PRECISION
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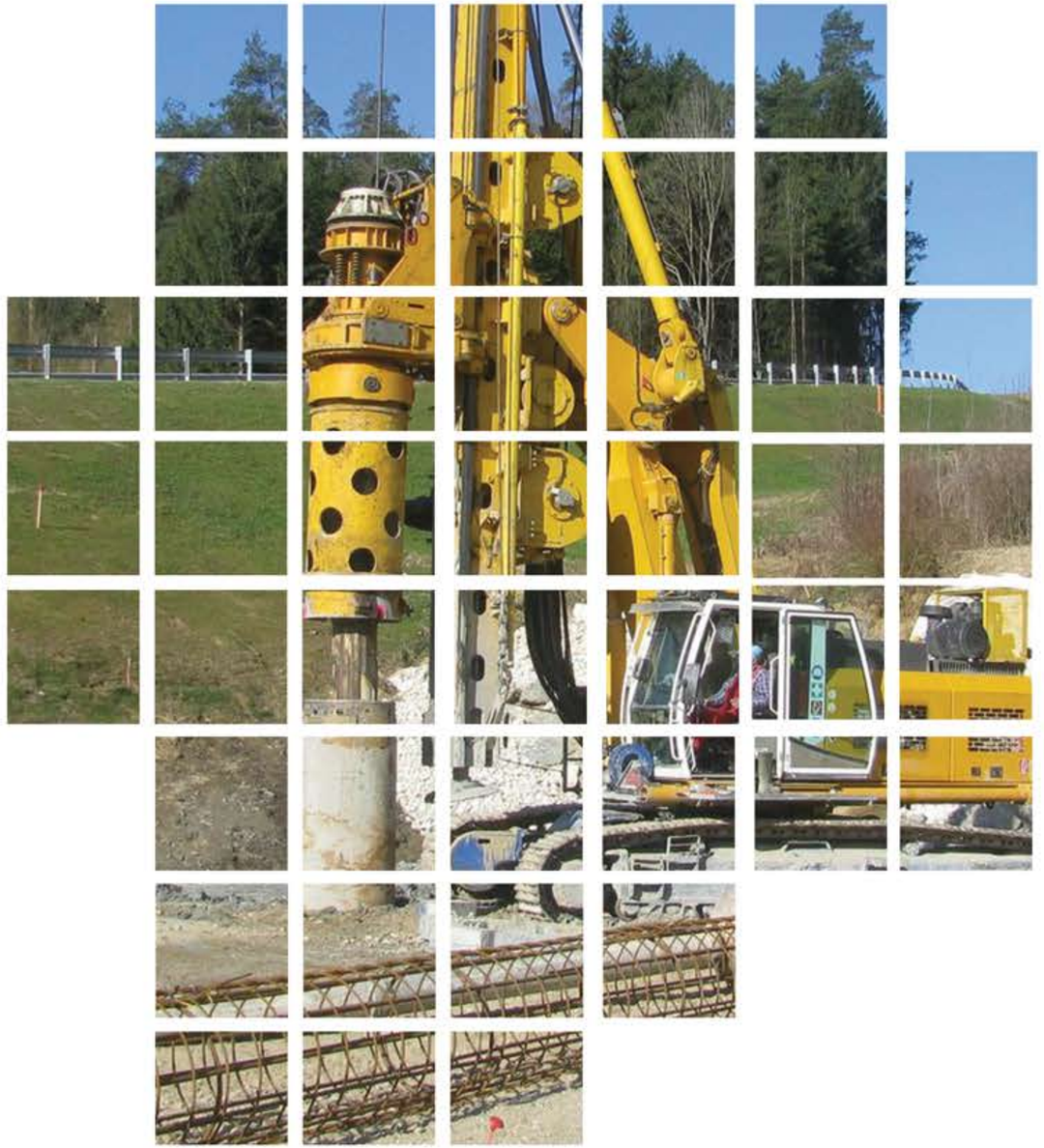
Laboratory Equipment, Instruments and Supplies

Catalog



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CEMENT & CONCRETE

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 agains certified proving rings. The load gauges are fitted with a maximum load pointer.

