concrete equipment

production

Concrete is used more than any other man-made material in the world, it is a composite construction material composed of cement (commonly Portland cement), coarse aggregates, sand, water and chemical admixtures.

The word concrete comes from the Latin word “concretus” (meaning compact or condensed) hence, concrete solidifies and hardens after mixing with water and placement due to a chemical process known as hydration.

The water reacts with the cement, which bonds the other components together, eventually creating a robust stone-like material that can be moulded in any shape we desire.
The quality of concrete is important if structures formed from this versatile material are to be safe and serve the purpose for which they were constructed therefore, several tests are conducted to identify the characteristics and parameters of concrete.

The testing equipment described in this section are special selected to test the physical parameters of concrete for consistency, degree of compaction, workability, setting time, segregation resistance, confined flowability, air content, bulk density, specific gravity, adhesion, water permeability and strength.

Slump Test

Standards: EN 12350–2, BS 1881: 102, ASTM C143, AASHTO T119

The Slump test method is used for the determination of the consistency, medium and high workability of fresh concrete.

Comprises:
The set comprises of slump cone, slump cone funnel, 600 mm long x 16 mm diameter tamping rod which is hemispherical at both ends, base plate, rubber mallet and steel rule. Supplied either galvanized or paint coated to prevent corrosion.

CN 0101
Slump test set complete

Spares:
CN 0102
Slump Cone Funnel

CN 0103
Base Plate
CN 0104
Rubber Mallet

CN 0105
Tamping Rod
CN 0106
Steel Rule

Waltz Container

Standards: EN 12350-4

Waltz Container is used for determining the degree of compactability and consistency of fresh concrete.

Comprises:
Comprises of a 200x200x400 mm (w x d x h) metal container with two carrying handles.

Coated against corrosion.

CN 0107
Waltz Container

K-slump Test

The K-Slump Test is used for in-place measurements of forms and test moulds.

The K-slump Tester indicates correlation to the slump Test, The Probe determines the workability of concrete and the degree of compaction after being placed in the forms.

CN 0108
K-slump

Vebe Consistometer

Standards: EN 12350-3, ASTM C1170

The vebe test is a variation of the simple slump test where the concrete is subject to vibration after removal from the slump cone to determine the workability of fresh concrete.

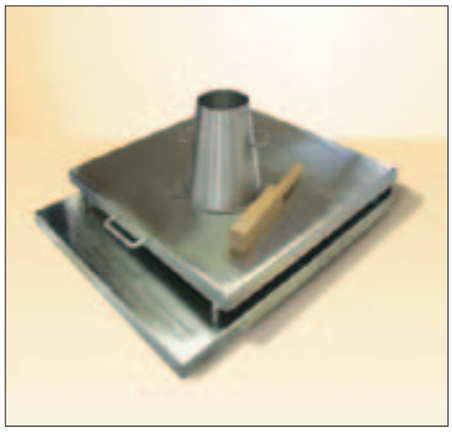
A plastic disc is placed into contact with the upper surface of the concrete, the vibrating table underneath operates at a fixed amplitude allowing the lower surface of the disc to be completely coated with cement.

Comprises:
Vibrating table
Slump cone
Graduated rod and transparent plate
Filling cone and tamping rod.

CN 0109
Vebe Consistometer
Spares:
CN 0110
Filling Cone
CN 0111
Slump Cone

Flow Table

Standards: EN 12350-5, BS 1881-105



The Flow Table test is used for determining the consistency and workability of fesh concrete.
The conical mold for casting the flow specimen and the caliper for measuring the diameter of the mortar after it has been spread on the flow table.

Comprises:
The apparatus consists of a double steel table, the upper table measuring 700x700 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 top of 130 mm dia., base of 200 mm dia., and higheat of 200 mm. Supplied complete with wooden tamping rod.

CN 0112
Flow table

Pocket Penetrometer

Standards: ASTM C403, AASHTO T197

The Pocket Penetrometer is designed for determination of setting time of fresh concrete for field and laboratory use.

Stainless steel plunger 32.3 mm² (1/20 inch²) area; plunger graduated 0-5 MPa.

CN 0113
Pocket Penetrometer

Setting-time by Concrete Penetrometer

Standards: ASTM C403, AASHTO T197

The Concrete Penetrometer is used for determination of setting time of the mortar fraction of fresh concrete.

Comprises:
The Concrete Penetrometer consists of a spring loading device which is graduated from 2 to 150 lbs, Set of stainless steel needle points of 650, 325, 160, 65, 32, and 16 mm² area.

CN 0114
Concrete Pentrometer complete

Spares:
CN 0115
Set of needle Points

V-Funnel Apparatus

The V-Funnel apparatus is used to evaluate the segregation resistance of freshly mixed self compacting concrete by observing the flowing speed due to the difference of samples remaining period in the funnel.

Comprises:
The test set consists of a stainless steel funnel placed vertically on a supporting stand.
The discharge orifice is equipped with a lid, which can be momentarily opened.

CN 0116
V-Funnel apparatus complete

U Shape Box Apparatus

The U Shape Box is used to determine the confined flowability and the capacity of SCC concrete to flow within confined spaces.

Comprises:
The Box is made of galvanized steel frame consisting of four 10 mm diameter and three 13 mm diameter bars.

CN 0117
U Shape Box apparatus complete

L Shape Box

The L Shape Box is used for evaluation of self compactability (confined flowability) of freshly mixed self compacting concrete.

The box gives the opportunity to evaluate different properties, such as filling ability, passing ability and resistance to segregation.

CN 0118
L Shape Box apparatus complete

Compacting Factor Apparatus

Standards: BS 1881-103, BS 5075

The Apparatus enables a check to be made on the weight of concrete when it is falls from fixed heights into a cylindrical container of standard capacity.

Comprises:
The Apparatus consists of two conical hoppers each with a hinged trap with quick release mechanism to allow free flow of the concrete sample.
A cylindrical mould is fitted beneath the hoppers.

CN 0119
Compacting Factor Apparatus

Air Entrainment Meter

Standards: EN 12350–7, ASTM C231, AASHTO T152

The Air Entrainment Meter is used to determine air content of fresh concrete. The meter measures up to 22% entrained air with an accuracy of ±0.25% at full scale.
It is appropriate for aggregates size of maximum 50mm.

