## **Compressive Strength Testing Equipment**

Compressive Strength Testing Equipment to test cement, brick and concrete is offered by us. The range we offer includes Manually (Hand) Operated, Semi Automatic Compression Testing Equipment, Electrically Cum Manually Operated equipment and more. These strength testing equipment are extremely handy and are easy to use for testing cement, concrete and mortar cubes. We lay utmost importance on equipment design and construct with emphasis on ease of operation. As present day buyers expect more power, speed and highest level of accuracy in material testing system, we continue to offer research based Compressive Strength Testing Equipment of international standard, at affordable prices.

# **Compression Testing Machine (Manually)**

(2 Pillar Model): Compression Testing Equipment Manually (Hand) Operated fitted with single load gauge. The loads are measured on Bourdon tube type load gauges which are calibrated against certified proving rings. The load gauges are fitted with a maximum load pointer.



SL-CC-001

Model	SL-CC-001	SL-CC-002	SL-CC-003	SL-CC-004	SL-CC-005
Capacity (in KN)	250 KN	500 KN	1000 KN	1500 KN	2000 KN
Pressure Gauge (In KN)	250 KN	500 KN	1000 KN	1500 KN	2000 KN
Least Count (In KN)	1 KN	2 KN	5 KN	5 KN	10 KN
Pressure Gauge Diameter (mm)	200	200	200	200	200
Vertical Daylight (mm)	310 Adj	310 Adj	310 Adj	310 Adj	410 Adj
Horizontal Clearance(mm)	210	210	260	280	330
Platen Diameter(mm)	200	200	220	250	300
Ram Diameter (mm)	83	117	165	181	234
Ram Travel (mm)	50	50	50	50	50
Specimen Size (Can be Te	ested)				
Cube	50mm 70.6mm	50mm 70.6mm 100mm	100mm 150mm	100mm 150mm	100mm 150mm
Capacity (in KN)			100 x 200 150 x 300	100 x 200 150 x 300	100 x 200 150 x 300

## **Compression Testing Machine (Manually)**

Model	SL-CC-006	SL-CC-007
Capacity (In KN)	1000 KN	1000 KN
Pressure Gauge (In KN)	1000 KN	1000 KN
Least Count (In KN)	5 KN	5 KN
Pressure Gauge Diameter (mm)	150	200
Vertical Daylight (mm)	310 (Adi)	310
Horizontal Clearance (mm)	260	240
Platen Size (mm)	240 x 165	220
Ram Diameter (mm)	165	165
Ram Travel (mm)	50	50
Type of Loading Unit	Channel Model	Four Pillar (Portable) Model
Specimen Size (Can be Test	ed)	
Cube	100mm x 150mm	100mm x 150mm
Cylindrical	100mm x 200mm 150mm x 300mm	100mm x 200mm 150mm x 300mm
Brick	100 x 100 x225 mm	

For concrete compressive strength testing we offer highly sophisticated testing machines duly made by our engineers and technicians keeping in mind the overall usages. Our concrete compressive strength testing machines includes concrete strength testing moulds like Cube Moulds, Beam Moulds, Cylindrical Moulds along with Flexural Strength Testing Machine that are equipped with

Four standard sizes of cube moulds are offered and supplied

Cube Mould SL-CC-008

complete with base plate.

the latest designs and operating principle.



SL-CC-007



Model SL-CC-008	Description
A. Cube Mould	Mortar Cube Mould 50 x 50 x 50mm with loose base plate. Made of Mild Steel.
B. Cube Mould	Mortar Cube Mould 50 x 50 x 50mm with base plate. Made of Cast Iron
C. Cube Mould	Mortar Cube Mould 70.6 x 70.6 x 70.6mm with loose base plate. Made of Mild Steel
D. Cube Mould	Mortar Cube Mould 70.6 x 70.6 x 70.6mm with base plate. Made of Cast Iron
E. Cube Mould	Concrete Cube Mould 100 x 100mm with base plate. Made of Cast Iron
F. Cube Mould	Concrete Cube Mould 150 x 150 x 150mm with base plate. Made of Cast Iron
G. Cube Mould	Concrete Cube Mould 150 x 150 x 150mm with base plate. Made of Cast Iron Accuracy Equivalent to ISI Marked

# Semi Automatic Compression Testing Machine (Electrically Cum Manually Operated (2 Pillar Model)

Compression Testing Equipment Electrically cum Manually (Hand) Operated. The loads are measured on Bourdon tube type load gauges which are calibrated against certified proving rings. The load gauges are fitted with a maximum load pointer. In the Electrically Operated Pumping Units, load gauges are fitted with micro switches to switch-off the motor when the load approaches the maximum capacity of the gauge, avoiding any over loading. Relays are incorporated so that the motor does not restart on its own after a power breakdown. The electrically operated pumping units are provided with a control knob to adjust the pace rate which can be effectively controlled by an experienced operator during the course of testing, by observing the progress of the load gauge reading. The electrically operated pumping units are also fitted with hand operated pump.



SL-CC-013

# A) Compression Testing Machine Electrically cum Manually (Hand) Operated fitted with single load gauge:

Model	SL-CC-009	SL-CC-010	SL-CC-011	SL-CC-012	SL-CC-013	SL-CC-014
Capacity (In KN)	250 KN	500 KN	1000KN	1500KN	2000KN	3000KN
Pressure Gauge (In KN)	250 KN	500 KN	1000KN	1500KN	2000KN	3000KN
Least Count (In KN)	1 KN	2 KN	5 KN	5 KN	10 KN	15 KN
Pressure Gauge Diameter(mm)	200	200	200	200	200	200
Vertical Daylight (mm)	310 (Adj)	310 (Adj)	310 (Adj)	310 (Adj)	310 (Adj)	310 (Adj)
Horizontal Clearance(mm)	210	210	260	280	330	380
Platen Diameter (mm)	200	200	220	250	300	300
Ram Diameter (mm)	83	117	165	181	234	234
Ram Travel (mm)	50	50	50	50	50	75
Motor H.P	0.5	0.5	1	1	1	2
Motor Voltage	220V, 1Ph 50Hz	220V, 1Ph 50Hz	440V, 3Ph 50Hz	440V, 3Ph 50Hz	440V, 3Ph 50Hz	440V, 3Ph 50Hz
Specimen Size (Can be Tes	sted):					
Cube	50mm, 70.6mm	50mm, 70.6mm, 100 mm	100mm, 150mm	100mm 150mm	100mm 150mm	100mm 150mm
Cylindrical			100 x 200 150 x 300			

