduated rule, spirit level and feet.

Dimensions: 960 x 210 x 400 mm

HIGH PRESSURE CEMENT AUTOCLAVE

ASTM C15 | ASTM C490 | UNE 7207

The High-Pressure Cement Autoclave is designed to perform expansion tests on cement specimens. 10 specimens can simultaneously be tested in the high-pressure steam vessel of 154 mm diameter and 430 mm height.

The Autoclave consists of a pressure gauge, pressure regulator, temperature regulator, control switches and safety valve.

Two Gang Shrinkage mould and Length Comparators should be ordered separately.

The High-Pressure Cement Autoclave is supplied complete with;

Specimen Rack, 10 samples capacity

Dimensions: 477x485x1150 mm

Weight (approx.): 65 kg

Power supply: 220V 1ph 50Hz

HEAT OF HYDRATION CALORIMETER, ANALOG THERMOMETER

EN 196-8 ASTM C186

HEAT OF HYDRATION OF CEMENT

Used to determine the heat of hydration of low heat Portland and hydraulic cement.

The apparatus consists of a Dewar flask contained in an insulated material and housed in a wooden box which is hinged so that the flask can be easily removed or replaced.

A second hinged wooden box contains the first one, granting a better insulation, as expressly requested by the a.m. Standards. The Calorimeter is supplied complete with a constant speed electric stirrer, and filler glass funnel.

Supplied with Digital Thermometer (-50 ... +300 C) and the propeller (3 Wings).

Power supply: 220 V 1 ph 50 Hz 150 W

Dimensions: 350 x 250 x 680 mm

Weight: 12 kg approx.

LANGAVANT CALORIMETER

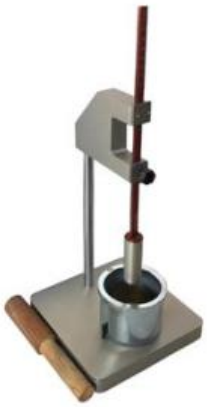
Semi-adiabatic Langavant Calorimeter Automatic Control with BLUETOOTH
Tablet PC System High Resolution Electronic Thermometer 0,001°C.
Unlimited Data Storage with PC System
The Semi-adiabatic Langavant Calorimeter system has been designed to measure the heat of hydration in fresh mortar.
The testing procedure consists of placing a sample of fresh mortar into a calorimeter, and determination of the amount of heat released on the basis of the temperature development that takes place. The Test Calorimeter with No. 1 consists of a thermos vessel with a thermally insulating closure and a stable aluminum enclosure that serves as a mount. The reference calorimeter with No. 2 has the same structural features and the same properties as the test calorimeter. The Mortar container is used to hold the mortar sample that is separated after each test.
This container is water-vapor proof, and the cover(lid) is provided with a cylindrical thermometer fitting in its Centre. Determination of the heat of hydration EN 196-9 stipulates that the room temperature of the laboratory must be 20 ± 2°C for mixture of the mortar and for conduct of the testing.

MORTAR WORKABILITY APPARATUS

Designed to test concrete mortar for dynamic workability and also to ensure optimum proportioning of mortar constituents (sand, water, cement, as well as cement/sand and water/cement ratios) compatible with given application.
Suitable also for checking possible improvement when admixing a plastifier, or for comparing two mortar types.
The unit consists of a prismatic receiver divided into two unequal volumes by a removable partition, and by an electric vibrator. The fresh mortar is poured in the large volume place, the separating partition is removed and the vibrator stats automatically. As a result of vibrations, mortar flows from the large volume to the small one, in a time which is a function of the workability of the mortar.

PLUNGER PENETROMETER

The Plunger Penetrometer is used to determine the consistency of fresh mortar, lime and masonry cement. This apparatus consists in a base, a vertical support, a graduated rod with 25 mm dia plunger, a test cup dia. 80 mm x 70 mm deep and a 40 mm dia tamper. Drop height 100 mm. Overall weight of plunger assembly is 90 g.



WORKABLE LIFE AND STIFFENING TIME

EN1015-9 | EN 13294
The apparatus is used for determining the stiffening time of repair products and systems comprising hydraulic based mortar and concrete (CC), including those modified by the addition of polymers (PCC) and workable life of fresh mortar after the mixing procedures. The apparatus includes a vertical loading pillar complete with penetration rod, sample container and electronic balance 30 kg cap., 0.5 g resolution.
Weight approx.: 10 kg

CEMENT

CALSIMETER DIETRICH FRÜHLING

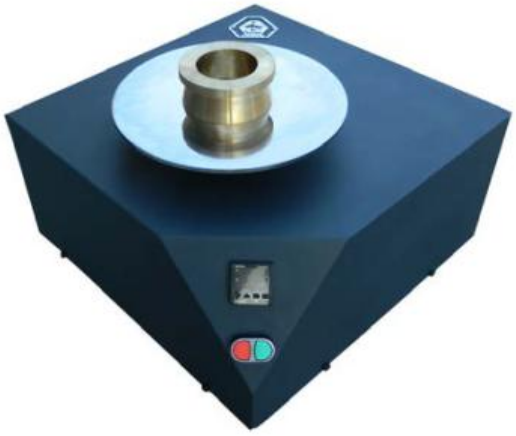
CALCIMETER CARBONATE CONTENT CACO³ IN LIMESTONE AND LIME MARLUsed for the determination of calcium carbonate ($CaCo^3$) in certain products such as limestone and lime marl. It mainly consists of a glass container in which the reaction between the calcium carbonate present in the product and a solution of hydrocloridric acid takes place. The gased product is collected and measured by a device connected to the container. As the volume of the produced gas (Co^2) is in relation to the $CaCo^2$ amount contained in the material, it is possible to calculate the percentage of $CaCo^3$

CEMENT FLOW CALIPER

Percent Flow Caliper for Flow Tables
ASTM C87, C185, C230 | AASHTO M152, T71, T137.
Used to measure mortar diameter and indicate percentage of flow.
The Percent Flow Caliper has special scale to give the average flow directly by adding four readings.

HAND OPERATED CEMENT FLOW TABLE

ASTM C230 | EN 459-2 | EN 1015-3
The Hand Operated Cement Flow Tables are used for determining the consistency of mortar, lime and cement specimens.
Digital Motorized models are available. The Hand Operated Cement Flow Table is fitted with a hand wheel.
ASTM Model: the table is manufactured from brass and has 254 mm diameter.
The conical mould is made of brass has dimensions of 100 mm base dia. x 70 mm top dia. x 50 mm height.
The Cement Flow Tables are supplied complete with brass flow mould and tamper.