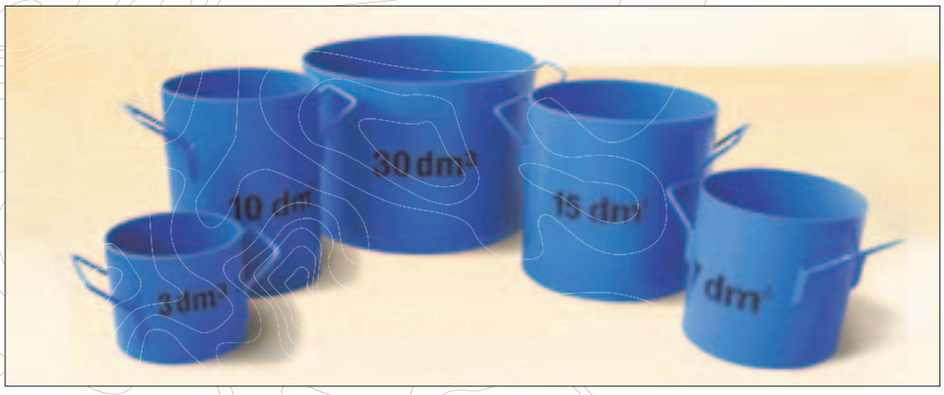
Comprises:
It consists of a flanged 7 liter capacity cylindrical vessel and cover assembly incorporating a pressure gauge air pump and valves.
The instrument can be calibrated and it is supplied complete with straight edge and tamping rod.

CN 0120
Air Entrainment Meter, Short Type
CN 0121
Air Entrainment Meter, Long Type

Bulk Density Measures

Standards: BS 812, EN 1097-3, 12350-6, ASTM C29, C138

The Bulk Density Measures is used to determine the loose bulk density and voids of Compacted Fresh Concrete. Manufactured from heavy gauge steel these bulk density measures comply with the requirements of either BS/EN or ASTM C138.
All measures has a carrying handles as per the required standard.



CN 0122
Bulk Density 3 ltr
CN 0123
Bulk Density 7 ltr
CN 0124
Bulk Density 10 ltr
CN 0125
Bulk Density 15 ltr
CN 0126
Bulk Density 20 ltr
CN 0127
Bulk Density 30 ltr

Density of Hard Concrete, Specific Gravity Frame

Standards: EN 12390-7, 1097-6, BS 1881:114

The Apparatus is used for specific gravity determination of fresh and hardened concrete.

Comprises:
A purpose built robust frame designed to support the electronic balance. The lower part of the frame incorporates a moving platform, which carries the water tank allowing the test specimens to be weighed in both air and water.

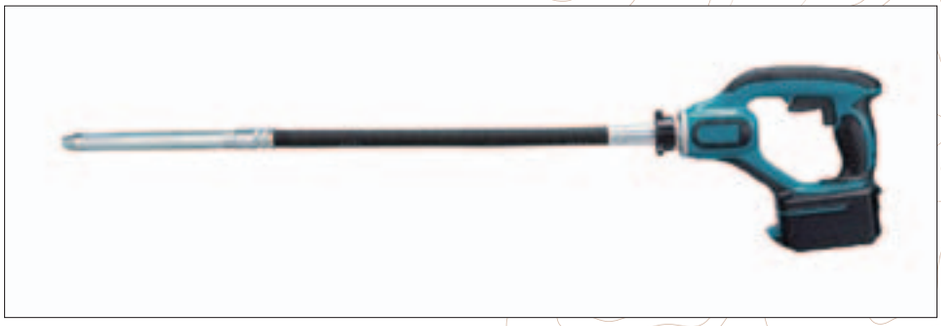
CN 0128
Specific Gravity Frame supplied complete with water tank, Buoyancy Balance, Cradle and suspension hook
Spares:
CN 0129
Cradle and suspension hook
CN 0130
Water Tank
CN 0131
Buoyancy Balance, 15 kg x 0.5 g

Vibrating Poker

Standards: EN 12390–2, 12350-6, -7, ASTM C31, C192, AASHTO T 23, T126

The Vibrating Poker is 25mm Tip, 250mm long ideal for the internal compaction of concrete specimens and a good alternative to traditional tamping bar especially when there are large numbers of specimens to be compacted.

CN 0132
Vibrating Poker complete



Melting Pot

Standards: EN 12390-7, 1097-6, BS 1881:114

The Melting Pot is used for melting capping compound (sulphur).

Comprises:
The apparatus consists of a aliminium container in a well-lagged steel jacket, cover and thermostatic control heating system to keep the temperature constant.
Specify Temp:
- 60° to 250°C, 100° to 320°C
- 60° to 450°C, 150° to 550°C

CN 0133
Melting Pot 1/2 litre
CN 0134
Melting Pot 1 litre
CN 0135
Melting Pot 2.5 litre
CN 0136
Melting Pot 4.5 litre
CN 0137
Melting Pot 9 litres

Cylinder Capping Frame

Standards: ASTM C617, EN 12390-3 AASHTO T23

The Cylinder Capping Frame is used to assure plane end surfaces perpendicular to the axis of the cylinder during the capping.
Built to last the frame comprising vertical supports mounted on a steel base.which can be disassembles for easy machining.

SN 0138
Cylinder Capping Frame
SN 0139
Cylinder Specimens, 75mm
SN 0140
Cylinder Specimens, 100mm
SN 0141
Cylinder Specimens, 150mm
SN 0142
Flake Capping Compound, 22 kg bag

Planetary Concrete Pan Mixer

Standards: BS 1377:2, ENV 1997-2, ASTM D4318, AASHTO T89

The Planetary Concrete Pan Mixer is efficient for mixing concrete samples for laboratory.

It is designed to give efficient mixing of both dry and wet materials, It Mixture with vertical axis. Reduction gear epicyclical. Manual discharge mouth, on the bottom.

Manual charge of raw material. Inertial counter-rotating satellite. Axle with idle wheels and rudder bar. The Cylinder capacity can be either 130, 220 or 300 Litres and the Yeld for mixture is 220 litres.
The Tank ring-shaped made by plate with big thickness. The mixer-has 3 shovel, external and internal scraper plus satellite inertial rotating arm.