PSC-L-001

Model	PSC-L-001	PSC-L-002	PSC-L-003	PSC-L-004	PSC-L-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	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 Tested)					
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	PSC-L-006	PSC-L-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 Tested)		
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	-------

PSC-L-007

Cube Mould PSC-L-008

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

PSC-L-008

Model PSC-L-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	Mortar Cube Mould 70.6 x 70.6 x 70.6mm 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

CEMENT & CONCRETE

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.

PSC-L-013

Model	PSC-L-009	PSC-L-010	PSC-L-011	PSC-L-012	PSC-L-013	PSC-L-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 Tested):						
Cube	50mm, 70.6mm	50mm, 70.6mm, 100 mm	100mm, 150mm	100mm 150mm	100mm 150mm	100mm 150mm
Cylindrical	-----	-----	100 x 200 150 x 300	100 x 200 150 x 300	100 x 200 150 x 300	100 x 200 150 x 300

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

Model	PSC-L-015	PSC-L-016	PSC-L-017	PSC-L-018
Capacity (In KN)	1000KN	1500KN	2000KN	3000KN
Pressure Gauge (In KN)	1000KN 250KN	1500KN 500KN	2000KN 500KN	2000KN 500KN
Least Count (In KN)	5KN, 1KN	5KN, 2KN	10KN, 2KN	15KN, 5KN
Pressure Gauge Diameter (mm)				

PSC-L-017

Model	PSC-L-019	PSC-L-020	PSC-L-021	PSC-L-022
Capacity (In KN)	1000KN	1500KN	2000KN	3000KN
Pressure Gauge (In KN)	1000KN, 500KN, 250KN	1500KN, 1000KN, 500KN	2000KN, 1000KN, 500KN	3000KN, 2000KN, 1000KN
Least Count (In KN)	5KN, 2KN, 1KN	5KN, 5KN, 2KN	10KN, 5KN, 2KN	15KN, 10KN, 5KN
Pressure Gauge Diameter (mm)	200	200	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 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.

PSC-L-027

Model	PSC-L-023	PSC-L-024	PSC-L-025	PSC-L-026	PSC-L-027	PSC-L-028
Capacity (In KN)	250 KN	500 KN	1000 KN	1500 KN	2000 KN	3000 KN
Digital Indicator (In KN)	250 KN	500 KN	1000 KN	1500 KN	2000 KN	3000 KN
Least Count (In KN)	1 KN	1 KN	1 KN	1 KN	1 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.

PSC-L-033

Model	PSC-L-029	PSC-L-030	PSC-L-031	PSC-L-032	PSC-L-033	PSC-L-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	PSC-L-035	PSC-L-036	PSC-L-037	PSC-L-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
Motor 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	100mm x 200mm 150mm x 300mm	100mm x 200mm 150mm x 300mm	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.

PSC-L-041

Model	PSC-L-039	PSC-L-040	PSC-L-041	PSC-L-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

CEMENT & CONCRETE

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	PSC-L-043	PSC-L-044	PSC-L-045
Capacity (In KN)	100KN	100KN	100KN
Pressure Gauge (In KN)	100KN	100KN	-----
Least Count (In KN)	½ KN	½ 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, 50Hz	
Specimen Size (Can be Tested) Beams (cm)	10 x 10 x5015 x 15 x 70		

PSC-L-043

Beam Mould PSC-L-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.

PSC-L-043

Model PSC-L-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 aresupplied complete with a base plate and top plate

Model PSC-L-047	Description
A. Cylindrical Mould	Cylindrical Mould 100mm dia. x 200 mm ht. with base plate. Made of Cast Iron
B. Cylindrical Mould	Cylindrical Mould 150mm dia. x 300 mm ht. with base plate. Made of Cast Iron