AUTOMATIC CEMENT FLOW TABLE

ASTM C230 | EN 459-2 | EN 1015-3
The Automatic Cement Flow Tables are used for determining the consistency of mortar, lime and cement specimens.
ASTM Model: the table is manufactured from brass and has 254 mm diameter.
The Cement Flow Tables are supplied complete with brass flow mould and tamper.

AUTOMATIC JOLTING TABLE, STD

EN 196-1 | EN ISO 679 | NF P15-412 | BS 3892 | UNE 80101
Used to compact cement mortar prisms 40 x 40 x 160 mm in the three gang mould, as requested by the above Specifications. The apparatus, consists of a table holding the mould, seated on a rotating cam driven at 60 revolutions per minute. The jolting group is connected to the table by bayonet joints for quick checking of the weights. The drop height (15,0 mm) is adjustable to keep it correct also after intensive uses. The apparatus is supplied with separate control panel including main switch, automatic digital drop counter, start/stop push button.
Power supply: 220 V 1 ph 50/60 Hz
Weight (approx.): 45 kg

STD AUTOMATIC JOLTING TABLE, CABINET

PRO AUTOMATIC JOLTING TABLE, CABINET

AUTOMATIC JOLTING TABLE, PRO

According to the RILEM - CEM method, cement, mortar and other binders
It is set to 60 strokes per minute with a spinning speed that makes one revolution in the middle for compression, making 60 strokes and automatically stopping. These strokes are measured on a scale of 28 x 30 cm on the device to 15 mm suddenly falls and falls. The weight of the shock table on the device; three-hole steel mold filling on together with funnel, total 20 kg and tolerance of + - 500 gr.
The device complies with EN 196 - 1 standards.
The device is electronically programmable digital counter. Isolation cabinet and lower concrete frame work system.
Dimension: 1400 * 700 * 450 mm
Power Supply: 220 V / 50-60 Hz / 1 Phase

EN 196 Vibration Table (GERMAN MODEL)

This machine comprises a 450 x 450 mm table, mounted on a supporting framework. The electro-magnetic vibrator is tuned to provide the correct amplitude to meet the compaction characteristics of the Jolting table. The prism mould is attached securely to the table using a swing bolt clamp arrangement. The machine is supplied with a separate wall mounting control panel incorporating an isolator timer, relay and push button emergency stop.

VIBRATING MACHINE FOR 70.7 MM

BS 4550
The Vibrating Machine is used for the preparation and compaction of 70.7 mm mortar cube specimens.
The mould table is mounted on four springs attached to an eccentric shaft which allows each sample to be vibrated at 12000 cycles per minute.
There is a timer on it to preset time and it stops automatically in every 120 seconds. Dimensions: 450 x 650 x 850 mm
Weight (approx.): 95 kg
Eccentric Shaft Rotation: 12000 r.p.m
Power Supply: 220 V, 50 Hz, 1 phase

PLASTER EXTENSOMETER

BS 1191 | UNI 6782
Used to measure the linear expansion of a paste of standard consistence.
The extensometer comprises an horizontal cradle 100 mm long x 60 mm wide x 25 mm deep closed at one end and open to the other.
The open end is in contact with a dial gauge spindle, so that the lateral expansion of the specimen is measured. The dial gauge has 10 mm travel and 0.01 mm graduation.
Dimensions: 250 x 80 x 80 mm
Weight: 3 Kg

CEMENT LENGTH COMPARATOR, ANALOG

DIGITAL CEMENT LENGTH COMPARATOR

DIAL LENGTH COMPARATOR,

DIGITAL LENGTH COMPARATOR

CEMENT

2 GANG PRISM MOULD 25 X 25 X 250 MM

SINGLE PRISM MOULD 75 X 75 X 285 MM

SINGLE PRISM MOULD 75 X 75 X 285 MM

PRO 3 GANG PRISM MOULD 40.1 X 40 X 160 MM

PVC 3 GANG BEAM MOULD 40 X 40 X 160 MM

STD 3 GANG BEAM MOULD 40 X 40 X 160 MM

PRO 3 GANG BEAM MOULD 40 X 40 X 160 MM

DERLIN / STEEL 3 GANG CUBE MOULD 50 MM

AL. FILLING FUNNEL FOR 40 X 40 X 160 MM

PVC CEMENT CUBE MOULD 70.7 MM

EN12390-1, 12390-2 | BS 1881

Interior Dimension:

70.7 x 70.7 x 70.7 mm

Weight(approx.): 1800gr

PVC CONCRETE CUBE MOULD, 100 MM

EN 12390-1, 12390-2 | BS 1881
Interior Dimension: 100 x 100 x 100 mm (Double Gang)
Weight (approx.): 2500gr

PVC CONCRETE CUBE MOULD 150 MM

Interior Dimension: 15 x 150 x 150 mm
Weight (approx.): 2800 gr

PVC CONCRETE CYLINDER MOULD 100 X 200 MM

PVC CONCRETE CYLINDER MOULD 150 X 300 MM

PVC CONCRETE CYLINDER MOULD 150 X 300 MM

PVC CONCRETE BEAM MOULD 10 X 10 X 40 CM

PVC CONCRETE BEAM MOULD 15 X 15 X 60 CM

STEEL CONCRETE CUBE MOULDS

CAST IRON CONCRETE CUBE MOULDS

STEEL CONCRETE CYLINDER MOULDS

STEEL CONCRETE BEAM MOULDS

PAN TYPE MIXER 25 LT

PAN TYPE MIXER 56 LT

PAN TYPE MIXER XL

DRUM TYPE CONCRETE MIXER

STEEL CONCRETE CURING TANK

CONCRETE CURING TANK, PVC

DIGITAL MORTAR MIXER, 5 LITERS

EN 196-3 | EN 459-2 | EN 413-2 |EN 196-1 | EN ISO 679 | ASTM C305 | EN 480-1 | ASTM C451
The mixer has been designed to mix mortars and cement pastes primarily to the requirements of standards. The mixing paddle has a planetary motion and is driven by a motor with a microprocessor-based speed and preset programs to meet all listed EN and ASTM standards, custom designed programs or manual mode. The mode button is used for the fast selection of different programs. The mixing paddle revolves at a rate of 140 rpm. with a planetary motion of 62 rpm. in low speed. In high speed, the paddle revolves at the rate of 285 rpm. with a planetary motion of 125 rpm. The Digital Mortar Mixer is supplied complete with; Stainless Steel Mixing Bowl, 5 lt (approx.) & Stainless Steel Beater.
Dimension: 300 x 555 x 610 mm
Power Supply: 220 V 1 Ph 50 Hz
Weight (approx.): 56 kg