# B) Compression Testing Machine Electrically cum Manually (Hand) Operated fitted with Two/Three load gauge:

Model	SL-CC-015	SL-CC-016	SL-CC-0	)17	SL-CC-018
Capacity (In KN)	1000KN	1500KN	2000k	N	3000KN
Pressure Gauge (In KN)	1000KN 250KN	1500KN 500KN	2000k 500K	(N N	2000KN 500KN
Least Count (In KN)	5KN, 1KN	5KN, 2KN	10KN 2KN	I,	15KN, 5KN
Pressure Gauge Diameter (mm)					
Model		SL-CC-	019		SL-CC-020
Capacity (In KN)		1000	KN		1500KN
Pressure Gauge (In KN)		1000F 500KN, 2	<n, 250KN</n, 	100	1500KN, 00KN, 500K
Least Count (In KN)		5KN, 2KM	V, 1KN	5K	N, 5KN, 2KN
Pressure Gauge Diamete	er (mm)	200	)		200

## Digital Compression Testing Machines Semi Automatic Digital Compression Testing Machine (Electrically Operated)

(2 Pillar Model): The Digital Compression Testing Machine has been designed to meet the need for a simple, economic and reliable means to test concrete for its compressive strength. The Digital Indicator incorporates a 4-Digits display calibrated in Kilo Newton (KN) and preset to maximum load capacity fitted with micro switches to switch-off the motor when the load approaches the maximum capacity of the gauge, avoiding any over loading. Relays are incorporated so that the motor does not restart on its own after a power breakdown. The electrically operated pumping units are provided with a control knob to adjust the pace rate which can be effectively controlled by an experienced operator during the course of testing, by observing the progress of the Digital Indicator readings.

SL-CC-023

250 KN

250 KN

1 KN

500 KN

1 KN

1000 KN

1 KN

Model

Capacity (In KN)

Digital Indicator (In KN)

Least Count (In KN)



1500 KN

1 KN

2000 KN

1 KN

3000 KN

1 KN

# Semi Automatic Compression Testing Equipment (Electrically Cum Manually Operated (2 Pillar Model)

Compression Testing Equipment Electrically cum Manually (Hand) Operated. The loads are measured on Bourdon tube type load gauges which are calibrated against certified proving rings. The load gauges are fitted with a maximum load pointer. In the Electrically Operated Pumping Units, load gauges are fitted with micro switches to switch-off the motor when the load approaches the maximum capacity of the gauge, avoiding any over loading. Relays are incorporated so that the motor does not restart on its own after a power breakdown. The electrically operated pumping units are provided with a control knob to adjust the pace rate which can be effectively controlled by an experienced operator during the course of testing, by observing the progress of the load gauge reading. The electrically operated pumping units are also fitted with hand operated pump.



SL-CC-033

Model	SL-CC-029	SL-CC-030	SL-CC-031	SL-CC-032	SL-CC-033	SL-CC-034
Capacity (In KN)	250KN	500KN	1000KN	1500KN	2000KN	3000KN
Pressure Gauge (In KN), Digital Indicator (In KN)	250KN, 250KN	500KN, 500KN	1000KN, 1000KN	1500KN, 1500KN	2000KN, 2000KN	3000KN, 3000KN
Least Count (In KN)	1KN, 1KN	2KN, 1KN	5KN, 1KN	5KN, 1KN	10KN, 1KN	10KN, 1KN
Pressure Gauge Diameter (mm)	200	200	200	200	200	200

# Semi Automatic Digital Compression Testing Machine (Electrically Operated - Fabricated Model)

The Digital Compression Testing Machine has been designed to meet the need for a simple, economic and reliable means to test concrete for its compressive strength. The Digital Indicator incorporates a 4-Digits display calibrated in Kilo Newton (KN) and preset to maximum load capacity fitted with micro switches to switch-off the motor when the load approaches the maximum capacity of the gauge, avoiding any over loading. Relays are incorporated so that the motor does not restart on its own after a power breakdown. The electrically operated pumping units are provided with a control knob to adjust the pace rate which can be effectively controlled by an experienced operator during the course of testing, by observing the progress of the Digital Indicator readings.



SL-CC-037

# CEMENT & CONCRETE

Model	SL-CC-035	SL-CC-036	SL-CC-037	SL-CC-038
Capacity (In KN)	1200KN	1500KN	2000KN	3000KN
Digital Indicator (In KN)	1200KN	1500KN	2000KN	3000KN
Least Count (In KN)	1KN	1KN	1KN	1KN
Vertical Daylight mm	310 (Adj)	310 (Adj)	410 (Adj)	410 (Adj)
Horizontal Clearance(mm)	230	260	310	335
Platen Diameter (mm)	220	250	300	300
Ram Diameter (mm)	165	181	234	234
Ram Travel (mm)	50	50	75	75
Motor H.P	1	1	1	2
Notor Voltage	440V, 3Ph, 50Hz	440V, 3Ph, 50Hz	440V, 3Ph, 50Hz	440V, 3Ph, 50Hz
Specimen Size (Can be Tested):				
Cube	100mm, 150mm	100mm, 150mm	100mm, 150mm	100mm, 150mm
Cylindrical	100mm x 200mm 150mm x 300mm			

# Semi Automatic Digital Compression Testing Machine ( Electrically cum Manually Operated - Fabricated Model with Load Gauge )

Compression Testing Machine has been designed to meet the need for a simple, economic and reliable means to test concrete for its compressive strength. The Load is displayed simultaneously on the Digital Load Indicator which incorporates a 4-Digits display calibrated in Kilo Newton (KN), preset to maximum load capacity and also on Bourdon tube type Load Gauge with a maximum load pointer. The Indicators are fitted with micro switches to switch-off the motor when the load approaches the maximum capacity of the gauge, avoiding any over loading. Relays are incorporated so that the motor does not restart on its own after a power breakdown. The electrically operated pumping units are provided with a control knob to adjust the pace rate which can be effectively controlled by an experienced operator during the course of testing, by observing the progress of the Digital Indicator readings or the Load Gauge readings. The electrically operated pumping units are also fitted with hand operated pump.



Model	SL-CC-039	SL-CC-040	SL-CC-041	SL-CC-042
Capacity (In KN)	1200KN	1500KN	2000KN	3000KN
Pressure Gauge (In KN), Digital Indicator (In KN)	1200KN, 1200KN	1500KN, 1500KN	2000KN, 2000KN	3.00KN, 3000KN
Least Count (In KN)	5KN, 1KN	5KN, 1KN	10KN, 1KN	15KN, 1KN
Pressure Gauge Diameter (mm)	200	200	200	200

## **Flexural Strength Testing Machine**

The Flexure Strength Testing Machines are designed to provide maximum rigidity throughout their working range. The load is applied by the upward movement of a hydraulic ram. The jack can be raised or lowered for testing different size beams. The load is indicated on a calibrated Bourdon tube type Pressure Gauge of range: 0-100kN x 0.5kN (0-10,000 kgf x 50 Kgf). The load gauge is calibrated against NPL/ NCCBM certified proving ring.