The mixer head lifts clear to provide maximum access to the pan and holds the mixing blades at a constant depth during the mixing operation. The blades can be adjusted to suit the different types and volume of materials to be mixed.

CN 0143
Planetary Concrete Pan Mixer, 130 lt

CN 0144
Planetary Concrete Pan Mixer, 220 lt

CN 0145
Planetary Concrete Pan Mixer, 300 lt

J-Ring Apparatus

Standards: ASTM C 1621/C 1621M-06

The J-Ring test, in conjunction with the Slump-Flow test, is one way to determine the passing ability of SCC, defined as the ability of the concrete to flow under its own weight to completely fill all spaces within the formwork.
The J Ring Test Set includes the J-Ring assembly, Modified Slump Cone, high-density polyethylene Strike-Off Bar and a plastic Base Plate with convenient cut-out carrying handles.

CN 0146
J Ring Test Set complete

CN 0147
J Ring

CN 0148
Slump Cone

CN 0149
Strike-Off Barone

Pull Off Strength Apparatus

Standards: ASTM C4541, ACI 503-30, BS 1881-207

The Pull-off Tester determines strength of concrete overlay adhesion and the strength of applied coatings, such as plastics, mortars, plasters, bituminous coats.

The Pull-off Tester tests at any measuring point, without requiring specimen preparation.
It has a crank drive, with adjustable legs optimize measurements for the specific test situation.

Comprises:
digital force gauge with lbf, PSI, kN and N/mm2 selectable display units, 50 mm diameter test disc, tensile draw bolt, carrying case and instruction manual.

CN 0150
Pull off Strength Apparatus
CN 0151
50mm Test Disks, set of 10
CN 0152
Steel Replacement Draw Bolt

Pan Concrete Mixer

The Pan Concrete Mixer is efficient for mixing quality concrete.
Pan type mixer is suitable for the mixing concrete in the laboratory.
It is designed to give efficient mixing of both dry and wet materials.
The total effective capacity of the mixer is 56 ltr.

Comprises:
The mixer head lifts clear to provide maximum access to the pan and holds the mixing blades at a constant depth during the mixing operation.
The blades can be adjusted to suit the different types and volume of materials to be mixed.

CN 0153
Pan Concrete Mixer

Drum Concrete Mixer

The Drum Concrete Mixer is used for efficient mixing of concrete.
The 125 ltr capacity Heavyduty mixer is equipped with rubber wheels which provide high portability.

CN 0154
Drum Concrete Mixer, 125lt
CN 0155
Drum Concrete Mixer, 170lt

CN 0156
Drum Concrete Mixer, 350lt

CN 0157
Drum Concrete Mixer, 425lt

Concrete Cube Moulds

Standards: EN 12390-1-2, ASTM C39, 192, AASHTO T23, T126

The Cast iron, hard plastic or steel cube moulds are manufactured in accordance to dimensions and tolerances stated in the related standards.

Two part or Four part with clamp attached base plate cast ironand steel moulds are designed to be durable, resistant and easy to clean.

Cast Iron Cube Moulds:

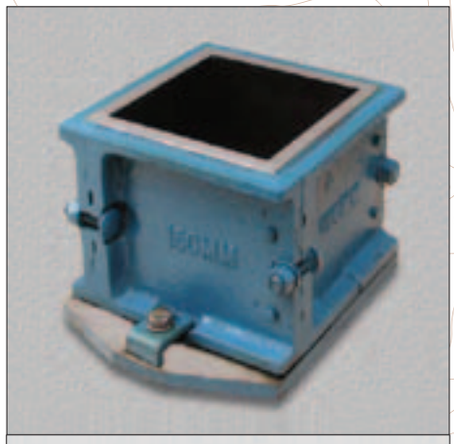
CN 0158
Cube moulds 100 mm,4 Part with Clamp base plate
CN 0159
Cube moulds 150 mm,4 Part with Clamp base plate
CN 0160
Cube moulds 200 mm,4 Part with Clamp base plate
CN 0161
Cube moulds 100 mm,2 Part with Clamp base plate
CN 0162
Cube moulds 150 mm,2 Part with Clamp base plate
CN 0163
Cube moulds 200 mm,2 Part with Clamp base plate
CN 0164
Steel Cube moulds 100 mm, with Clamp base plate
CN 0165
Steel Cube moulds 150 mm, with Clamp base plate
CN 0166
Steel Cube moulds 200 mm, with Clamp base plate

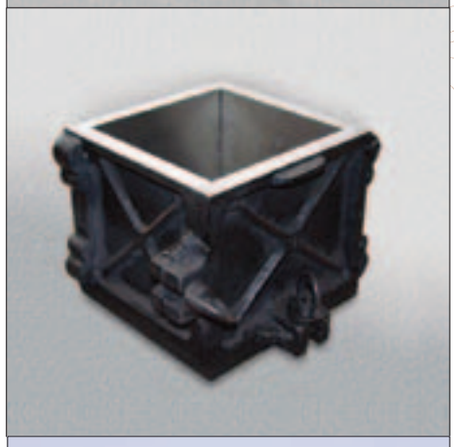
Plastic Cube Moulds:

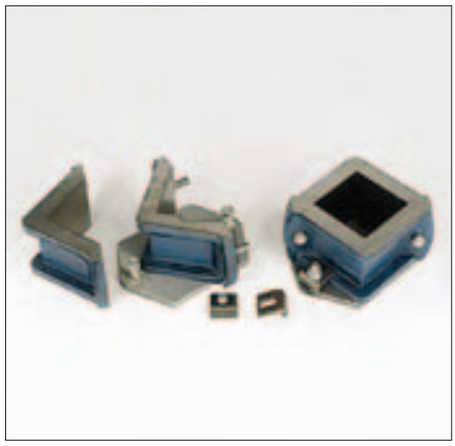
CN 0167
Plastic Cube moulds 100 mm
CN 0168
Plastic Cube moulds 150 mm
CN 0169
Plastic Cube moulds 200 mm

Plastic Cube Moulds with handle:

CN 0170
Plastic Cube moulds 100 mm with handle
CN 0171
Plastic Cube moulds 150 mm with handle
CN 0172
Plastic Cube moulds 200 mm with handle