AUTOMATIC PROGRAMMABLE MORTAR MIXER

5 Liters Capacity Automatic Sand Discharging System
EN 196-3 | EN 459-2 | EN 413-2 |EN196-1 | EN ISO 679 | ASTM C305 | EN 480-1 | ASTM C451
The mixer has been designed to mix mortars and cement pastes primarily to the requirements of standards. The mixing paddle has a planetary motion and is driven by a motor with a microprocessor-based speed and preset programs to meet all listed EN and ASTM Standards, custom designed programs or manual mode. The mode button is used for the fast selection of different programs.
The mixing paddle revolves at a rate of 140 rpm. with a planetary motion of 62 rpm. in low speed. In high speed, the paddle revolves at the rate of 285 rpm. with a planetary motion of 125 rpm. Automatic sand dispenser is supplied with the machine and the sand is automatically discharged. Custom design allows 6 programs to be set by the operator, where the motor speed, sand dispenser position and duration of the mix can be set.
For the mix where the motor speed is selected as zero, the bowl can be lowered without interrupting the rest of the program. On the display the user can see the mix time and the machine is equipped with lamp to warn the user for critical time periods. The Automatic Programmable Mortar Mixer is supplied complete with; Stainless Steel Mixing Bowl, 5 lt (approx.) & Stainless-Steel Beater
Dimension: 300 x 555 x 610 mm
Weight (approx.): 56 kg

Mortar mixer with program control (GERMAN MODEL)

for production of cement-mortar and cement glue acc. to
DIN 1164 parts 5+7,
EN 196 parts 1+3(ISO R/679, ASTM C 305, BS 450)with automatic sand intake with protective cover 2 mixing speeds 140 + 285 (1/min)5 liter stainless steel stirrer electrical connections: 400 V/50 Hz; 1,0 kW measurements: W/D/H 630 x 300 x 800 mm weight: approx. 93 kg

CEN STANDARD SAND

EN 196 Standard Norm Sand.(Sachets of 1350g) Test of Cement to be used in stainless steel boiling bath. Pre-packed certified sand to be used in EN prism The aim is to measure the expansion of the moulds. (Cement-Sand-Water)This sand is also Cement after having been for 24 hrs. Steam rising in used for standard setting time test. This sand is used to determine the strength in Laboratory tests.

PRIS Cement is the Sole agent for Southern Africa

DIGITAL PULL OFF TESTER 16 KN

This dynamometer measures the adhesive force and the tensile strength of two layers of materials (concrete, facing plasters, mortars, building plasters, lime etc.) and is particularly suitable for applications concerning testing repairs of any structure where the bond strength between two layers is an essential factor.Compact, light and suitable for use in any location, this Pull-Off Tester is fitted with a load cell and high resolution large digital display unit; it is therefore suitable for measurements from low loads up to 16 kN, granting a wide working range and ideal for a large number of applications and materials. The direct tensile force is applied by rotating the hand wheel.The three feet of the unit can be fixed in the large position (overall dimensions 176 mm diameter) with very stable bearing, or in the compact position (overall dimensions 92.5mm diameter), to perform tests in narrow spaces, or for specimens close one to the other.

REFRIGERATED CEMENT CURING TANK

DOUBLE FLOOR | CIRCULATION SYSTEM
EN 196-1/ASTM C 150
160 Prism Sample Capacity .RANTEK Cement Curing Pool Systems are made of complex stainless steel and meet the needs of the actual temperature values at the desired set temperatures thanks to the microprocessor controlled digital unit.
The easily cleaned complex stainless-steel inner and outer reservoir consist of specially designed stainless steel shelves, cooling units, heating units, water circulation pump systems for placing prism samples. It can be operated between +20 C and +60 C temperature range.
Thermometer Reading Resolution: 0.1 C Special production is made in desired sizes.
Dimensions. (w x d x h) = 1000 x 750 x 1500 mm
Approximate weight. 160 kg

EN 196 Curing Bath

For Cement prism of 40, 0 x 40, 1 x 160 mm. The Bath holds 4 stainless steel racks to accommodate 120 specimens. The water in the Bath is circulated at a digital set constant temperature, e.g. 20ºC. The Bath has refrigeration cooling as well as a heating element which is thermostatically controlled, thus specimens are always cured at the same temperature before the breaking strength test is done. (Compression Testing)

CEMENT CURING CABINET

CABINET, 120 LITERS/ CABINET, 250 LITERS / CABINET, 500 LITERS /
CABINET, 750 LITERS / CABINET, 1000 LITERS
Rantek Curing Cabinets are designed to stimulate real climate conditions by controlling temperature, humidity, day and night light cycles. The temperature and humidity control range of the test cabinets allows many tests to be performed in different sectors.
However, stability, artificial aging, storage and shelf life tests can also be done easily.
Designed for use in many industries. In order to ensure maximum durability and reliability, the most appropriate materials for internal and external construction are used.
The cell is made of Stainless Steel and the outer body is made of epoxy-painted galvanized steel to be unaffected by high humidity. The power lamps inside the door, protected by heat and refractory glass, provide daylight to the specimens. Glass Metal door allows observation of samples without affecting the humidity and temperature values in the cell. When cold and hot test temperatures are considered, insulation is of great importance for product efficiency. The isolation of the Test Cabinet devices is achieved by injection of high-density polyurethane. Humidity is provided by a humidity generator and is measured by the humidity sensor inside the cell.
At this point, it is ensured that the nudge is measured in the most sensitive way.
The temperature is controlled by PID, humidification and cooling proportional control system.
In addition to the diagnostic system, there is an adjustable safety thermostat for heating.
There is a 128 x 64 pixel touch screen on the user panel of the device. Strong air circulation provides stability with very good temperature and humidity distribution even at low temperatures.
After the door is opened and closed, there is a rapid recovery period. Test Cabinets are equipped with an advanced microprocessor control system.