Model	SL-CC-043	SL-CC-044	SL-CC-045
Capacity (In KN)	100KN	100KN	100KN
Pressure Gauge (In KN)	100KN	100KN	
Least Count (In KN)	1⁄2 KN	1⁄2 KN	0.1 KN
Pressure Gauge Diameter (mm)	200	200	200
Vertical Daylight (mm)	310 (Adj)	310 (Adj)	310 (Adj)
Horizontal Clearance(mm)	210	210	210
Ram Diameter (mm)	83	83	83
Ram Travel (mm)	50	50	50
Motor H.P		0.50	0.50
Motor Voltage	220V, 1Ph, 50H		Ph, 50Hz
Specimen Size (Can be Tested) Beams (cm)	10 x 10 x5015 x 15 x 70		

## Beam Mould SL-CC-046

Two standard sizes of Beam Moulds are offered for casting concrete specimens for flexural strength testing. These beam moulds are made of cast iron and are supplied complete with a base plate.

Model SL-CC-046	Description
A. Beam Mould	Flexure Beam Strength Testing Beam Mould 100 x 100 x 500 with base plate. Made of Cast Iron
B. Beam Mould	Flexure Beam Strength Testing Beam Mould 100 x 100 x 700 with base plate. Made of Cast Iron

## **Cylindrical Mould**

Moulds for testing concrete cylinders for Compressive Strength Testing are offered in two different sizes. These cylindrical moulds are made of Cast Iron and split into two parts longitudinally. These are supplied complete with a base plate and top plate

Model SL-CC-047	Description
A. Cylindrical Mould	Cylindrical Mould 100mm dia. x 200 mm ht. with base plate. Made of Cast Iron
<b>B.</b> Cylindrical Mould	Cylindrical Mould 150mm dia. x 300 mm ht. with base plate. Made of Cast Iron



SL-CC-043



SL-CC-046

SL-CC-047

## **Proving Rings**

Specification: The Proving Rings are made of special steel, carefully forged to provide high and stable accuracy, dependability and repeatability. The dial gauge and anvil are mounted on U-brackets clamped to the ring body by set screws. The indicator has a sensitivity of 0.002mm/ div and the deflection is directly proportional to the applied load. The rings are supplied complete with dial gauge and Works Calibration Chart, individually packed in polished wooden boxes. NPL (India) / NCCBM Calibration Certificates can also be arranged for any proving ring at an additional cost. Separate Pair of Loading Pads are provided to suit each proving ring.



Model	Capacity	
Proving Ring Model SL-CC-048	25kgf to 100kgf (1KN)	
Proving Ring Model SL-CC-049	200kgf (2KN)	
Proving Ring Model SL-CC-050	250kgf (2.5KN)	
Proving Ring Model SL-CC-051	1000kgf (10KN)	1
Proving Ring Model SL-CC-052	2000kgf (20KN)	ä
Proving Ring Model SL-CC-053	2500kgf (25KN)	9
Proving Ring Model SL-CC-054	3000kgf (30KN)	8
Proving Ring Model SL-CC-055	5000kgf (50KN)	8
Proving Ring Model SL-CC-056	100KN (10Tons)	ħ
Proving Ring Model SL-CC-057	200KN (20Tons)	đ
Proving Ring Model SL-CC-058	500KN (50Tons)	
Proving Ring Model SL-CC-059	1000KN (100Tons)	12
Proving Ring Model SL-CC-060	2000KN (200Tons)	h

## Cement Sampler SL-CC-061

#### IS 7535 1986 ASTM C183 AASHTO T127

This is a brass tube approximately 53 cm long and 2.8 cm I.D. with a wooden handle. Total length approximately 73cm. The tube has the sharp angular edge which conveniently pierces cement bags. An air hole of approximately 3mm dia is drilled on the tube near handle. Total sample collected at one time is 300 cm approximately

## Blaine's Air Permeability Apparatus SL-CC-062

IS 4031, 5516, 1727 & 4828, ASTM C-204 BS 4359-2

The apparatus is used for determining the fineness of cement in terms of specific surface expressed as total surface area in square centimeters per gram of cement. This is a variable flow type are permeability.

**Specification:** The apparatus consists one each of permeability cell 12.5mm I.D. manometer 'U' type mounted on stand with a built in stop cock, perforated disc, plunger rubber stopper, rubber tube 30cm long. Packet of 12 filter paper disc and a bottle of 100ml dibutylphthalate liquid.





## Vicat Needle Apparatus SL-CC-063

IS 4031, 2645, 2542 ( PART-1), 1727, 5513 & 712 BS 12, 146, 915, 1370, 4027, 4246, 4248 AASHTO T 129, E 131.

This instrument is used for determining the normal consistency and setting times of cement and 'A' class limes.

**Specification:** The apparatus consists of a metallic frame bearing a freely movable and with a cap at top, one vicat mould and glass base plate and one set of needles one each initial needle, final needle and consistency plunger.

### Vicat Needle App. with Dashpot SL-CC-064

IS 4031, 2645, 2542 ( PART-1), 1727, 5513 & 712 BS 12, 146, 915, 1370, 4027, 4246, 4248 AASHTO T 129, E 131.

**Specification:** Same as Vicat Needle Apparatus but in addition is fitted with a dashpot which facilities gentle lowering of the needles.

**Accessories:** Mild steel base plate 5 inches x 5 inches. Fulcrum mould, brass, 70mm i.d. base dia. x 60mm i.d. top dia., 40 mm height.

**Note:**1) Normally set of needles and mould which meet is requirements as per I.S. 5513 are supplied. While ordering please specify the specification code of the instrument required. 2) Vicat needle apparatus for determining consistency of hydraulic cement. Gypsum plaster, lime etc. As per ASTM C 187-58 C 472-62 C 110-58, IS 2542 (Part-1) can also be supplied.

## Gillmore Needle Apparatus SL-CC-065

#### ASTM C 266

This instrument is used for determining the time setting of hydraulic cement.

**Specification:** A base with a Vertical shaft and Two horizontal arms. The lower arms is adjustable for height. 1 no. Initial needle 1/12-inch dia. ¼ lb. Wt. 1 no. Final needle 1/24 inch dia. ¼ lb. Wt. 1 no. Glass base plate. Complete as above.

### Kelley Ball Penetration Apparatus sL-cc-066 ASTM C-360

The apparatus is used to determine the work ability of Portland cement & concrete. The Kelly ball test is considered to be simple and much faster than the slump test. Twice the Kelly ball reading approximately equals the slump. It consists of a cylinder with a ball shaped bottom and handle, together weighing 15 kg. A strip frame, guides the handle and serves as a reference for measuring the depth of penetration. The handle is graduated in mm. Penetration can be recorded to the nearest 0.5mm.

## Kelley Ball Penetration Apparatus SL-CC-067

Heavy-duty, cast-aluminum design with quick release latches. Provides convenience for the operator and protection to Kelly ball when transporting to and from the job site.





SL-CC-065



SL-CC-066

# Flow Table SL-CC-068

IS : 6932 ( PART VIII) ASTM C 230,BS 4551:1

This is used for determining the work ability of building limes.