Concrete Cylinder Moulds

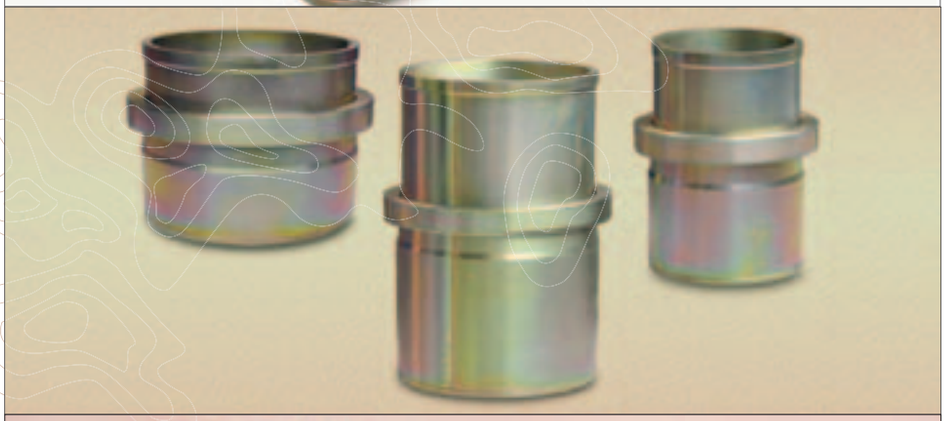
Standards: EN 12390-1-2, ASTM C39, 192

The Cast Iron Cylinder Moulds are manufactured in accordance to dimensions and tolerances stated in the related standards.

Cast Iron Cube Moulds:

CN 0173
Cast Iron Cylinder Moulds, Split type 100x200 mm
CN 0174
Cast Iron Cylinder Moulds, Split type 150x150mm
CN 0175
Cast Iron Cylinder Moulds, Split Type 150x300mm

CN 0176
Cast Iron Cylinder Moulds, Ring Type 100x200 mm
CN 0177
Cast Iron Cylinder Moulds, Ring Type 150x150mm
CN 0178
Cast Iron Cylinder Moulds, Ring Type 150x300mm



The Plastic Cylinder Moulds are manufactured in accordance to dimensions and tolerances stated in the related standards.

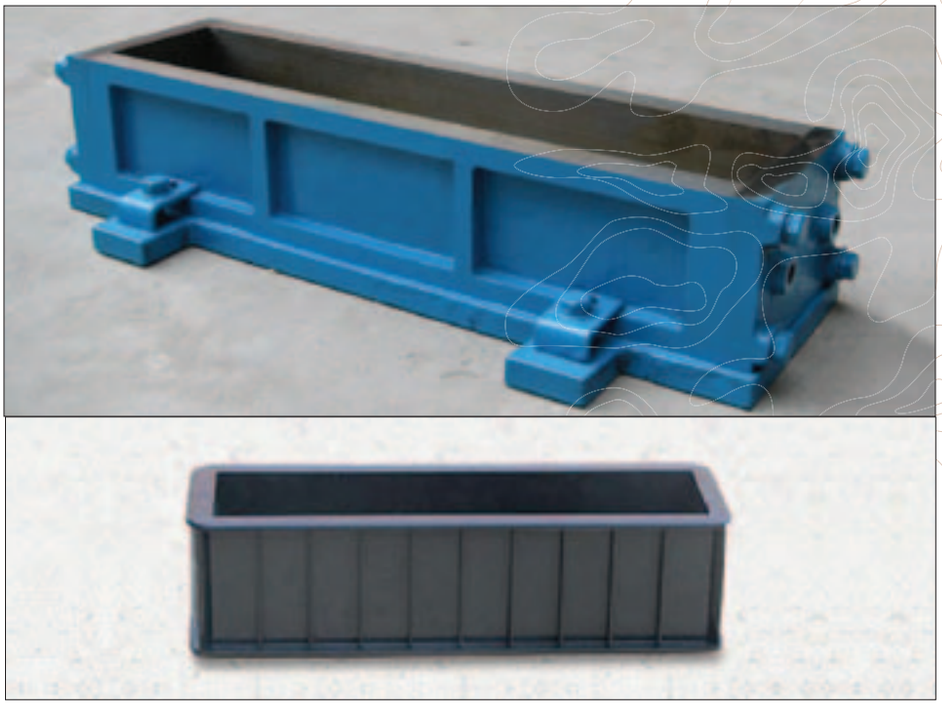
Plastic Cube Moulds:

CN 0179
Plastic Cylinder Moulds 100x200 mm
CN 0180
Plastic Cylinder Moulds 150x150mm
CN 0181
Plastic Cylinder Moulds 150x300mm

Concrete Beam Moulds

Standards: EN 12390-1-2, ASTM C39, 192, AASHTO T23, T126

Steel beam moulds are manufactured in accordance to dimensions and tolerances stated in the related standards. Two part and clamp attached base plate steel moulds are designed to be durable, resistant and easy to clean.
We also offer Heavy Duty Plastic beam moulds which are much lighter and build to last long time.



CN 0182
Beam mould 100x100x500 mm
CN 0183
Beam mould 150x150x600 mm
CN 0184
Beam mould 150x150x750 mm
CN 0185
Pastic Beam mould 100x100x500 mm
CN 0186
Plastic Beam mould 150x150x600 mm
CN 0187
Plastic Beam mould 150x150x750 mm

Curing Tank

Standards: EN 12390-1-2, ASTM C39, 192

The Curing Tank is designed for curing concrete cubes, beams and cylinders. The temperature can be set and maintained to the required value by an electric resistance incorporating a thermo regulator which maintains set temperature between ambient and 40°C with ±2°C accuracy.
The tank is also supplied with a submersible circulator pump to assure good temperature uniformity.

CN 0188
Small Curing Tank complete with all accessories
CN 0189
Large Curing Tank complete with all accessories
CN 0190
Set of Racks for Small Curing tank
CN 0191
Set of Racks for Large Curing tank
CN 0192
Recirculating Pump and heater

Vibrating Table

Standards: EN 12390–2

The Vibrating Table is a compact unit providing controlled vibro-compaction with fixed amplitude in the laboratory using cube or cylinder moulding equipment.