TECHNICAL SPECIFICATIONS:

- Microprocessor controls maintain temperature and humidity in approximate ranges of -10°C to 60°C and 20%-95%, respectively.
- A low-pressure water vapor generator controls chamber humidification by injecting saturated water vapor into the recirculating air duct.
- This process is preferable to steam generation because steam introduces additional heat to the chamber atmosphere, which compromises temperature control.
- Fully Automatic Water using
- Transparent Interior Glass Door System
- Stainless Steel inner side
- Heat Paint external side
- Stainless Steel Shelving: 4 Supplied (16 Maximum)
- Relative Humidity Range: 20% to 95%
- Jacket Type: Air
- Temperature Sensitivity: ± 1 ºC
- Temperature Range: -10°C to 60°C
- Capacity: 120 Lt, 250 Lt, 500 Lt, 750 Lt, 1000 Lt.
- Temperature Sensor: PT 100
- Humidity Sensitivity: ±1
- Timer: 1 min. - 99.9 hour
- RS 232 PC controlled system
- 220 V / 50 Hz / 1ph

Humidity cabinet (RSA)

To hold 3 gang moulds under conditions as specified under EN 196 specifications.
You therefore have a pre-set constant temperature and a pre-set constant humidity.
Electronic Temperature control with Refrigerated water circulation 15.0ºC to 35.0ºC
Electronic Humidification up to 93% relative humidity at 20ºC
400-litre capacity with 4 stainless steel shelves to hold ± 20 x 3 gang moulds
40, 0 x 40, 1 x 160mm (EN 196)

CEMENT MOISTURE SYSTEM, STD and XL

360 PRISM MOULDS & 10 STEEL MOULDS / 900 PRISM Moulds & 24 STEEL MOULDS.
Fully Automatic 19.5" TFT ALL IN ONE Computer Controlled Moisture cabinet with pool system (Water Bath);
This a device that meets both the Prism holding pools and the Moisture cabinet. Installation of air conditioners in the rooms, installation of temperature sensors in the pools, addition of resistances to heat the pool water, and the homogeneous distribution of the room air together with the pool water.
The Moisture Cabinet with a pool system records all the information from the sensors as a graphical image on the computer by performing all these operations electronically and automatically in volume as a single device.
The height of the unit is approx. 200 cm and the depth of 250 cm with the control unit is 110 cm. The unit has 360 prisms and 10 molds. The device is single door, where the XL unit is double door.
The appliance cabinet and its components are made entirely of stainless steel. There are 6 mm spaced slots to accommodate the prism in the drawers. In this case, it is ensured that the prisms mentioned in the standard are closer than 5 mm.
To place the prism There are 3 drawers inside the device. In this case, it is ensured that the prisms mentioned in the standard are closer than 5 mm.
To place the prism There are 6 drawers inside the device. Each drawer is independent of each other to set the specimens in the separate feature. There is a rested water tank inside the device.
The unit has both a heating and a cooling system, which is controlled by the electronic control unit and the temperature inside the cabinet is kept at 20 ± 1 degrees. There is a sprinkling system inside the unit and humidity is at least 93% inside.
The temperature sensor in the sprinkler system storage is available and temperature information is sent to the computer by following the electronic display.
The water returning from the sprinkler system is sent for reuse. There is a sensor on the device that measures the humidity and temperature of the room in which the device is located, and an electronic display that digitally reads and sends them to the computer.
There is a sensor inside the device that measures the humidity and temperature inside the cabinet and an electronic display that reads them digitally and graphically sends them to the computer.
There is a portable drawer temperature sensor to read and send the drawer temperatures to the computer.
With the computer, you can print the graphics that the software will record and store these graphics in memory.
The air in the device is homogenized by the fan system which operates automatically

CEMENT MOISTURE SYSTEM, STD
360 PRISM MOULDS & 10 STEEL MOULDS

CEMENT MOISTURE SYSTEM, XL
900 PRISM Moulds & 24 STEEL MOULDS

AUTOMATIC CEMENT COMPRESSION/FLEXURAL TESTING MACHINE 300 kN / 20 kN

"HIGH PERFORMANCE" WITH DUAL TESTING CHAMBER AND TWO INDEPENDENT MEASURING RANGES 300 KN AND 20 KN WITH LOAD CELLS AND TOUCH SCREEN CONTROL UNIT.
EN 196-1, 459-2, 1015-11, 13454-2 | ASTM C109, C348, C349 | BS 4550-3.4
These testing machines of high performance, advanced solutions and top-quality components are equipped with two load chambers with two independent measuring ranges.
They are suitable to perform: Flexural tests on cement prisms 40,1x40x160 mm (with the range 0 - 20 kN)
Compression tests on portions of prism 40,1 x 40 x 160 mm broken in flexure,
cubes side 40, 50, 70, 100 mm 2", cores with max. height of 180 mm (with the range 0 - 300 kN).
The applied load is measured by two strain gage load cells (20kN and 300kN) at high accuracy.
The load chamber 0 - 20 kN permits fully accurate tests on specimens having low strength (both in compression and in flexure). Max. vertical daylight between platens: 189 mm
Platens diameter: 165 mm
Ram travel: 35 mm approx.
Accuracy: Grade 1 starting from 1/10 of the scale for both the ranges.
Safety guards to CE Directive, polycarbonate made, with hinges.
Supplied complete with lower Compression platens and coupling pieces to easily fix the Compression devices.
Dimensions of the frame: 1300 x 400 x 1500 mm approx.
Power supply: 220V 1ph 50Hz 750W
Weight: 530 kg approx.

CEMENT FLEXURE APPARATUS, EN NORM, STD
CEMENT FLEXURE APPARATUS, ASTM NORM, STD

ASTM C348 | EN 196-1
Flexure testing device for mortar prisms 40 x 40 x 160 mm
Robust frame fitted with an upper bearer that moves vertically supported by springs. One of the two lower bearer can tilt horizontally and the distance between the two bearers is 100 mm for the EN version and 119 mm for the ASTM version.
Apart from that, the two models are identical.
Total height is 188 mm
Weight approx.: 8 kg

CEMENT COMPRESSION APPARATUS, EN NORM, STD
CEMENT COMPRESSION APPARATUS, ASTM NORM, STD

ASTM C109 | EN 196
Compression device to test 50mm (2") cubes
Robust frame fitted with an upper platen with spherical seat that moves vertically sustained by a spring.
The apparatus can be placed and centered directly on the lower machine platen.
Weight approx.: 8 kg

CEMENT COMP. & FLEX. APPARATUS, PRO

MANUEL COMPRESSION MACHINE

DIGITAL CONTROL SYSTEM (LED SCREEN)
Sensitive Testing Standards: ASTM C39 | AASHTO T22
Rigid welded steel construction. ASTM spherical seat allows free alignment at the initial contact with the specimen.
It is designed strictly conforming to the Standards, to test4" and 6" diameter specimens. ASTM spherical seat fully compliant to ASTM C39 for testing 4" x 8" and 6" x 12 cylinders. Special hand operated pressure-compensated proportional valve for the manual preset of load rate requiring just occasional operator's intervention.