PSC-L-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

Model	Capacity
Proving Ring Model PSC-L-048	25kgf to 100kgf (1KN)
Proving Ring Model PSC-L-049	200kgf (2KN)
Proving Ring Model PSC-L-050	250kgf (2.5KN)
Proving Ring Model PSC-L-051	1000kgf (10KN)
Proving Ring Model PSC-L-052	2000kgf (20KN)
Proving Ring Model PSC-L-053	2500kgf (25KN)
Proving Ring Model PSC-L-054	3000kgf (30KN)
Proving Ring Model PSC-L-055	5000kgf (50KN)
Proving Ring Model PSC-L-056	100KN (10Tons)
Proving Ring Model PSC-L-057	200KN (20Tons)
Proving Ring Model PSC-L-058	500KN (50Tons)
Proving Ring Model PSC-L-059	1000KN (100Tons)
Proving Ring Model PSC-L-060	2000KN (200Tons)

Blaine's Air Permeability Apparatus PSC-L-061

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.

PSC-L-061

Vicat Needle Apparatus PSC-L-062

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.

PSC-L-062

Vicat Needle App. with Dashpot PSC-L-063

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) Norm ally set of needles and mould which meet isrequire-ments 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.

PSC-L-063

Gillmore Needle Apparatus PSC–064

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

Flow Table PSC-L-065

is used for determining the work ability of building limes.

Specification: The flow table consists of a 30 cm dia. polish steelp-late 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.

PSC-L-065

CEMENT & CONCRETE

Flow Table PSC-L-066

It is used for determining the flow of cement concrete.

Specification: Consists of a steel table top 76.2cm (30 inch. Dia) Finaly 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.

PSC-L-066

Flow Table (Motorized) PSC-L-067

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.

PSC-L-067

Flow Table PSC-L-068

This used for measuring the consistency of pozzolana and alsocement 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.

PSC-L-068

Flow Table (Motorized) PSC-L-069

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.

PSC-L-069

CEMENT & CONCRETE

Ve Bee Consistometer PSC-L-070

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.

PSC-L-070

Slump Test Apparatus PSC-L-071

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.

PSC-L-071

Compaction Factor Apparatus PSC-L-0072

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.

PSC-L-072

Lab. Concrete Mixer (Manually) PSC-L-073

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.

PSC-L-073

Lab. Concrete Mixer (Motorized) PSC-L-074

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

PSC-L-074

Cement Mortar Mixer PSC-L-075

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.

PSC-L-075

Cone Penetrometer for Mortar PSC-L-076

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.

PSC-L-077

Gang Mould (Three Gang) PSC-L-077

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

CEMENT & CONCRETE

LE Chatelier Mould PSC-L-079

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.

PSC-L-079

LE Chatelier Flask PSC-L-080

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.

PSC-L-080

Shrinkage Bar Mould (One Gang) PSC-L-081

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.

PSC-L-081

Shrinkage Bar Mould (Two Gang) PSC-L-082

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

PSC-L-082

Shrinkage Bar Mould (Three Gang) PSC-L-083

Same as above but Three compartments.

PSC-L-083

Shrinkage Bar Mould (Four Gang) PSC-L-084

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.

PSC-L-084

Length Comparator PSC-L-085

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 adjustabl 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.

PSC-L-085

Laboratory Cement Autoclave PSC-L-086

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.

PSC-L-086

CEMENT & CONCRETE

Vibrating Table PSC-L-087
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:

PSC-L-087

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

Mortar Cube Vibrating Machine PSC-L-088

Vibrating Machine is used for vibrating the mix in moulds at a frequency of 12,000 ± 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.

PSC-L-088

Model	Type	Motor	Electrical Supply
PSC-L-092.A	Analogue	½ HP 2880 RPM	220V, Single Phase, 50Hz AC Supply
PSC-L-092.B	Digital	½ HP 2880 RPM	220V, Single Phase, 50Hz AC Supply

Tensile Strength Tester (Manually) PSC-L-089

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.

PSC-L-089

Tensile Strength Tester (Elec.) PSC-L-090

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.

PSC-L-090

Briquette Mould (Single/Three) PSC-L-091

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.

PSC-L-091

Prism Mould Three gang PSC-L-092

(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.

PSC-L-092

Pocket Concrete Penetrometer PSC-L-093

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 2 position when released. 2 Scale range is 0-50kg/cm when the 2 penetration resistance reaches a 2 value of 35kg/cm the concrete is assumed initially set. Supplied complete in carrying case.