Comprises:

Vibrating tables consists of vibrating motor,control unit and clamping assembly. The table is available in two alternative sizes, 610 x 380 mm and 1260 x 620 mm. Small table accepts 4, large table accepts 8 cube, cylinder moulds or beam moulds by using clamping assembly.

CN 0193
Large Vibrating Table 1260 x 620 mm

CN 0194
Small Vibrating Table 610 x 380 mm

Concrete Impermeability Apparatus

Standards: EN 12390-8

The Concrete Impermeability Apparatus is used for the determining of the depth of penetration of water to hardened concrete specimens under pressure. 3 and 6 specimen capacity models are available.

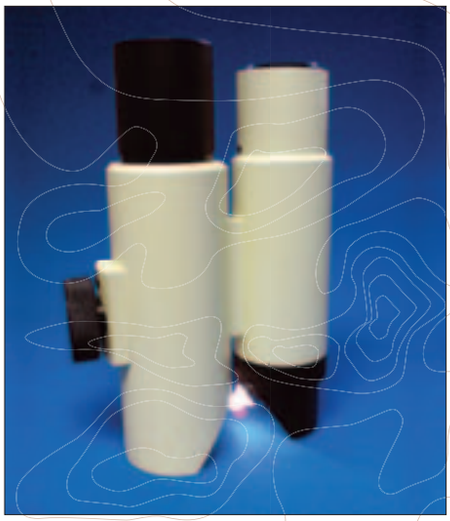
The system can test 150x150x150 mm, 200x200x200 mm cube or 150x300mm cylinder specimens. Pressure to the sample, up to 10 bar with 0,2 bar precision is generated by way of compressed air applied to the integral water tank and controlled by a pressure regulator; with a pressure gauge. The penetration of water is measured through the burettes supplied complete with the system. The system comprises impermeability gaskets for every cell.

The apparatus has to be fitted with the suitable air compressor with maximum working pressure of 10 bar.

CN 0195
Impermeability Three Place Model Complete

CN 0196
Impermeability Six Place Model Complete

Crack Detection Microscope



The Crack Detection Microscope is a precision apparatus, used for measuring cracks in concrete.
It has its own adjustable light source for darkened conditions.
The image is focused by turning a knurled knob on the side and the eyepiece scale can be rotated through 360 degrees to align with the crack under examination.

The 4mm range of measurement is divided into 0.02mm divisions.

CN 0197
Crack Detection Microscope complete

Concrete Ultrasonic Non-destructive Apparatus

Standards: BS 1881-203, EN 12504-4;ASTM C597

An essential tool for investigating the structural integrity of a wide range of materials. This new generation Concrete Ultrasonic can be used in the laboratory or on site to investigate uniformity; cavities, cracks, fire/frost damage, delamination, deterioration and strength.
It has memory storage of up to 100 sets of readings and built in RS232 serial port for download of data. Supplied with a simple software download utility kit and does not require reference bar as calibration is done by 'zeroing'. It can calculate and display additional parameters – velocity, path length and Young's Modulus. It can be set to any pulse repetition frequency from 1 to 100 and has pulse delay mode which allows the user to take readings at specified intervals from 1 per second up to 99 hours.

CN 0198
Concrete Ultrasonic Non-destructive Apparatus

Mechanical Strain Gauge

Standards: BS 1881-206

The mechanical strain gauge allows strain measurement to be made at different parts of a structure using a single instrument. comes with a digital gauge.

CN 0199
StrainGauge 100mm
CN 0200
StrainGauge 200mm

Concrete Test Hammer

Standards: EN 12504-2, ASTM C805, BS 1881

The Concrete Test Hammer is the traditional instrument used for the non-destructive testing of hardened concrete.
This easy-to-use instrument provides a quick and simple test for obtaining an immediate indication of concrete strength in various parts of a structure.
The verifiable strength is between 10 and 70 N/mm²

The test anvil on the other hand is used to verify test hammer calibration. the calibration must be verified before and after a test sequence.

CN 0201
Concrete Test Hammer, Normal Type complete with carrying case,PSI curve and carborundum stone
CN 0202
Testing Anvil with surface hardness > 62 HRC

Our latest generation concrete test hammer is made of the best components, distinctive ergonomic and all this brought to the development of the special type of concrete hammers with higher degree of reliability as far as correlation curves are concerned, obtaining the new SonReb method.

To develop new curves, 50 cubic samples (200x200mm) of twenty distinct classes of concrete have been tested.

The verifiable strength is between 10 and 120 N/mm2

Comprises:

- Instruction manual with MpA
- PSI curves
- Notepad to record index values
- Pencil
- Abrasive grindstone complete with case
- Position template (length 25 mm)
- Position template (length 30 mm)
- Phenolphthalein atomizer
- Phenolphthalein label precautions
- Padded case with shoulder-strap
- Notepad for recording scale values
- Calibration and QC certificate
- Transport safety cap

CN 0203
Concrete Test Hammer, Special Type complete with all accessories

Digital Concrete Test Hammer

Standards: EN 12504-2, ASTM C805, BS 1881

Our Digital Concrete Test Hammer is full of Precision and Reliability of the latest generation, the distinctive ergonomic design, the quality of the material used.

Light weighted and as easy to handle as a mechanical sclerometer, the Digital Concrete Hammer is an essential tool for the field experts. By means of a built-in operating system menu, the Digital Hammer can perform simple concrete tests while constantly recording the collected data.

Testing parameters settings according to the required standards.
A dedicated data card, which enables to acquire, store and analyze the collected data, allows to download them on to a PC to be further processed.

Comprises:
- Model: Digital Concrete Test Hammer, type N
- Battery life: 60 hours
- Impact energy: 2,207 Nm
- Operating temperature -10 °C +65 °C
- Measurement range 10-120 N/mm2
- Dimensions: 330x80x100 mm
- Internal memory 20,000 index values
- LCD graphic display 64x124
- Controls: icons keyboard
- Interface: RS232
- Power supply, 5 rechargeable batteries LR6 1.5V

CN 0204
Digital Concrete Test Hammer complete with all accessories

Micro Covermeter

Standards: BS1881 part 204

The Micro Covermeter is developed model with newly designed probe believed to incorporate the most accurate depth and bar size determination routines available.

Combined with extremely good resolution of multiple bars, sets the unit apart from others and sets the benchmark for covermeter surveying.