- Compression machine has windows Plexiglass into Aluminum frame
- Maximum Load Capacity: 600,1000,1200, 1500 kN
- Maximum Vertical Clearance: 340mm
- Compression Plate 55 HRC hardened in the degree,
- Testing according to the distances between the sample size is supplied with parts.

Supplied with.

Distance Piece Ø 165*90 mm
Distance Piece Ø 165*50 mm
Distance Piece Ø 165*30 mm
Distance Piece Ø 165*15 mm

- Total Weight: 650 kg
- Power Supply: 220V, 60 Hz, 1ph

SEMI AUTO COMPRESSION MACHINE

HIGH STABILITY SOLID FRAME
DIGITAL LED CONTROL SYSTEM
A Class Sensitive Testing
EN 12390-3, EN12390-4, BS 1881, ISO EN 7500.
Technical Specifications: The system as standard 10 x 10 x 10 cm, 15 x 15 x 15 cm cubes, 75 x 150 mm, 150 x 300 mm cylindrical specimens can be tested. When the machine first start speed is high and then when compression plate closer to the specimen automatically speed is lower for sensitive compression tests.
Compression machine has windows Plexiglass into Aluminum frame.

- Maximum Load Capacity: 2000 kN
- Compression Plate 55 HRC hardened in the degree,
- Testing according to the distances between the sample size is supplied with parts.
- 220-volt, 1 phase, 50 Hz works with

Supplied with.

Distance Piece Ø 165*90 mm
Distance Piece Ø 165*50 mm
Distance Piece Ø 165*30 mm
Distance Piece Ø 165*15 mm
Total Weight: 650 kg
Power Supply: 220V, 60 Hz, 1ph

AUTO COMPRESSION MACHINE, TOUCH SCREEN

HIGH STABILITY WELDED SOLID FRAME
NEW GENERATION TFT AUTOMATIC DATA ACQUISITION SYSTEM
A Class Sensitive Testing
EN 12390-3, EN 12390-4, BS 1881, ISO EN 7500.

Technical Specifications:

The system as standard 10 x 10 x 10 cm, 15 x 15 x 15 cm cube, 75 x 150 mm, 150 x 300 mm cylindrical specimens can be tested. When the machine first start speed is high and then when compression plate closer to the specimen automatically speed is lower for sensitive compression tests. Compression machine has windows Plexiglass into Aluminum frame

- Maximum Load Capacity: **2000 kN**
- Maximum vertical clearance: 340 mm
- Compression Piston diameter is 320 mm
- Compression Plate 55 HRC hardened in the degree,
- Testing according to the distances between the sample size is supplied with parts.

TFT TOUCH SCREEN AUTOMATIC DATA ACQUISITION SYSTEM

- Up to 420 Bar with the hydraulic unit to read Screen Graphics display unit is located.
- Hydraulic Pump System is HAWE Brand / German Made
- Solenoid Valve is ARON Brand /Italian Made
- Pressure Transmitter is TRAFAG Brand / Swiss Made
- TFT Screen Unit test immediately graphics, loading speed, load and stress values can be monitored, such as.
- Supplied with PC Software
- Dot-matrix printer can be connected to an external unit.
- Program test samples, firms, laboratories and test stored can be entered.
- Load-time, stress-time graphs, test reports and sample reports can be obtained.
- There are sample centering lines on the additional load table.
- Additional loading table has a fast centering system for the sample.
- Press can be connected to the computer with com port output.
- Reading unit has special graphics and touch screen and appropriate reading.
- There is a transport hook to remove the press.
- Total Weight: 950 kg
- Power Supply: 220V, 50 Hz, 1ph

AUTO COMPRESSION MACHINE, BLUETOOTH

HIGH STABILITY SOLID FRAME FULLY AUTOMATIC BLUETOOTH TABLET PC CONTROL SYSTEM A CLASS SENSITIVE TESTING
EN 12390-3, EN 12390-4 | BS 1881 | ISO EN 7500.
The system as standard 10 x 10 x 10 cm, 15 x 15 x 15 cm, 20 x 20 x 20 cm cube, 75 x 150 mm, 150 x 300 mm and 160 x 320 mm cylindrical specimens can be tested. When the machine first start speed is high and then when compression plate closer to the specimen automatically speed is lower for sensitive compression tests. Compression machine has windows Plexiglass into Aluminum frame Maximum Load Capacity: **2000 kN**
Maximum vertical clearance: 340 mm
Compression Piston diameter is 320 mm
Compression Plate 55 HRC hardened in the degree,
Testing according to the distances between the sample size is supplied with parts.
AUTOMATIC BLUETOOTH DATA ACQUISITION SYSTEM
Up to 420 Bar with the hydraulic unit to read Screen Graphics display unit is located. Hydraulic Pump System complete REXROTH Brand / German Made. Solenoid Valve is ARON Brand / Italian Made. Pressure Transmitter is TRAFAG Brand / Swiss Made. TFT Screen Unit test immediately graphics, loading speed, load and stress values can be monitored, such as. Supplied with PC Software. Dot-matrix printer can be connected to an external unit. Program test samples, firms, laboratories and test stored can be entered. Load-time, stress-time graphs, test reports and sample reports can be obtained. There are sample centering lines on the additional load table. Additional loading table has a fast centering system for the sample. Press can be connected to the computer with com port output. Reading unit has special graphics and touch screen and appropriate reading.
There is a transport hook to remove the press.
Total Weight: 900 kg
Power Supply: 220V, 60 Hz, 1 phase

AUTO COMPRESSION MACHINE, 4-COLUMN HIGH STABILITY 4-COLUMN FRAME

NEW GENERATION TFT AUTOMATIC DATA ACQUISITION SYSTEM
A Class Sensitive Testing
EN 12390-3, EN 12390-4, BS 1881, ISO EN 7500.
Technical Specifications: The system as standard 10 x 10 x 10 cm, 15 x 15 x 15 cm cube, 75 x 150 mm, 150 x 300 mm cylindrical specimens can be tested. When the machine first start speed is high and then when compression plate closer to the specimen automatically speed is lower for sensitive compression tests.
Compression machine has windows Plexiglass into Aluminum frame

- Maximum Load Capacity: 2000 kN
- Maximum vertical clearance: 340mm
- Compression Piston diameter is 320 mm
- Compression Plate 55 HRC hardened in the degree,
- Testing according to the distances between the sample size is supplied with parts.