PSC-L-093

Concrete Test Hammer (Small) PSC-L-094

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.

PSC-L-094

Concrete Test Hammer (Big) PSC-L-095

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.

PSC-L-095

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	-	-	+1% up to 40ppm
Li : 0.5 to 100	0.724-144.8	-	**Readout**
Power	**Air Supply :**By oil free mini compressor unit with		+2% above 40ppm
230V+10% AC, 50Hz	pressure regulator		

Capping Set (Horizontal) PSC-L-095

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 wit holders for holding the cylinder in position. The holder are split and the bottom half of each holder is fixed firmly and the top half of each is removable and bolted down to the lower half. On the upper parts of the vertical plates 'V' s are provided for pouring the capping compound. Two spacers are also provided. Complete with cylinder carrier and ladle for molten compound.

PSC-L-095

Capping Set (Vertical) PSC-L-096

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 PSC-L-097

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.

PSC-L-097

CEMENT & CONCRETE

Lateral Extensometer PSC-L-098

This is for determining the lateral extension of 15cm dia x 30 cm highcement 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.

PSC-L-098

Air Entrainment Meter PSC-L-099

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 flangedcylindrical 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.n The whole assembly is mounted on a flat base. The instrument is supplied complete with one each following accessories.

PSC-L-099

Other Size are also available.

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

Sand Apsorption Cone and Tamper PSC-L-100

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.

PSC-L-100

Curing Tank PSC-L-101

a) 24 Hour cycle from time of mixing.
b) Controlled 35°C or 100°C ±2°C 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 ± 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

PSC-L-101

Needle Vibrator PSC-L-102

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 vibrocompaction 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.

PSC-L-102

Tile Flexure Testing Machine PSC-L-103

The Tile Flexure Testing Machine is used to determine the flexural strength of clay roofing tiles and cement concrete flooring tiles. Weare 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.

PSC-L-103

Tile Abrasion Testing Machine PSC-L-104

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.

PSC-L-104

Vibratory Hammer PSC-L-105

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.

PSC-L-105

CEMENT & CONCRETE

Cement Mortar Permeability App. (6 Cell Model) PSC-L-106
Cement Mortar Permeability App. (12 Cell Model) PSC-L-107

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.

PSC-L-107

Concrete Permeability Test App. PSC-L-108

(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 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.

PSC-L-108

Permeability App. (3 Cell Model) PSC-L-109

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.

PSC-L-109

ASPHALT / BITUMEN

Ring & Ball Apparatus PSC-L-001

This apparatus is used to determine Softening point of Bitumen. It is that temperature at which a sample of bituminous material loaded by a 9.5mm dia steel ball, drops a specified distance when heated under specified conditions.
Specification : The apparatus consists of steel bracket with a sliding-plate support. That support has two holes of 10mm dia on which a ring and ball guide can be kept. A central hole on this plate is for inserting thermometer. Supplied with a glass beaker approximate 600ml, high and a hand stirrer and 2 Nos. 9.5mm dia steel balls

Ring & Ball Apparatus (Electrical) PSC-L-002

Electrical heating, with a Heater and Energy Regulator, Suitable for operation on 230 V, 50Hz, Single Phase, A.C. supply. Each unit is supplied with bath of heat resistant glass and the following. Tapered Rings, Ball Centering Guide, Steel Ball, of 9.5mm dia, Ring Holder, Electric Heater (Hot Plate)

Dean Stark PSC-L-003

Used to determine the water in petroleum products or bituminous materials by distilling them with volatile solvent. The equipment comprises electric heater with thermoregulator, glass still, support stand, condenser, receiving trap, clamp.