**Specification:** The flow table consists of a 30 cm dia. polish steel plate with 3 engraved annular circles 7, 11 and 19cm dia. The table top is arranged for a free fall of 12.5mm by a cam action. Supplied complete with one brass conical mould, 65mm i.d. at base and 40mm i.d. at top, height of the mould 90mm.

## Flow Table SL-CC-069

IS 1199-1959, ASTM C-124, AASHTO-T-120.

It is used for determining the flow of cement concrete.

**Specification:** Consists of a steel table top 76.2cm (30 inch. Dia) Finely machined. The integral cast ribs are designed for support and strength. The stand is fabricated out of cast iron and is of study construction. Holes for mounting in foundations are drilled in the base plate. The ground and hardened steel cam is designed to fit and drop the table by 12.5mm. The hand wheel makes it simple to operate the table. Supplied with one conical mould with two handles, 12cm height, having17cm. Inside Dia. at the top and 25cm inner dia. at the base. Complete with a tamping rod 16mm dia x 600mm long one end rounded.

## Flow Table (Motorized) SL-CC-070

#### IS 1199, ASTM C-124, AASHTO-T-120

Same as above but electrically operated to raise and drop the table top, approx. 15 times in 15 seconds, Suitable for operation on 230 Volts, 50 cycles, A.C. supply.

## Flow Table: IS 5512 & BS 4551-1 SL-CC-071

This used for measuring the consistency of pozzolana and also cement mortar and hydrated lime.

**Specification :** It consists of a machined brass table top 250+/-2.5mm dia. Mounted on a rigid stand. The table top is reinforced with equally disposed ribs and allowed to conical brass mould 100mm i.d. top dia. and 50mm high.

**Accessories :** Mild steel plate 25mm thick and 25cm square for fixing to the underside of the base. Same as ZI 1008 but electrically operated to raise and drop the table top, approx. 15 times in 15 seconds, Suitable for operation on 230 Volts, 50 cycles, A.C. supply.

## Flow Table (Motorized) SL-CC-072

### IS 5512 & BS 4551-1

Same as above but electrically operated. Fitted with a motor, connected to the cam shaft through a reduction gear to give approximately 100 R.P.M. Suitable for operation in Single Phase 230 V A.C. 50 Cycles, Supply.



SL-CC-072



### Ve Bee Consistometer SL-CC-073

#### IS 1199 & BS EN 12350.

The instrument is used for work ability as well as consistency of fresh concrete. A slump Cone and a graduated rod supplied with the instrument helps the operator to find out slump values and vibration table with container and acrylic disc is used to find out work ability of concrete expressed in Vee Bee degrees, which is defined as the time in seconds to complete required vibrating at which the fresh concrete flows out sufficiently to come in contract of the entire face of acrylic disc.

**Specification :** The equipment consists of : A vibrating table size 380mm long and 260mm wide, resting upon elastic support at a height of about 305mm above the floor, complete with Start/Stop switch, cord and plug. A holder is fixed to the base in to which a swivel arm is telescoped with funnel and guide swivel arm is also detachable from the vibrating table. The divisions of scale on the rod record the slump of the concrete in millimeters. Supplied complete with a sheet metal container with lifting handles which can easily be fixed to the vibrating table. A slump cone open at both ends with lifting handles and a tamping rod of size 16mm dia and 600mm long rounded at both ends.

### Slump Test Apparatus SL-CC-074

As Per IS 1199, IS 7320

**Specification :** The slump cone in these slump test apparatus is filled with freshly mixed concrete and tamped with a tamping rod in three or four layers. The top of the concrete is leveled off with the top of the slump cone, the cone is lifted vertically up and the slump of the sample is immediately measured. The complete slump test apparatus set comprises of a Steel Octagon Base Plate (8 faces) with carrying handle, Graduated Tamping Rod 16mm dia. x 600mm long with one bullet end, slump cone having base 200mm, height 300mm fitted with handle.

## Compaction Factor Apparatus SL-CC-075

#### IS 1199, 5515. & BS 1881-103

The apparatus is used for determining the work ability of fresh concrete, provided the maximum size of the aggregate does not exceed 38mm. The test is particularly useful for concrete mixes of very low work ability where true slump values are not reliable.

**Specifications:** It consists of two rigid conical hoppers and a cylinder mounted on a rigid metal frame. The lower openings of the hoppers are fitted with hinged trapdoors having quich release catches. A circular metal plate is provided to cover the top of the cylinder. Supplied complete with one plasterer's trowel and one tamping rod, 16mm diax600 mm long, one end rounded.







SL-CC-074



# Lab. Concrete Mixer (Manually) sL-CC-076

Our hand operated concrete mixers are easy to operate. Durable in quality and requiring low maintenance cost, our machines are widely used in construction of buildings, houses, road and other construction purposes. Highly resistant to corrosion and better performing, these machines have been widely demanded by our clients across the globe.

## Lab. Concrete Mixer (Motorized) SL-CC-077

**Specification:** The Laboratory Concrete Mixer is used for preparing Mix Design of Concrete. It consists of a steel vessel of 55/ 110 Litres capacity, mounted on a frame. The vessel is rotated at 20-22 RPM with the help of a motor and a pulley arrangement. The vessel of laboratory concrete mixer can be titled to any angle by a hand wheel and counter weight. This facilitates mixing and discharge. Blades are provided inside the vessel to mix the material thoroughly. The large pulley wheel facilitates manual rotation of the drum during power failure. The drum, pulley wheel, and motor, etc, are mounted on a steel frame in these laboratory concrete mixer. The concrete mixer is fitted with ½ HP motor. Suitable for Operation on 220V, Single Phase, 50Hz, AC Supply

### Cement Mortar Mixer SL-CC-078

#### IS:4031,1727

It is used for mixing cement pastes, mortars and pozzolanas.

**Specification:** The apparatus consists of an epicyclic type stainless steel paddle imparting both planetary and revolving motion, by means of gears. It has two speeds of 140 + 5 r.p.m. and 285 + 10 r.p.m. with planetary motions of approximately 62 r.p.m. + 5 r.p.m. and 125 r.p.m.+/-10 r.p.m. respectively. The stand of the mixer has arrangement to raise or lower the bowl. Complete with stainless steel bowl of about six litres capacity. Suitable for operation on 230 volts, 50 cycles, single phase, A.C. supply.

Cone Penetrometer for Mortar sL-cc-079 IS 2250-1965

For determining the consistency of masonry mortar Consists of a movable bearing rod to which a cone 145mm. Long and 75mm dia at a base is fixed. The bearing rod passes freely through a bracket which is provided with release mechanism. A dial graduated in mm with rack and pinion is provided for measuring the penetration. Complete with a conical container 150mm id x 180mm deep and a platform.