TFT TOUCH SCREEN AUTOMATIC DATAACQUISITION SYSTEM

- Up to 420 Bar with the hydraulic unit to read Screen Graphics display unit is located.
- Hydraulic Pump System is HAWE Brand / German Made
- Solenoid Valve is ARON Brand /Italian Made
- Pressure Transmitter is TRAFAG Brand / Swiss Made
- TFT Screen Unit test immediately graphics, loading speed, load and stress values can be monitored, such as.
- Supplied with PC Software
- Dot-matrix printer can be connected to an external unit.
- Program test samples, firms, laboratories, and test stored can be entered.
- Load-time, stress-time graphs, test reports and sample reports can be obtained.
- There are sample centering lines on the additional load table.
- Additional loading table has a fast centering system for the sample.
- Press can be connected to the computer with com port output.
- Reading unit has special graphics and touch screen and appropriate reading.
- There is a transport hook to remove the press.
- Total Weight: 1100 kg
- Power Supply: 220V, 50 Hz, 1ph

AUTO FLEXURAL MACHINE, O FRAME

Standards: ASTM C78, 293 /AASHTO T97 / BS 1881:118 / TS EN 1390-5
The Rantek Automatic range of 200kN capacity Flexural Testing Machines have been designed for reliable and consistent testing of flexural test on standard concrete beams, concrete or natural stone curbs, concrete paving flags, and natural stone slabs. Tests can be performed by either TFT Touch Screen Readout Unit or on a computer with using free Software. The Automatic Flexural Testing Machines allow inexperienced operators to perform the tests. Once the machine is switched on and the specimen is placed. The only required operations are: Setting test parameters, including pace rate Pressing the START button on the control unit.
The Rantek ranges of Flexural Machines have the accuracy of Class 1
Test assembly is used for 3 or 4point flexural tests on 100- or 150-mm Concrete Beams. The distance of lower bearers can be adjusted max. 800mm. The distance between upper bearers can be set with additional distance pieces set.
The Automatic Flexural Testing Machines consist of: Heavy Duty Welded Load Frame, Automatic Hydraulic Power Pack, TFT Touch Screen data acquisition& control system, Flexural test assembly. TFT Screen Unit test immediately graphics, loading speed, load and stress values can be monitored, such as.
Supplied with PC Software. Dot-matrix printer can be connected to an external unit. Program test samples, firms, laboratories, and test stored can be entered.
Load-time, stress-time graphs, test reports and sample reports can be obtained.
There are sample centering lines on the additional load table.
Additional loading table has a fast centering system for the sample.
Press can be connected to the computer with com port output.
Reading unit has special graphics and touch screen and appropriate reading.
There is a transport hook to remove the press.
Total Weight: 600 kg
Power Supply: 220V, 60 Hz, 1 ph

ELECTRONIC COMPRESSOMETER

AUTO BLOCK TESTING MACHINE

ANALOG COMPRESSOMETER

AUTO PIPE COMPRESSION MACHINE

EN 1916 / ASTM C301, C497

Compression pipe testing machine was designed to conduct vertex compression testing with full load testing without impact or blows on tubes and preformed parts which are made of concrete, steel fiber concrete and reinforced concrete. Load Capacity is 500 kN, Test pipes with dimension 50 mm –2000 mm consisting of:

Frame of structural steel bolted together with high strength bolts, so it can be easily assembled/disassembled for delivery or for site movements. The frame must be locked to a concrete base to be prepared by the customer. Two upper crossbeams raised and lowered by a motor by speed operated winch.

The upper frame crossbeam is locked in position by pins inserted through the columns.

NOTE: The testing frame is delivered disassembled and must be mounted on site following the instructions. Testing frames with different features can be manufactured as per Customer's requirements. The Customer can also manufacture locally the testing frame and fix easily to loading/control system only.

LCD Data Acquisition Control System Features: Up to 420 Bar with the hydraulic unit to read Screen Graphics display unit is located. Hydraulic Pump System complete REXROTH Brand / German Made. Solenoid Valve is ARON Brand /Italian Made. Pressure Transmitter is TRAFAG Brand / Swiss Made LCD Graphic Screen Unit test immediately graphics, loading speed, load and stress values can be monitored, such as. Dot-matrix printer can be connected to an external unit.

Program test samples, firms, laboratories, and test stored can be entered.

Load-time, stress-time graphs, test reports and sample reports can be obtained.

There are sample centering lines on the additional load table.

Additional loading table has a fast centering system for the sample.

Press can be connected to the computer with com port output. Reading unit has special graphics and touch screen and appropriate reading. There is a transport hook to remove the press.

Hydraulic unit and press are mounted on the same frame so that ease of use is provided.

Dimensions: 3200 x 3500 x h 5500 mm approx.

Total Weight: 3750 kg approx.

ANALOG MANUEL TABLET/PELLET PRESS 30 TONS

The Mortar Grinder can mix and homogenize powders, suspension and pastes, even for samples with high viscosity. The RAM 300 is suitable for the proper and reproducible sample preparation to analytical fineness. Application Examples ashes, cement clinker, chemical products, coal, cocoa nibs, coke, drugs, food, homeopathic materials, nuts, oil seeds, pharmaceutical materials, plant materials, salts, silicates, slag, soils, spices, tiles, yeast cells, ...
Solid, high-quality pellets are an important precondition for reliable and meaningful XRF analysis.
The RAM600 is a compact benchtop unit with particularly simple and safe operation.
With a pressure force of 30 t it is ideally suited for the preparation of solid samples for XRF analysis.

The pellets produced are of high quality and are characterized by their high degree of stability.
The piston pressure can be read off from the clearly visible manometer scale.
The dies for the Pellet Press RAM 600 are available in several diameters and can be evacuated completely.

DIGITAL MANUEL TABLET/PELLET PRESS 30 TONS

Same as mod. RAM600, but reading values with DIGITAL MANOMETER

RTP AUTOMATIC TABLET/PELLET PRESS 40 TONS CAPACITY

TFT TOUCH SCREEN DATA ACQUISITION SYSTEM

RANTEK Automatic Tablet Press RTP, program controlled for x-ray fluorescence analysis offers all the advantages of sample preparation. Pelleting with RANTEK RTP significantly increases the reproducibility and accuracy of the sample preparation process. Hydraulic system and automatic and fully programmable system. It is suitable for producing pellet samples for XRF, IR, and other analytical techniques.
RTP Tablet Press is a high quality, precise engineering with compact dimensions Product. Ideal for laboratory requirements.
The RANTEK Hydraulic RTP press produces high-quality compressed tablets with a surface similar to the one required for the best XRF results. It achieves the desired homogeneity and stability for each tablet with maximum reproducibility.
The spinning head makes the filling and cleaning of the molds fast, simple and safe.