CN 0205
Micro Covermeter complete

Compression Machine

Standards: EN 12390-3,4,5,6; EN 12504-1, 1354, 1521, 13161, 1338, 1340, 196, 772-1, -6, 13286-41, BS 1881 3892-3, 187, 6073-1, 6717 ASTM C39

Our range of 2000 kN and 3000KN capacity Compression Machines has been designed to meet the need for reliable and consistent testing of concrete samples.
The machines feature both model the semi automatic and the Full automatic models.

The Full automatic models comes with complete automatic test cycle, a closed loop digital readout unit. Once the specimen parameters have been introduced, it is sufficient to press the START button to complete the test.

The Full Automatic Compression Machines consist of their main parts: Frame, power pack and data acquisition control system.

CN 0206
Full Automatic Compression machine, 2000 KN
CN 0207
Full Automatic Compression machine, 3000 KN

Accessories:

CN 0208
Distance Piece 20 mm

CN 0209
Distance Piece 30 mm

CN 0210
Distance Piece 50mm

CN 0211
Distance Piece 90mm

CN 0212
Distance Piece 100mm

Compression Machine

Standards: EN 12390-3,4,5,6; EN 12504-1, 1354, 1521, 13161, 1338, 1340, 196, 772-1, -6, 13286-41, BS 1881 3892-3, 187, 6073-1, 6717 ASTM C39

The dual stage power pack which is controlled by the control system which is designed to supply the required oil to the frame.
Very silent power pack can load a specimen between 1 kN/ sec to 20 kN/sec. On the dual stage pump high delivery low pressure pump is used for rapid approach and low delivery high pressure radial piston pump is used for test execution. On all power packs maximum pressure valve is used to avoid machine overloading.

LCD graphics data acquisition and controls system is designed to control the machine and processing of data from load cells or pressure transducers installed on the compression machine frame.

The easy to read LCD graphic display and touch-button data pad keys make the unit quick and straight forward to operate. All interactions with the measuring system are via the front control panel by using simple menu-driven procedures.

Dedicated software package is available for further online data processing, database management and certificate printing.

Compression Machine

Standards: EN 12390-3,4,5,6; EN 12504-1, 1354, 1521, 13161, 1338, 1340, 196, 772-1, -6, 13286-41, BS 1881 3892-3, 187, 6073-1, 6717 ASTM C39

The Semi Automatic range of Compression Testing Machine is designed to meet most needs for reliable and consistent testing.

The Display Unit is a microcontroller controlled device with advanced facilities for data capture, calculation and presentation.

CN 0213
Semi Automatic Compression machine, 2000 KN

CN 0214
Semi Automatic Compression machine, 3000 KN

Accessories:
Distance Pieces, See Page 86

Block Test Platens

Standards: EN772-1, BS 6073-1

The Block Test Platens 510mmx310mmx50mm are used for testing concrete blocks and other structural materials.

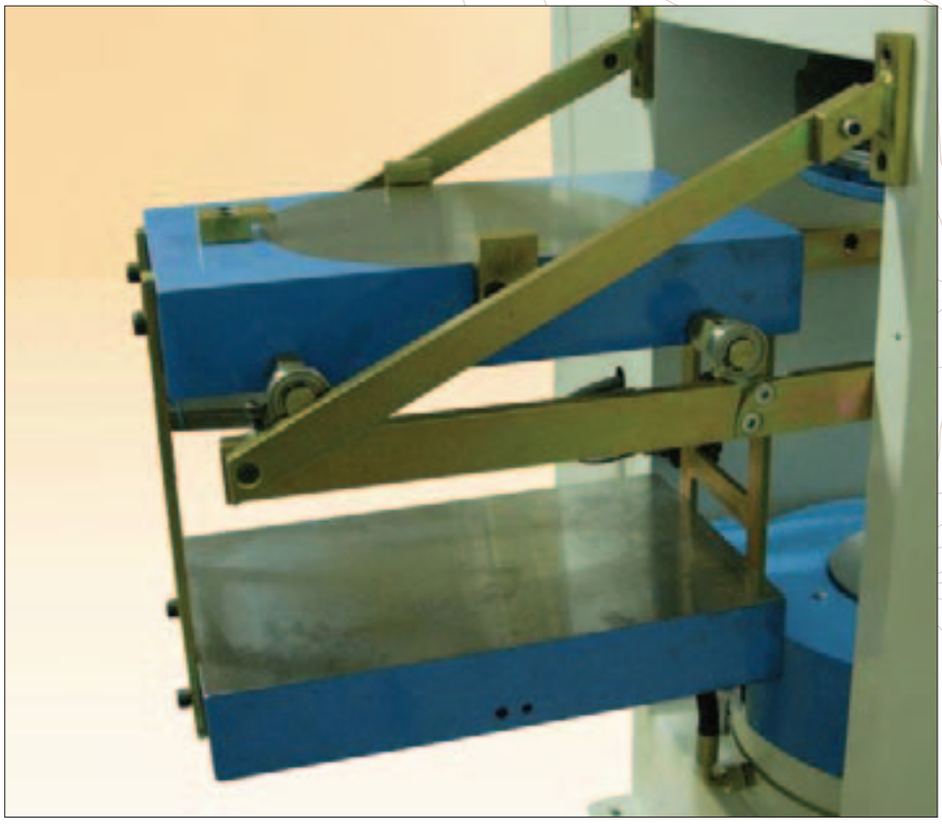
CN 0215
Block Test Platens

Block Test Platens Sliding Rail Assembly

Standards: EN 772-1, BS 6073-1

The Block Test Platens Sliding Rail Assembly 510mmx310mmx50mm allows the platens to be easily installed without removing the existing circular platens.

CM 0216
Block Test Platens Sliding Rail Assembly



Splitting Tensile Devise and Compressometer

Standards: EN 1338, EN 12390-6, ASTM C 496

The Splitting Tensile Devise for testing samples 320 mm long x 200mm wide and 40 mm to 130 mm thick. Specialy designed Splitting Jig that is used for Splitting Concrete Blocks, Cylindrical Speciments and Concrete Cubes of different sizes.

The Cylinder Splitting Jig for testing cylinders of 150 x 150 mm and 150 x 300 mm (diameter x length).