Standard Penetrometer PSC-L-004

Used to determine grade of bitumen. The penetration tests determine consistency of bitumen for the purpose of grading. Depth in units 1/10 of millimeter to which a standard needle having a standard weight will penetrate vertically in a duration of five seconds at a temperature of 25°C determines penetration for gradation.
Specification : It consists of a vertical pillar mounted on a base provided with leveling screws. The head, together with dial plunger rod a cone (or needle) slides on a pillar and can be clamped at any desired height. A rack and pinion and pointer assemble provides fine adjustment of needle or cone tip to sample. It incorporates a clutch mechanism. Which makes reading bsequent resetting a simple and accurate operation. The dial is graduated in 400 1/10 and the millimeter subdivisions and the needle pointer against figures makes easy reading. Supplied with a bitumen penetration needle, ring weight one each 50 gms. and 100 gms. two sample containers.
Accessories: Penetration cone for empirical estimation of penetration of lubricating grease, petroleum jelly etc. Balance fitted with an under bench weighing facility can be fitted. The balance supplied can also be used as a standard weighing device, thus

PSC-L-002

PSC-L-004

providing a versatile and comprehensive weighing system in the laboratory. (i) Cap. 5 Kg (5000gm) Accuracy 0.5 gm (500mg) (ii) Cap. 15kg (15000gms) Accuracy 1 gm (1000 mg)

Semi-Automatic Penetrometer PSC-L-005

Same as above but the unit is compact with timer to control duration of penetration. The instrument is provided with lead screw gear arrangement, Leveling screws, Spirit level.

PSC-L-005

Hardness Tester for Mastic Asphalt PSC-L-006

For determining the hardness number of Mastic Asphalt for flooring.It consist of an internally insulated cabinet to the base of which is fitted a water bath having two taps. The bath is heated by an immersion heater and the temperature is controlled with the thermostat at 35° +/- 0.5° C. A 6.5mm dia pin is loaded on the specimen by means of a lever to give a 31.7 Kg weight. A dial gauge 0.01 x 25 mm is provided to record the penetration of pin into the specimen.

PSC-L-006

Stripping Value Apparatus PSC-L-007

For determining stripping value of bituminous mixes having aggregate size: 1.0mm to 75 micron. Specification : A circular tray rotates in a vertical plane at a rate of approximately 100 R.P.M. by an electrical geared motor. 4 bottles of approximately 400 cc are mounted 0 on this circular tray at an angle of 90 . To each other with their mouth towards center of the tray. A time switch is provided. Suitable for operation on 230 V A.C. Single Phase.

PSC-L-007

SAY Bolt Viscometer PSC-L-J20

Say bolt Viscometer, Electrically Heated, ASTM D88, D244, AASHTO T72 for the empirical measurement of Say bolt Viscosity of petroleum products at specified temperatures between 70o F and 210o F. This is also used for determining the Saybolt Furol Viscosity of bituminous materials at temperatures of 250, 275, 300, 350, 400 and 450 F. It comprises one each of cylindrical Oil cup, Universal Tip, Furol Tip, Bath Fitted with immersion Heater mounted on a stand. Dimmer stat for temperature control, Stirrer with shield. Complete with insulated handle and thermometer support receiving flask, withdrawal tube, filter funnel, thermometer support for cup and circular spirit level. Suitable for operation on 230 V 50 Hz, Single Phase, A.C.

PSC-L-008

Standard TAR Viscometer PSC-L-009

Electrical Heating with Immersion Heating Elements and Dimmer stat for controlling the temperature. Suitable for operation on 230 V, 50Hz, Single Phase , A.C. supply Complete with 10mm cup and valve. Cup, 10mm Ball Valve, 10mm

PSC-L-009

ASPHALT / BITUMEN

Reflux Extractor 4000 GMS PSC-L-010

The simple apparatus working on the same operation principle of consisting of cylindrical glass jar supporting two metal cones of stainless steel cloth and a metal condenser on top of the jar. Supplied complete with 100 filter papers & wire gauge, Hot Plate.
NOTE: Spare Cylindrical glass jar can be supplied at an extra cost

PSC-L-010

Centrifuge Extractor (Manually) PSC-L-011

The Instrument is used for determination and checking of Bitumen percentage in Bituminous mix, the mix is added with a solvent and dissolved bitumen is removed by centrifugal action. Consists of a removable Aluminum rotor bowl, Capacity 1500 gms. With a capn and tightening nut. The bowl assembly is mounted on a vertical shaft, which protrudes from a cast housing. This shaft and thus the bowl is rotated fast manually by enclosed gears in the cast body and handle. Solvent is introduced during the test through the holes in the cap of the housing. A drain is provided to collect dissolved Bitumen coming out of the rotating bowl and getting collected in the housing.