PRECISION TFT TOUCH CONTROL

The palletization process of RTP is controlled by the PLC program. This means that the sample leads to a significant improvement in the reproducibility of the preparation and therefore to a more precise analysis.
Total pressure, such as increasing pressure increase and decrease parameters as well as the pressure holding time can be preset in the TFT panel.
The pressure increase and decrease during palletization are controlled so that the internal stresses in the sample are reduced.

- 30 pieces of Stainless-Steel Pelletizing Capsule will be supplied free of charge with the device.
- Typical pressing cycle is less than two minutes.
- Fully automatic, programmable system.
- Safe with safety lock and automatic pump shut-off safety valve provides the possibility to work.
- Automatic pellet mould unloading system.
- Perform the entire pressing cycle at the touch of a button.
- 220 V, 50-60 Hz, 1 pH
- Weight: 165 kg

HARDGROVE INDEX DEVICE, HGI

ASTM D409/409M

Hardgrove Grindability Tester measures relative ease of pulverization of coals compared to standard coals in accordance with ASTM D409 Hardgrove Machine Method. The resulting Hardgrove Grindability Index (HGI) provides a measure of energy required in a grinding process or a measure of yield for a given energy input. A prepared 50 g sample of No. 16—No. 30 sieve size coal and eight 1in (25.4mm) diameter polished steel grinding balls are placed in a stationary bowl having a machined circular track.

An upper grinding ring with matching track is rotated at 20 rpm to drive the balls while a fixed load of 64lb (29kg) is maintained by weighting the motor-driven spindle attached to the upper ring.

A counter/switch assembly automatically stops the tester after 60 revolutions, and amount of grinding is determined by sieving on a No. 200 sieve. The unit is made from durable steel and cast-iron materials throughout to ensure reliable, maintenance-free operation. Upper and lower grinding elements and 8 grinding balls are included with each model.

AUTOMATIC HARDGROVE INDEX DEVICE, HGI

ISO 5074:1994 | ASTM D 409-08

Application： This instrument can be used to determine grindability of coal in the field of coal industry, power plants, metallurgical industry and scientific research, etc. High automation With film key and LCD screen Highlights：

With microcomputer intelligent controlling system, real time display of working status and process.

High automation: Auto-lifting & loading, automatic revolution & counting, and stop automatically after 60 rounds. With built-in linear regression correction curve, calculation and calibration can be finished automatically.

With emergency stop function. If restart, revolution counting can accumulate.

With film key and LCD screen, it's easy to operate. Connection with balance is available; Data can be stored automatically; With micro-printer, it can realize the functions of date query, automatic calculation, result print and so on.

Conformance to standard ISO 5074:1994 Hard coal – Determination of Hardgrove Grindability Index.

ASTM D 409-08 Standard Test Method for Grindability of Coal by the Hardgrove-Machine Method.

AUTOMATIC MORTAR GRINDER

The Mortar Grinder can mix and homogenize powders, suspension and pastes, even for samples with high viscosity. The RAM300 is suitable for the proper and reproducible sample preparation to analytical fineness.

The sample grinder substitutes cumbersome hand mortars by a high-performance drive w/electronic control.

Application Examples: ashes, cement, clinker, chemical products, coal, cocoa nibs, coke, drugs, food, homeopathic, materials, nuts, oil seeds, pharmaceutical materials, plant materials, salts, silicates, slag, soils, spices, tiles, yeast cells, ...

Water Distillation (RSA)

All Glass 4 litres per hour –Water distillation unit 4 or 8 litre per hour, complete with low level Wall mounted, simple robust unit, with easy water cut out device, pressure regulator and exchangeable heating element. 20 litre storage tank which switches unit off when full.

AUTOMATIC WATER DISTILLER

Devices: chemical, pharmaceutical, food, textile industry research and quality control laboratories, medical laboratories, hospitals and clinics operating rooms are used to obtain pure water. In the automatic water distiller, the boiling and condensation tubes are next to each other and the boiling section also has a lid for cleaning. There is a presorted and electrode level control system which allows the device to operate according to the network pressure. All parts in contact with water and water vapor are made of stainless steel.
The heater switches off automatically when the water level in the boiling tank drops below normal. In the devices, the inlet water pressure is observed with the manometer on the panel. The device can be used on the laboratory bench or hung on the wall if desired.

Technical Specifications

Distillation Water Capacity: 4 liters / hour
Cooling Water Consumption (max.): 40 liters / hour
Cooling Water Outlet Temperature: 50 ° C
Heater Type: Stainless steel body tube resistance
Safety System: Water level control with thermostat and electrode
Outer Body Material: Electrostatically painted heavy duty steel
Inner Body Material: Stainless steel
Connection Materials: PVC and silicone hose
Installed Power: 3000W
Power Supply: 220 V. - 50 Hz.
External Dimensions (W x H x D): 40 x 52 x 18 cm
Net Weight: 14 kg. | Packed Weight: 16 kg.

Automatic Adjustable Water Dispenser 5 – 60 ml

DIGITAL RECTANGULAR HOT PLATE

DIGITAL SQUARE HOT PLATE

DIGITAL SAND BATH

GENERAL PURPOSE WATER BATH

DIGITAL WATER BATH, COOLING

LABORATORY OIL BATH

ORBITAL SHAKER

Analytical Balances

Capacity 80g to 250g
Readability 0.0001g

Solis Analytical and Semi-Micro Balances

Capacity 120g to 510g
Readability 0.01mg/ 0.1mg to 0.0001g

PMB Moisture Analyser

Capacity 50g to 200g
Readability 0.001g / 0.01% to 0.01g / 0.05%

CB Compact Balances

Capacity 500g to 3000g
Readability 0.1g to 1g

Portable Compact Balances

Capacity 200g to 5000g
Readability 0.01g to 1g

Solis Precision Balances

Capacity 360g to 8200g
Readability 0.001g to 0.01g

Precision Balances

Capacity 220g to 22000g
Readability 0.001g to 0.1g

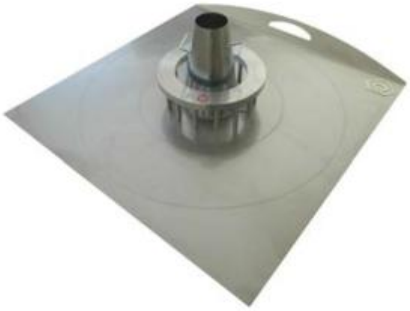
Portable Precision Balances

Capacity 120g to 3000g
Readability 0.001g to 0.1g

CONCRETE FLOW TABLE

EN 12350-5
The test set is used for concrete
mixes of high workability and determines flow index as an arithmetic mean of the diameter of the specimen after working on a flow table. The apparatus consists of a double steel table, an upper table measuring 700 x 700 mm and hinged at one side to the lower table. The top table is inscribed, and all parts are protected against corrosion. The stainless-steel cone has a 130 ±2 mm top diameter, 200 ±2 mm base diameter and 200 ±2 mm height and 1.5 mm thickness. The Concrete Flow Table is supplied complete with, Stainless Steel Flow Cone & Wooden Tamper
Dimensions: 700 x 850 x 300 mm
Weight (approx.) 35 kg