## Gang Mould (Three Gang) sL-CC-080

#### BS 1881-108

Moulding of 40mm, 50mm, 100mm specimens. Manufactured from Mild Steel / Cast Iron / Bronze and supplied complete with base plate.











## LE Chatelier Mould SL-CC-081

IS 269, 712, 5514, 1727, 2645, 6932 (PART IX) BS 6463

It is used for the determination of soundness by expansion method of ordinary and rapid hardening Portland cement, low heat Portland cement and class 'A' Limes.

**Specification :** It consists of a small split cylinder forming a mould. On either side of the split cylinder. Two parallel indicating arms with pointed ends are attached. Supplied complete with two glass plates and a lead weight.

## LE Chatelier Flask SL-CC-082

#### IS 4031 1968, ASTM C 188

Used for finding specific gravity of hydraulic cement. Made from Borosilicate glass. The flask is 243mm in total height, having a bulb of 90mm dia of 250ml approximate capacity. The long neck of the flask has at top a funnel of 50mm dia in that fits a ground glass stopper. The neck has over-all 11mm i.d. upper portion is graduated from 18ml to 24ml with 1 ml graduation. Just at the bottom of the neck 1 ml capacity is marked in between there is 17 ml capacity bulb.

## Shrinkage Bar Mould (One Gang) SL-CC-083

IS 4031, 10086, ASTM C 227. & BS 1881.

The mould is used for casting specimens of cement & aggregate combinations for measuring the potential expansive alkali reactivity. **Specification :** The mould, which has 25 mm x 25 mm x 250 mm, effective gauge length is made of mild steel and has accurately machined faces. The parts of the moulds are tight fitting and firmly held together when assembled. Supplied complete with base plate and four stainless steel smooth reference pins.

### Shrinkage Bar Mould (Two Gang) sL-cc-084

Same as above but with Two compartments assembled on angle base plate.

## Shrinkage Bar Mould (Three Gang) SL-CC-085

Same as above but Three compartments.

## Shrinkage Bar Mould (Four Gang) SL-CC-086

Same as above but having Four Compartments.

Note: Bar mould as above but in gun metal as well as with knurled and threaded reference pins are also available.

## Volume Change Apparatus SL-CC-087

#### ASTM C 490, IS 4031 & BS 1881

The instrument is used for determining the volume change of cement concrete. Specification : The apparatus comprises of one mould effective gauge length complete with base plate, four reference pins, one length comparator frame, one stainless reference bar with insulated grip, and one dial gauge, 0.002mm x 10mm



SL-CC-087

# Length Comparator SL-CC-088

IS 1199-1959, IS 4031 1968 BS 1881, ASTM C 151, C490

It is used to measure the dying shrinkage of concrete autoclave expansion of Portland cement and potential expansive reactivity of cement aggregate combinations in mortar bars during storage, on self drying. **Specification :** The instrument consists of a channeled base over which two vertical pillars are fixed. An adjustable cross plate is at the top. A dial gauge, reading to .002mm x 12mm. Can be located upon a 6.5mm. dia ball or other reference point cemented in the specimen. On the base there is similar recessed seating in which can be placed a second ball or reference point in the specimen. Complete with a stainless steel standardization bar with insulated grip and with 6.5mm dia. Balls mounted in the ends. The unit can be supplied with an Electronic Dial Gauge at extra cost if indicated at the time of placing the order.

## Laboratory Cement Autoclave SL-CC-089

IS 4031-1968, IS 1624-1960 & ASTM C 151, C 141

The autoclave is suitable for conducting accelerated soundness tests on cements or the autoclave expansion test requiring constant steam pressure with the correspondent constant pressure. It consists of a stainless steel cylinder with a welded heat insulated metal housing attractively finished. The attached control unit encloses a sensitive pressure regulator and pressure gauge. Power switches and pilot lights for controlling the electric heating units. Inside chamber dimensions 10.5 cm diameter x 40.5cm height suitable for operation on 230 V, 50 Hz Single Phase A. C. supply. Supplied complete with test bar holder, special rack to hold specimens above water level in the autoclave and in a vertical position to expose them in the same manner. A Digital PID Controller is fitted for controlling the desired temperature.

Note : Ordinary laboratory cement autoclave with mild steel chambers are also available.

## Heat of Hydration Apparatus SL-CC-090

#### IS 11262-1985, ASTM C 186

This equipment is required to determine the heat of hydration of cement as expressed in calories per gram. The equipment comprises of the following :1) A wide mounted double walled vacuum flask with a stop cock 38 mm & a insulating container for the flask 2) A Beckman thermometer (Range 5° C )held tightly by the cock stopper in such a way as to avoid accidental contact with the stirrer blade & the reading lens. To facilitate the easy removal the cock stopper is in two halves.3) A constant speed stirrer (double bladed propeller type)extended to within 38 mm from the bottom of the flask.4) A funnel (Gooch type)with a stem of 6 mm inner dia & a body approx 25 mm long and 25 mm dia is fitted to the cock stopper for introducing the sample All the above to combine to form the calorimeter for the determination of heat of hydration of cement. Suitable To Operate on 230 V A.C. 50 Hz



## Vibrating Table SL-CC-091

#### Specification:

Proper compaction of cement and concrete while casting specimens for compressive or flexural strength testing essential to achieve a better and more consistent mixture. The cement and concrete vibrating table top has stops along its edges to prevent moulds from sliding off the table during operation. The maximum load capacity is 140 kg. The concrete vibrating tables are offered in 3 different table top sizes:



SL-CC-091

Model	Table Top Size (mm)	Motor Electrical Supply	
SL-CC-091.A	1000mm x 1000 mm	1 HP	440V, Three Phase, 50 Hz AC Supply
SL-CC-091.B	600 mm x 600 mm	1 HP	440V, Three Phase, 50 Hz AC Supply
SL-CC-091.C	500 mm x 500 mm	1 HP	440V, Three Phase, 50 Hz AC Supply

## Mortar Cube Vibrating Machine SL-CC-092

Quality Standard : As Per IS 4031, IS 10080

Vibrating Machine is used for vibrating the mix in moulds at a frequency of 12,000  $\pm$  400 cycles per minute. The vibrator is mounted over 4 coiled springs and the vibrations are developed by means of a revolving eccentric shaft. The centre of gravity of the vibrator, including the cube mould, is either at the centre of eccentric shaft or within 25mm below it. The simple design of the machine facilitates easy assembly and dismantling of the cube moulds.