PSC-L-011

Centrifuge Extractor (Motorized) PSC-L-012

Centrifuge Extractor, Electrical Operation, Capacity 1500g, with a Dimmer stat for speed control from 2,400 to 3,600 rpm. Suitable for operation on 230 V, 50 Hz, Single Phase, A.C. supply. Used for the determination of bitumen percentage in bituminous mixtures. It consists of a removable, precision machined aluminum rotor bowl (accessory 1500 or 3000 g capacity), housed in a cylindrical aluminum box. The separate control panel incorporates an electronic card fitted with AC drive that automatically drives the bowl speed rotation ramp from 0 to 3600 R.P.M. as requested by Standards, with automatic fast stop bowl rotation at the end of the test. Supplied complete with speed regulator and digital display monitoring the frequency. Power supply: 230 V A.C. Single Phase.

PSC-L-012

Benkelman Beam PSC-L-013

Lightweight Aluminum construction, Ease of Transportation, Unique-Telescopic Design Simplifying Field set up, Compact, Thereby reducing the amount of storage space needed. Benkelman Beam utilizes the technique of using balanced beam in conjunction with a suitable vehicle to measure road flexure The improved Benkelman Beam is a convenient, accurate device for measuring the deflection of flexible pavements under moving wheel loads. Operating on a simple lever arm principle, the unit consists. Supplied with carrying case.
NOTE :Benkelman Beam with Digital Dial Gauge also available at an extra cost

PSC-L-013

Straight Edge (3 Meters) PSC-L-014

A straight edge approximately 3 metres in length may be used to determine lateral surface regularity of a road surface. This lightweight apparatus is made up of mild steel or aluminum as per customers requirement and is equally supported at both ends producing a set height between the road surface & the beam. Any vertical irregularity is measured using incremented wedges.

PSC-L-014

Ductility Testing Apparatus PSC-L-015

Designed to test three specimens simultaneously. The machine consists of a carriage moving over a lead screw. An electric motor driven reduction gear unit ensures smooth constant speed and continuous operation. The entire assembly is mounted with a stainless steel lined water bath completely encased in metal bound hardwood. It is equipped with an electric pump circulator and heater. The temperature is controlled thermostatically. Two rates of travel i.e. 5 cm/min and 1 cm/min are provided. Suitable for operation on 230 V, 50 Hz, Single Phase, A.C. supply.
COMPLETE WITH: Ductility Mould , with Base Plate 3 Nos. Thermometer IP 38 C, Range: 23o C to 27o C

PSC-L-015

Compaction Mould PSC-L-016

Comprising Mould body, base plate and combined filling / extraction collar. Satisfies

PSC-L-016

Compaction Pedestal PSC-L-017

Comprising a 300mm sq x 25mm thick steel plate complete with 4 tie rods and securing nuts. A mould clamp and hammer guide arefitted to the plate. The unit is supplied complete with a laminated hardwood block.

Compaction Pedestal PSC-L-018

Comprising a 12” square x 1 inch thick steel plate secured to an 8” square x 18” high wooden block. 4 angle brackets are supplied for securing the block. A specimen mould holder is fitted to the steel plate.

Compaction Hammer PSC-L-019

The hammer has a 4535 g sliding weight with a free fall of 457m m.

Steel Block PSC-L-020

100mm diameter x 50mm height. For heating the compaction hammer foot according to BS 598-107. Accessories: Proctor/core Cutter Extruder Spares, Base Plate for compaction mould, Base plate for compaction mould, Filling / Extraction Collar For Compaction Mould

PSC-L-018/19

ASPHALT / BITUMEN

Marshal Stability Test Apparatus PSC-L-021

Generally the test is applicable to hot mix designs using bitumen and aggregates upto a maximum size of 25mm. In this method, the resistance to plastic deformation of cylindrical specimen of bituminous mixture is measured when the same is loaded at periphery at 5 cm per min. This test procedure is used in designing and evaluating bituminous paving mixes. The test procedure is extensively used in routine test programmers for paving jobs. There are two major features of the Marshall method of designing mixes namely, a) density – voids analysis b) Stability – flow tests. The marshall stability of mix is defined as a maximum load carried by a compacted specimen at a standard test temperature of 60ºC. The flow value is deformation the marshall test specimen under goes during the loading upto the maximum load, 0.25 mm units. In this test and attempt is made to determine optimum binder content for the type of aggregate mix and traffic intensity.