J-RING TEST SET



L-BOX TEST APPARATUS

SLUMP CONE TEST SET

EN12350-2
The Slump test method is used for the determination of the consistency and workability of fresh concrete. The Slump Test Set is supplied galvanize coated to prevent corrosion.
The Slump Test Set are supplied complete with;
Slump Cone Top Día: 100 ±2 mm /Base Día: 200 ±2 mm / Height: 300 ±2 mm
Slump Base Plate 500 x 500 x 60 mm with Handle Slump Funnel, Galvanized Steel
Tamping Rod Ø 16 x 600 mm
Rubber Mallet
Steel Ruler 300 x 1 mm
Dimensions: 550 x 600 x 250 mm (packed)
Weight (approx.) 6 kg

PORTABLE SLUMP CONE SET

ASTM C143 | AASHTO T119
The Slump test method is used for the determination of the consistency and workability of fresh concrete.
Slump Cone Funnel, made of seamless spun steel, should be ordered separately.
Slump Test Set are supplied complete with.
Slump Cone, Seamless spun metal,
Aluminum Base Plate with clamps and measuring bridge
Tamping Rod, Graduated
Scoop, Stainless Steel 38 oz.
Dimensions: 550 x 600 x 250 mm
Weight (approx.): 10 kg

COMPACTION FACTOR APPARATUS

SPECIFIC GRAVITY/BOUYANCY SET

MELTING POT

ELECTRIC CORE DRILL MACHINE

CONCRETE TEST HAMMER

DIGITAL TEST HAMMER

POCKET CONCRETE PENETROMETER

UNIVERSAL CUTTING MACHINE

EN 12390–3, 12504-1 | ASTM C42, D4543
Universal Cutting Machine has been developed to cut and prepare concrete, rock or natural stone cores or other type test specimens. Special clamp assembly allows specimens to be held during cutting operation. The machine is supplied complete with “V“block clamp for Ø 100 mm specimens and a water circulation pump.
Included Ø 350 mm Cutting Blade & Special Clamp Assembly with the machine.
Max. Cutting Height: 110 mm
Max. Cutting Length: 400 mm
Power of Water Pump: 0.37 HP
Supplied complete with;
Diamond Blade dia. 350 mm
Special Clamp Assembly
Power supply: 220 V 1 ph 50/60 Hz
Weight (approx.): 117 kg

CEMENT

S.S. CALIBRATION WEIGHT F CLASS

S.S. CALIBRATION WEIGHT E CLASS

CAST CALIBRATION WEIGHT M1 CLASS

DESK TYPE PH METER

PORTABLE PH METER

POCKET TYPE PH METER

UNIVERSAL PH INDICATOR PAPER

DIGITAL ANEMOMETER

DIGITAL WEATHER STATION

DIGITAL THERMO HYGROMETER

TACHOMETER

ANALOG HYGROMETER

INFRARED THERMOMETER

S.S. PROBE DIGITAL THERMOMETER

BIMETALLIC THERMOMETER

MAXIMUM MINIMUM THERMOMETER

ASTM THERMOMETERS

GLASS THERMOMETERS

DIGITAL CHRONOMETER

DIGITAL DIAL GAUGE

DIGITAL VERNIER CALIPER, STAINLESS S.

DESICCATOR CABINET

VACUUM DESICCATOR

NON VACUUM DESICCATOR

CEMENT

VACUUM FILTER FLASK

GLASS ERLENMAYER

GLASS BOILING FLASK

GLASS FUNNEL PYCNOMETER

GLASS PYCNOMETER

REAGENT BOTTLE

GLASS MEASURING CYLINDERS

PVC MEASURING CYLINDERS

GLASS BEAKER

PLASTIC BEAKER

PLASTIC VOLUMETRIC FLASK

GLASS VOLUMETRIC FLASK

PLASTIC WASHING BOTTLE

BURETTE STOPCOCK

GLASS GRADUATED PIPETTES

GLASS ROD

GLASS PETRI DISH

WATCH DISHES

PORCELAIN MORTAR AND PESTLE

PORCELAIN EVAPORATING DISHES

PORCELAIN CRUCIBLE

GOOCH CRUCIBLE FILTER PORCELAIN

BUCHNER FUNNEL

CRUCIBLE TONGS

BUNSEN BURNER WITH TRIPOD

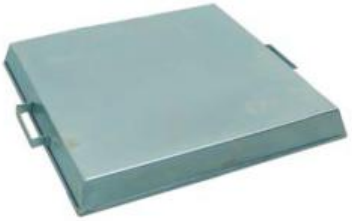
ROUND HOT PLATE

ALUMINIUM MOISTURE TIN AND LID

STAINLESS STEEL MIXING BOWL

ALUMINIUM PAN

GALVANIZED STEEL PAN



STAINLESS STEEL PAN

GALVANIZED STEEL SCOOP

STAINLESS STEEL SCOOP

FLEXIBLE SPATULA, WOODEN HANDLE

RUBBER MALLET

LARGE SIZE S.S. SCOOP

CEMENT

MINI AIR COMPRESSOR FOR DEMOULDING

VACUUM PUMPS

LABORATORY TROLLEY

LABORATORY REAGENTS

LABORATORY AIR COMPRESSOR

Cement is an inorganic material widely used in the construction industry, both on construction sites and in the manufacture of semi-finished products. By mixing with water, cement becomes a paste with adhesive properties: it is for this reason that it is considered as a hydraulic binder and correctly defined as hydraulic cement. This paste is generally used as a binder with inert solid materials such as sand, gravel, and small stones to produce the mortar and to prepare different types of concrete (lightweight concrete, reinforced concrete, prestressed concrete ...). Browse this section and discover the full range of products for cement and mortar testing