CM 0217
Block Splitting Jig

CM 0218
Cylinder Splitting Jig
CM 0219
Cubes Splitting Jig
CM 0220
Compressometer

Flexural Test Machine

Standards: EN 12390-5,6, 1338, 1340, ASTM C78, C293, C496

The Flexural Testing Machine range of 100 kN and 200 kN capacity have been designed for reliable and consistent testing of concrete beams, transverse test on kerbs and flagstones, indirect tensile tests on concrete and interlocking pavers.

The Flexural Machines feature the complete automatic test cycle with a closed loop digital readout.

Once the specimen parameter have been introduced, it is sufficient to press the START button to complete the test.

The Flexural Frame can be connected to any Geotechnical compression machine as a second frame.

CN 0221
Flexural Testing Machine, 100 kN capacity

CN 0222
Flexural Testing Machine, 200 kN capacity

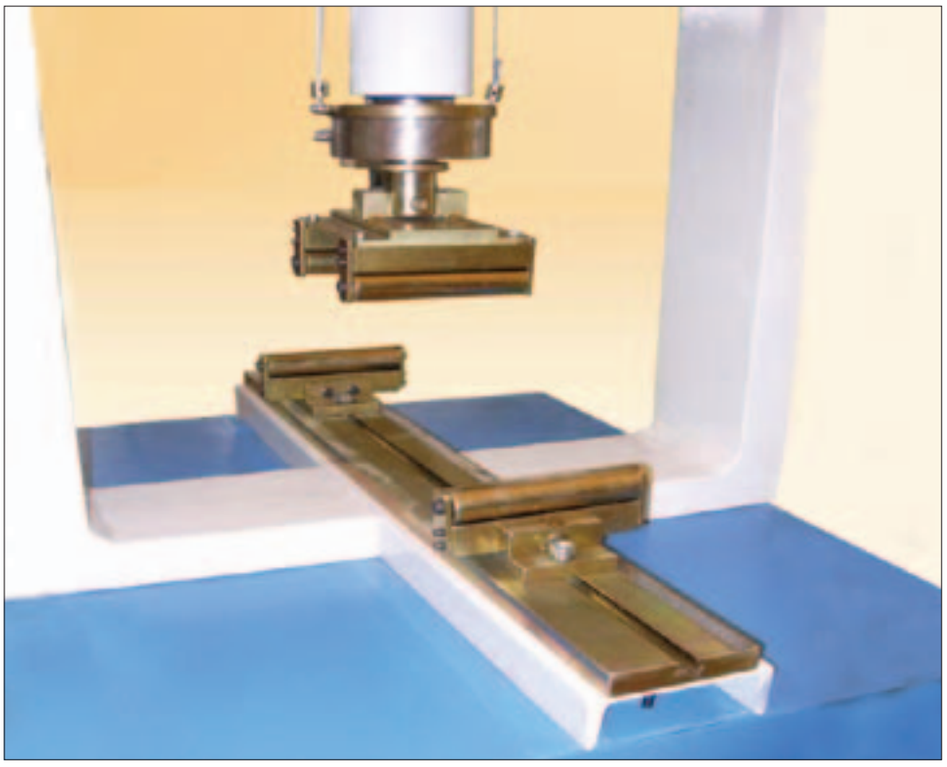
Comprises:

The Flexural machines consist of their main part frame, power pack and data acquisition & control system.

Each part has been designed to manufacture machines with a high degree of mechanical stability and complies with the suitable standard.

Flexural Test Machine

Standards: EN 12390-5,6, 1338, 1340, ASTM C78, C293, C496



The Flexural Test assembly on Concrete Beams is used for 3 or 4 point flexural tests on 100 or 150 mm concrete beams.
The distance of the lower bearers can be adjusted between 100mm and 800mm.
The distance between upper bearers can be set to 100mm or 150 mm.
During the 3 point Flexural testing one of the bearers can be removed and the other placed in the center.
The bearer dimensions are 40mm diameter x 160 mm length.

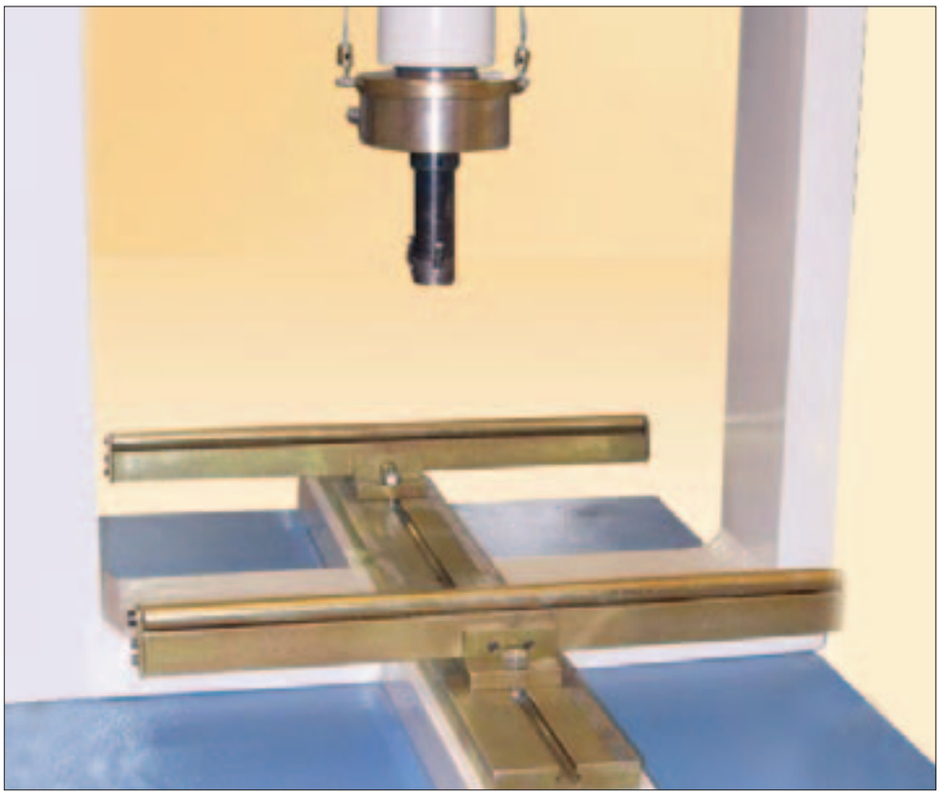
CN 0225
Bearers for concerete beams of 100x100x400-500 mm, 150x150x600-750 mm. Consist of two upper rollers and two lower rollers of. 40 dia. and 160 mm lenght.Complying to EN 12390-5 and ASTM C78

The Flexural Test assembly for Kerbs and Blocks consists of two lower bearers 20mm diameter x 600mm long and 40 mm diameter upper loading piston with ball seating assembly.