Model	Туре	Motor Electrical Supply	
SL-CC-092.A	Analogue	1⁄2 HP 2880 RPM	220V, Single Phase, 50Hz AC Supply
SL-CC-092.B	Digital	1⁄2 HP 2880 RPM	220V, Single Phase, 50Hz AC Supply

## Jolting Apparatus SL-CC-093

#### IS 1727 1967, IS 4031 1968, ASTM C 394, C 64

For making standard rectangular specimens of 40 x 40 x 160mm. of Portland and pozzolana cement mortar for determining the transverse strength. Specification: The jolting apparatus consists of a rectangular table rigidly connected by two support arms to a spindle at a horizontal distance of 800 mm from the centre of the table. There is a projecting lug with a plane face on the upper face of the table beneath which is a stop with a rounded upper surface. The table can be raised and allowed to fall freely on the stop by a cam which is connected to a motor and gearbox through a V-belt an pulleys. The cam rotates at a rate of 60 Rev/Min. A stroke counter fitted with micro-switch is provided which stops the machine after 60 Jolts. Locating pins are provided for mounting the mould compartments on the table. The mould surmounted by the hopper can be clamped rigidly to the table. Supplied complete with mould and hopper. Suitable for operation on 230 Volts, Single Phase, A.C. Supply. A Digital Preset Counter can be supplied at an extra cost. Accessories: Steel mould with base plate having three compartments each having 40mm x 40mm x 160mm.



# Tensile Strength Tester (Manually) sL-CC-094

#### IS: 269 1950, BS 12

Using for making tensile strength test on cement briquettes.

Specification : A loading Machine, double lever type, with steel scale marked from 0-500 Newtons in 10 Newton division. Maximum loading capacity 5 kN. Automatic Loading system using Lead Shot. Lead shot 15 kg supplied with the machine. Set of weights for weighing lead shot comprising one each for weighing upto 0.5 kN, 1 kN, 1.5 kN & 2.0 kN. One standard Briquette Mould with Base Plate also Supplied.

## Tensile Strength Tester (Elec.) sL-cc-095 IS 269 1958, BS 12

The instrument employs a friction free, accurate, double lever system, the load being applied by means of sliding weight on the top lever. The capacity of the units is 900 kgs. After fixing the briquette in the jaws, the machine is switched on. The sliding weight slides over the calibrated lever thus applying tension to the specimen. A micro switch fitted instantly stop the machine on failure of the briquette and on failure the tensile load is accurately 0.5kg. By means of a marker provided on the sliding weight to its zero position. Suitable for operation on 230 V, 50 cycles, Single Phase, A.C. supply. Complete with one brass briquette mould and one base plate.

# Briquette Mould (Single/Three) SL-CC-096

### IS 269 1958, Bs12.,

For casting of cement briquettes for tensile strength tests. It is a two part split mould made of gun metal. Two thumb screws facilitate easy and quick assembling and dismantling of the mould. The minimum cross section of the briquettes cast is 25.4 mm x 25.4 mm. Supplied complete with a steel base plate.

# Prism Mould Three gang sL-CC-097

IS 1727 1967, IS 4031 1968, ASTM C 394, C 64

(40.1x40x160mm) It is supplied complete with base. All parts are marked with their dentification number for correct assembly. Each mould is individually verified in the dimensional tolerances, hardness, squareness, flatness & roughness.

## Mortar Needle Penetrometer SL-CC-098

#### ASTM: C 403

It is used for finding out the rate of hardening of mortar sieved from concrete spring and a stem graduated from 0-70 kg x 1 kg. Six interchangeable penetration needles of areas 645, 323, 65 32 and 16mm sq. Is provided . The penetration resistance is measured by the force exerted to penetrate the mortar by 25mm and is indicated by a sliding ring on the stem, which is graduated. Needle shanks are marked at every 12.5mm. Complete in a wooden carrying case.



SL-CC-094



🜿 www.labtekindia.com

# Pocket Concrete Penetrometer SL-CC-099

#### ASTM C-403

For fast evaluation of the initial setting of concrete. It can be used on light weight concrete, special roof deck mixes and concrete additives.

**Specification :** Consists of a needle having face area 3/10 sq. cm. and graduated at a distance of 25cm. The needles point is an integral part of barrel which houses a calibrated spring. The spring is confined in a sleeve. The resistance offered by the concrete mortar is shown on the direct reading scale with a marker ring which holds its position when released. 2 Scale range is 0-50kg/cm<sup>2</sup> when the penetration resistance reaches a 2 value of 35kg/cm<sup>2</sup> the concrete is assumed initially set. Supplied complete in carrying case.

## Concrete Test Hammer (Small) SL-CC-100

The concrete test hammer is an instrument which is easy to use, for quick and approximate measurement of the resistance to pressure of manufactured concrete products. The principles on which it works are based on the rebound impact of a hammer on a piston which rests against the surface of the concrete products. The Greater the resistance of the concrete, greater is the rebounded impact. By reading this rebound impact on a scale and relating it to curves on graphs supplied with the instrument, the resistance to compression in MPa or PSI can be found, with 20% of actual.

Specifications : Consists of a barrel in which is housed a hammer mass attached to an impact spring which slides on a guide bar. A plunger is attached to the guide bar which is pressed against the surface to be tested. As the piston is pressed against the surface to be tested, on reaching the compressive strength, the hammer mass is released and rebounds to a certain extent (according to the strength of the surface) which is indicated by a rider on a calibrated scale. A lock button fixed on the body of the hammer locks the rider in place and the rider can be recared to zero position by using the same button. The equivalent compressive strength can be computed from the chart supplied. Each hammer is calibrated against at standard test hammer, and is suitable for specimen of compressive strengths 100 - 700 kg/cm. The instrument, complete with a grinding stone for polishing the test surface, is supplied in carrying case.

## Concrete Test Hammer (Big) SL-CC-101

It is similar to the above but is used for testing concrete with over size aggregates (for which test, cubes promise no reliable results) and for testing concrete roads. Its plunger is wider as such, the amount of concrete reached by the impact is considerbly greater. With this model also the results obtained are within 20% of the actual compressive strength. The instrument is supplied with two handles which can be attached to the body of the concrete test hammer for carrying out the test easily. Complete with grinding stones.



SL-CC-099



SL-CC-100



SL-CC-101

### Flame Photometer SL-CC-102

BS 4550, ASTM C 114-17

1) Extremely useful for medical and laboratory use
 2) Highly Accurate using Micro controller Technology
 3) 3 Point Calibration using curve fitting software
 4) Direct results in PPM and MEO

MICROPROCESSOR BASED FLAME PHOTOMETER is an ideal instrument for the determination of Sodium, Potassium, Calcium and Lithium. It uses the latest Micro-controller technology and advanced engineering techniques so as to give enhanced accuracy and reproducibility. The System has 3 point calibration facility using curve fitting software. It has soft touch membrane keys for ease of operation. The solution is aspirated through an atomiser. Air, sample and the fuel are mixed in the mixing chamber which is then sprayed as a very fine mist into the flame. The color of the flame is changed depending upon the concentration of elements present. Radiations form the flame passes through the sensing system and specific narrow band interference filter which permits only the characteristic radiation to pass to the photo-detector. The output of the photodetector is then processed by the micro-controller and the final results are displayed on the digital display.