PSC-L-021

The apparatus consists of: 1) A loading unit motorized, capacity 5000kgf with two telescopic pillars and an adjustable cross head. Limit switches are fitted inside to control upward or downward movement of the pillars. On-off reversing switch and indicator lamps are on the front side while a hand wheel to manually move the pillars is on the right. The load frame

Standard Accessories: Marshal Mould:3 Nos, Marshal Rammer:2 Nos, Pedestal :1 Nos, Braking Head:1 Nos

Mixer with Heating Jacket PSC-L-022

A 6-litre Mixer Used in conjunction with an Iso Mantle, is suitable for mixing samples of asphalt. Bench mounting Mixer, 6 liter nominal capacity. Supplied with bowl, beater and whisk. Motorised with two s p e e d o p e r a t e d o n 2 3 0 V A.C. , S i n g l e P h a s e . ISO Mantle Electric Heater: For use of Bench Mounting mixer. For 230 VAC.,50Hz, Single Phase

PSC-L-022

Automatic Compactor PSC-L-023

Automatic Compactor for Bituminous Mixes Rugged construction to withstand hard work Fully automatic and easy to operate Uniform compaction Automatic Preset Blow Counter Specification : The Automatic Compactor eliminates the laborious process of manual compaction and an even degree of compaction is achieved. The driven mechanism lifts the weight of 4.5kg and drops it through a correct height of 457 mm. The rammer foot is removable, which facilitates preheating. A compaction pedestal with specimen holder is fixed to the base. An Automatic Blow counter enables the number of blows to be present before each test and automatically stops the machine on completion. Suitable for operation on 230 V, 50 Hz, Single Phase, A.C. supply.

PSC-L-023

Core Cutting / Drilling Machine PSC-L-024 (Diesel Engine Driven)

Suitable to cut/drill cores of concrete, rocks, stones, tiles or the similar materials. The machine is suitable for core samples of size upto 150 mm diameter with the help of thin walled diamond bits which are at extra cost. The machine has sturdy base with pillar support in which rack and pinion is provided for adjustment in height and penetration assembly. The leveling screws are provided at the base. For gripping the sample in position suitable grips are provided. A suitable diesel engine is fitted in the machine with cooling arrangement with water. The base frame is also fitted with wheels
for ease of transportation. Dimension approx, are as under: Height : 1300 mm, Base : 600 x 1200 mm, Head travel on rack : 350mm, Drill speeds : 900 R.P.M. for soft samples and 350 R.P.M. for hard Samples, Water swivel : Built in the machines. Accessories: (1) Thin wall diamond bits. (2) Core barrel.

PSC-L-024

Core Cutting/ Drilling Machine PSC-L-025 (Motorized)

Rated Voltage: ~220 V / 50Hz, Power Input: 2800W, No-Load Speed: 840rpm, Max. bit diameter: Ø50mm/100mm/150mm Shaft Male: 1 1/4"UNC **Features :** 1. Compact size with light weight as well as safety in operation, 2. The drills are equipped with a friction clutch as well as over load current protection for protecting motor, 3. High-strength gear to keep the drill working long hours constantly, 4. Excellent speed, smooth and stability during drilling, 5. Out setting water swivel seal facilitate making replacement when the seal worn out, 6. Bits capacity: 25mm Dia - 150mm Dia **Complete Combination :** The core drill includes drill motor, base, column, carriage, control panel, friction clutch, motor mount plate, rack, gear-box, out setting water swivel seal, hydraulic system. Optional parts include water pump, rod for ceiling jack, water container, adapters. Application : The Core Drill is the industry standard, designed for concrete, reinforced concrete, Asphalt and brick in construction.