The distance between lower bearers can be adjusted from 100mm to 800mm.

CN 0223
Bearers for flexure test on flagstones and kerbs to EN 1339 and 1340. Consist of two lower roller of 20 mm dia. x 600 mm lenght and upper load point of 40 mm dia with ball seating

CN 0224
Bearers for flexure test on concrete blocks Consist of two lower roller and one upper roller of 20 mm dia. x 600 mm lenght

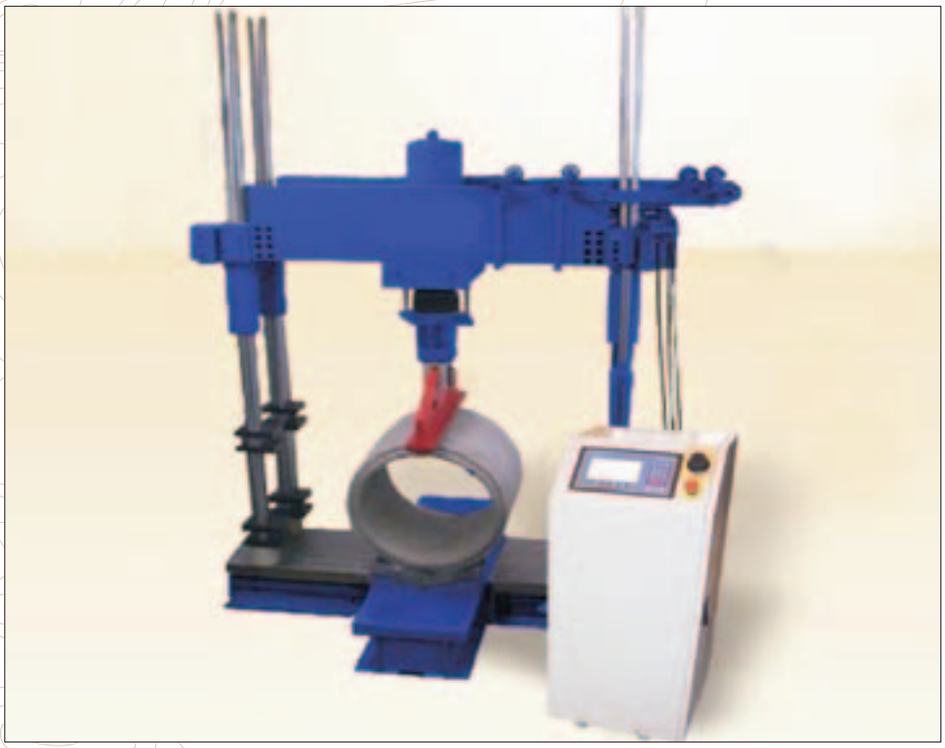


Pipe Testing Machine

Standards: EN 12390-5,6, 1338, 1340, ASTM C78, C293, C496

The Automatic Pipe Test Machine is a 1000KN static application for tensile, compression and bending tests of concrete pipes.
The machine can test pipes both verticaly and horizontaly each according to the installation and accessories used.
It can test large building pipes, joists, plates,sections of various shapes and sizes.

CN 0226
Automatic Pipe Test Machine



Compression and Tension Testing Machine

Standards: BS 1610, ASTM C-39, E4 AASHTO T-22, ASTM C78, C293, C496

The Compression and Tension Automatic Testing Machine has a range of 500 kN tension and 1000 kN compression capacity.
It is designed to meet the need for reliable and consistent testing of steel rebars and concrete samples for use both in the field and laboratory.

The machine consists of a very rigid frame with double-acting cylinder assembly to perform tension tests on steel rebars up to 22 mm dia., flat specimens up to 15mm thick and 50mm wide, compression tests on concrete cubes up to 150 mm and on cylinders up to 160x320 mm.
Its Heavy Duty, high degree of accuracy and low cost make this machine ideal for site testing and educational purposes.

CN 0227
Compression and Tension Testing Machine

Rapid Chloride Permeability

Standards: ASTM C1202, AASHTO T-277

It is often necessary to evaluate chloride permeability characteristics of concrete in bridges and other structures.

Now the electronic technology is available to evaluate slices of cores taken from such sources using a 6-hr. laboratory procedure.

By testing slices from laboratory cylinders, the method is also suitable for evaluation of materials and/or additives for mix design of HPC or other concretes.

Current flow with time is measured while a 4" (102mm) diameter, 2" (51mm) thick specimen slice is subjected to a regulated 60V DC potential across ends. The negative end is exposed to 3% sodium chloride solution, and the positive end to 0.3N sodium hydroxide solution. The Rapid Chloride Permeability test Instrument automates the integration of current relative to time to determine coulombs as a measure of chloride permeability.

Models are available to test four, or eight specimens simultaneously. Test voltage, test time, current for each specimen and coulombs for each specimen are continuously displayed. Printouts of the above data are automatically activated every 30 minutes or at a different user selectable rate. The printout can also be manually activated at any time by switch and are directed to the internal printer. Tests are automatically terminated at 360 minutes. Current range is 0-1 amp DC per core.

The Rapid Chloride Permeability Units have a wide range voltage supply capability of 30 to 60 volts DC. Instrument cabinets measure 19x17x7" (432x483x178mm), WxHxD.
Order the Test Cells separately, minimum of 4 needed. Vacuum Apparatus, required for either systems, includes vacuum pump, electronic vacuum gauge, water trap, desiccators, stand, clamps, filter paper, and vacuum hose.

CM 0228
Rapid Chloride Permeability Apparatus complete set 4 cell model
CM 0229
Rapid Chloride Permeability Apparatus complete set 8 cell model

Accessories:
CM 0230
Chloride Permeability Vacuum complete set
CM 0231
Rapid Chloride Permeability Test Cell, Pair