SL-CC-102

Range	Serum	Urine	Sensitivity
Na: 0.1 to 100	0.435-435	0.87-870	01.ppm
K: 1 to 100	0.256-256	0.512-512	Accuracy
Ca: 15 to 100	-	-	<u>+</u> 1% up to 40ppm
Li : 0.5 to 100	0.724-144.8	-	Readout
Power	Air Supply :By oil free m	<u>+</u> 2% above 40ppm	
230V <u>+</u> 10% AC, 50Hz	pressure		

## Melting Pot SL-CC-103

Used to melt Capping compound this pot comprises a metal container in a well lagged steel jacket. A thermostatic control and stand by heat switch are fitted. Supplied complete with lift off cover.

Warmer : An electrically heated and thermostatically controlled bath for melting the capping compound. Supplied with cover and handle. Suitable for operation on 230 Volts A.C. Single Phase.

Capping Compound : Used for capping the ends of concrete cylinders to be tested. Available in packs of 5 kg.

Bowl & Ladle : Metallic bowl is used to carry the capping compound and ladle is used to pout molten capping compound in to the groves between specimen and capping plate. Supplied as a set.

**Specification:** Dimensions (Diameter x Depth) Internal 140 x 150mm, External:250 x 165mm, Capacity :2.4 Liters, Rated Power :750 W , Temperatures :40 to 3400C





## Capping Set (Horizontal) SL-CC-104

IS: 516 1959, BS 1881-120, ASTM C31, C 617,

For 15cm dia x 30cm length cylinders

For 100mm dia x 200mm length cylinder specification . 2027 but for use with specimens 100mm dia x 200mm long.

**Specification:** The set comprises of a cylinder capper, a cylinder carrier and a ladle. The cylinder capper consists of a base on which two accurately machined plates are mounted vertically. One plate is firmly fixed and the other one is adjustable horizontally. Two plates are provided with holders for holding the cylinder in position. The holder are split and the bottom half of each holder is fixed firmly and the upper parts of the vertical plates 'V' s are provided. Complete with cylinder carrier and ladle for molten compound.



SL-CC-104

## Capping Set (Vertical) SL-CC-105

#### IS: 516 1959, BS 1881-120

For capping compression cylinder specimens. This apparatus can be used both in the laboratory and in the field. The specimens capped in this apparatus have plane parallel faces.

#### Specification: For cylinders 150mm dia x 300mm long

Consists of a base with an upright. The upright serves as a guide for positioning the capping plate and cylinder. The 19mm thick capping plate is machined accurately. There is a recess in the plate for keeping the molten capping compound and to position cylinder. Complete with cylinder carrier and ladle.

For cylinder 100mm x 200mm long, for cylinders 100mm x 200mm long. For carrying the concrete cylinders in the laboratory and in the field. Double handles make it easy to hold the cylinder during capping operations. Complete with snap clamp and cushioning lining. Capping mould : For capping the concrete cylinders, it consists of an accurately machined plate with a recess for 100mm dia specimen.

## Longitudinal Compressometer SL-CC-106

#### ASTM C 469

It is designed for finding out the deformation and strains on 15cms. Diameter and 30 cms high cement and concrete cylinders when subjected to compressive loads.

**Specification :** Consists of a frame with a bottom ring and a top ring with tightening screws to firmly clamp the compressometer over the cylinder. A dial gauge .002mm x 5mm is mounted on the upper ring and the tie of the dial gauge rests on an anvil. The zero on the dial gauge can be set by adjusting the anvil screw. Supplied in a wooden carrying case.



SL-CC-106

## Lateral Extensometer SL-CC-107

This is for determining the lateral extension of 15cm dia x 30 cm high cement concrete cylinders while testing them under compression.

**Specification :** The unit consists of two movable frames pivoted at one end. The extensometer is fixed to the specimen with the help of tightening screws. The lateral extension is indicated on a dial gauge of 0.002mm x 5mm is mounted on the upper ring and the tip of the dial gauge rests on an anvil. The zero on the dial gauge can be set by adjusting the anvil screw. Supplied in a wooden carrying case.

### Mechanical Strain Gauge SL-CC-108

#### BS 1881-206.

It is used for finding out the linear deformation caused on two reference points fixed on a loading member.

**Specification :** This portable gauge is designed for a gauge length of 20 cm. of the reference pins. The deformation is indicated by a 0.002 x 5mm dial gauge attached to the instrument. Complete with two standard bars for 20 cm gauge length supplied in a wooden case.

Accessories : Reference pins in packet of 100 nos. at an extra cost.

## Air Entrainment Meter SL-CC-109

#### IS 1199 1959 & BS 1881-106

As entrainment of air in limited percentage improves durability of concrete and very low percentages deteriorate it ,measurement of air entrapped in freshly mixed concrete becomes important. The use of chemical additives to increase work ability of concrete in turn requires an air content check to be made. Air entrainment meters are used to determine air entrained in freshly mixed concrete by pressure method.

**Specification :** The apparatus consists of a pressure tight flanged cylindrical measuring bowl of 0.005 cubic meter capacity for maximum size of aggregate 38mm. The bowl is fitted with a removable flanged conical cover assembly with the help of a seal. The conical cover has an air valve and a petcock for bleeding off the water. A transparent cylindrical stand pipe which is graduated in air content is fixed to the conical cover assembly. Pressure is applied to the specimen with the help of a pressure bulb and the pressure is recorded on the pressure gauge which is mounted on the stand pipe. The whole assembly is mounted on a flat base. The instrument is supplied complete with one each following accessories.

#### Other Size are also available.

0.007 cubic meter capacity for maximum size of aggregates 38mm,0.01 cubic meter capacity for maximum size of aggregate 75mm.0.1 cubic meter capacity for maximum size of aggregate 150mm.









# Sand Apsorption Cone and Tamper SL-CC-110

#### ASTM C 128 AASHTO-T-84.

Used for determining the slump of fine aggregate in the determination of bulk and apparent specific gravity and absorption of fine aggregate.

Specification : The equipment comprises of a conical metal mould 1.5inch dia at to 27/8 top, 3.5 inch dia at base and 2 inch in height. A metal tamping rod weighting 12 ounces and having a flat circular tamping faces 1 inch in dia meter



SL-CC-110

### Curing Tank sL-cc-111

a) 24 Hour cycle from time of mixing.

b) Controlled 35oC or 100oC  $\pm 2\text{oC}$  Curing Temperature for concrete.

c) Controlled 27oC ± 2oC Curing Temperature for grey cement.

The tank has been designed to accommodate 150mm/70.6mm cube moulds upto 36/72 cube mould and fully insulated, complete with a hinged lid, heater, thermostat and re-circulated pump. Provision of two removable racks allowing free circulation of water around each mould. The pump, drain valves and electrical equipment are housed in a compartment located at one end of the tank. The Tank is heated by a immersion heater under normal conditions and refrigeration system for grey cement the temperature is controlled at 35oC or 100oC  $\pm$  2oC / 27oC +2oC , expect for the 15 minutes after immersion of the freshly made specimens.

1 Curing Tank for 6/12 moulds of 150mm / 70.6mm size 2 Curing Tank for 12/24 moulds of 150mm / 70.6mm size 3 Curing Tank for 24/48 moulds of 150mm / 70.6mm size 4 Curing Tank for 36/72 moulds of 150mm / 70.6mm size

### Needle Vibrator SL-CC-112

An increasing number of contractual obligations call for various forms of vibro-compacted concrete fro achieving a better and more consistent mixute. The Needle Vibrator is recommended for vibro-compaction test cylinders and beams at site and in the laboratory. This instrument can also be used at small construction sites.

A motor fitted on a swivel base drives a flexible shaft, which in turn, vibrates the needle at about 10,000 vibrations per minute. (approx.) Specifications: Needle Vibrator with a 25mm. diameter x 350mm, long needle, a one meter long flexible shaft and a motor drive with a swivel head and on/off switch. Wired fro 230V. Sph. 50Hz.

#### Accessories:

2 meter long flexible shaft without needle.
3 meter long flexible shaft without needle.
5 meter long flexible shaft without needle, but with a 2 H.P. motor.
Needle 20mm, diameter x 350mm. long.
Needle 40mm, diameter x 350mm. long.



SL-CC-111



# Tile Flexure Testing Machine SL-CC-113

#### AS PER IS: 1237 and 654

The Tile Flexure Testing Machine is used to determine the flexural strength of clay roofing tiles and cement concrete flooring tiles. We are one of the leading manufacturers of Tile Flexure Testing Machines. Our machines are manufactured using best raw materials to ensure good functionality and durability. The Tile Flexure Testing Machine is a double lever loading machine where load is placed by a flow of lead metal that automatically stops as the sample breaks. The sample is mounted between rollers which are 40mm or 12mm in dia. Bearing rollers can be placed at center distances of 150, 200 or 270mm. The unit comes equipped with a 20 Kg lead metal.

## Tile Abrasion Testing Machine sL-cc-114

#### AS PER IS: 1237 & 1706.

This is used for determination of resistance to wear for cement concrete flooring tiles. Tiles specimen of size 7.06cm x 7.06cm is pressed tace-wise under specific load on a grinding path and abrasive powder is evenly spread on the rotating grinding path and after specific number of revolutions of the grinding disc the second parallel side of the tile is subjected to wear for similar number of rotations. The wear of the tile is measured on a thickness gauge specifically made fro the purpose. The machine consists of a disc rotating at a speed of 30 rpm in a circular tray. A bracket is provided to hold the specimen. A counter balance lever loads the specimen. Load applied is 30kgf. A funnel is fitted to evenly spread abrasive powder on the grinding path. A pre-set counter automatically stops the machine after 22 revolutions. This counter is re-adjustable. The machine works on 440 volts AC, three phase electrical supply.

#### Vibratory Hammer SL-CC-115

We are providers of Vibratory Hammers, which is a specialized equipment used consistently at construction sites. The Vibratory Hammer is electrically operated. Our Vibratory Hammer has several uses. Some of them are listed below.

#### Specifications

Used for changing the soil formation with the use of its vibration Used for driving hammers into heavy or hard piles

Used for the compaction of concrete cubes of 150mm & 100mm

## Hydraulic Jacks SL-CC-116

Hydraulic Jacks have multipurpose utility, i.e. application of loads while engaged in field investigation, determination of load carrying capacity of piles in the field, tensioning of wires in pre-stressed structures, loading of members of any structure for deformation characteristics etc. The jacks are supplied complete with manually operated pumping units fitted with bourdon tube type load gauge and high pressure flexible hose pipe. All the jacks have a piston travel of 50 mm and jacks upto 1000 kN capacity are provided with retraction springs.







# POZZOLANA Cement Mortar Permeability Apparatus (Three Cell Model) sL-CC-117

#### IS 1727-2645

For water proofing of concrete admixture and special water proof cements are used. Water proofing of these compounds, is established by measuring permeability of standard mortar. Specimen with or without such water proofing compounds. Permeability apparatus in used to determine permeability to water of cement mortar specimens with or without water proofing compound.

**Specification :** The mortar permeability apparatus comprises three brass/ gun metal cells mounted on a stand and a pressure chamber with a pressure regulator. The cell can accommodate 100mm dia x 50mm high specimen. Each cell assembly consists of the base plate. The base plate has one outlet for water and is recessed to hold the specimen in place with a ring washer in between. The top plate has an inlet for water and a suitable connector for the application of pressurized water in the cell the mount and collar are clamped between the base plate and the top plate with the help of four tension rods and nuts. The cells are mounted on a stand.

The pressure chamber is fitted with a pressure regulator which helps in regulating the pressure from 0-7kg/sq. cm. The regulator has two pressure gauges, one for indicating the pressure in the chamber (0-10.5kg/sq.cm.) The pressure chamber is connected to the cells with pressure hoses and with couplings. This pressure chamber is fitted with valve. Pressure is applied to the pressure chamber with help of a foot pump and rubber hose which are supplied with the instrument.

Cement Mortar Permeability App. (6 Cell Model) SL-CC-118

Cement Mortar Permeability App. (12 Cell Model) SL-CC-119

Same as above but twelve cells , mounted on a stand.

Accessories : Specimen casting mould C.I. with base plate 100mm dia x 50mm height.

Note : Where Larger Number Of Cells Are Used A Suitable Compressor In Place Of Pressure Chamber Is Recommended. This Compressor Can Be Supplied At Extra Cost.

### Concrete Permeability Test App. SL-CC-120

As Per IS 3085 / DIN Standard

#### (Single Cell Model)

One of the durability test of concrete is to determine permeability of water through specimen. Permeability apparatus is used for determining the permeability of cement mortar and concrete specimens of 15cm cubes cast in the laboratory.

#### Specification :

The concrete permeability apparatus comprises of a brass / gunmetal cell of Square/Round cross-section mounted on a stand and a pressure chamber is connected to the cell through copper tubing and T-connector mounted on the stand with sleeve packed valve and



SL-CC-118



SL-CC-120

rubber hose pipe with end connections. The cell assembly consists of one base plate, one metal funnel and one top plate. The pressure chamber is fitted with a pressure regulator which helps in regulating the pressure from 0-15kg/cm sq. Gauge is for indicating the pressure in the cell. A foot pump and a pressure tube is supplied to develop pressure in the chamber. The apparatus is supplied with a measuring cylinder 500cc to measure percolated quantity to water. Pressure can also be applied; by a pressure air line or by a compressor which can be supplied at an extra cost.

## Permeability App. (3 Cell Model) SL-CC-121

Same as above but supplied with three individual cells with stand. Three pressure gauges for indicating pressure in each cell are supplied apart from the main pressure gauge which indicates pressure chamber.



SL-CC-121