PSC-L-025

Rock/ Concrete Cutting Machine PSC-L-026

Electrically operated with cooling system.MASONARY TABLE SAW For people who work with stone, brick, large tiles or blocks, it goes without saying that precision is crucial to the end result. But the efficiency of the machine should never compromise the need for good ergonomics and a reasonable workload. Put simply, the stone or tile you cut must fit perfectly, just as the machine and the blade you use must fit your work situation perfectly. Universal table saw with a unique super-stable height adjustment device, lockable in any position. max. cutting depth in top position is 230 mm, by turning the material over.

PSC-L-026

ASPHALT / BITUMEN

Asphalt & Concrete Floor Saw PSC-L-027

Driven by electrical motor or by engine as per customers requirement. Diamond bit of 100 mm to 600 mm maximum can be supplied as per requirement. The trolley in which the engine is fitted is supplied with cooling arrangements with the help of a water tank. Arrangements to control the depth is also provided. A safety guard isalso provided on the diamond blade. Two wheels are provided for easy movability of the machine.

PSC-L-027

Loss on Heating/ Thin Film Oven PSC-L-028

Precise, Hot Air Drying Better Mineral / Blanket Insulation for high Temperature & to avoid heat loss Silent Hot Air Blower, Unique design of Air Circulation provide through out uniform Air movement Unique design of ventilation keeps the surface of the instruments from being Burnt even when the instruments i.e. Oven Temperature maintained at 200°C Polish / Hair Line 304 grade S. Steel sheet interior, long operation, corrosion resistant Kanthal A-1 Super quality coil shaped & Air heater tubular model wound on side/on the back of the Oven for better accuracy Full feature with Digital. Temperature Controller cum Indicator having Alarm facility (On Customer request) Toughened Glass view window to observe /Test the material without disturbing the Temperature condition of the chamber. Working Temperature required as per IS : ASTM is 163°C+- 1°C Provide with detachable metal shaft (Both for Loss on Heating / Thin Film Oven) Reduction gear is fitted from outside rotated by a vertical shaft having 5-6 RPM.

Applications : For Bitumen Testing Loss of weight, softening Paint, Penetration Loss of wt in Bitumen & Flux Oils (For Construction / Road Projects Department / Industries)

Specifications : Size: 16" x 16" x 16", Capacity: 60 ltr, Heater Wattage: 1.5 KW

PSC-L-028

Rolling Thin Film Oven PSC-L-029

Certified temperature control, Digital Display Internal Fan The Rolling Thin Film Oven Test is used to obtain homogeneously aged material by the application of heat and air in order to simulate these affects in conventional mixing. The oven is of double wall construction with side vents and of the heated convection type of air Circulation. An electronic controller maintains the temperature at 163+ 0.5° C. A vertical, carriage is supplied to support 8 glass sample containers, which are rotated at 15+ 0.2rpm. An outlet orifice 1mm in diameter is connected to a 7.6m length of copper tubing and flow meter which controls the airflow at 4000 ml/min. Air is blown into the sample containers at their lowest point of travel by an internal airjet. The oven is supplied with 8 glass sample containers and a thermometer (IP 47C/ASTM 13C). Internal dimensions 483 x 450 x 381mm. A separate source of compressed air is required to operate this oven. Operating Voltage 230 V A.C., Single Phase

PSC-L-029

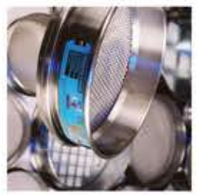
Core Cutting Grinding Machine PSC-L-030

Table Mounted Stable Construction Feed arrangement for cutting Feed arrangement for cutting Cooling water arrangement Heavy Duty, Single Phase Motor 230 V A.C. Specification : This unit is designed for cutting and grinding cylindrical rock specimens upto NX size. The outfit includes 200mm dia diamond impregnated cutter, a fine diamond impregnated grinding wheel a water supply system and sampler holder. A V-Vice, to hold the sample up to 55mm dia x 140mm long to be cut parallel and square to the longitudinal axis is provided. Cores longer that 140mm can be prepared by reversing the specimen and holding. against the vice, A hand feed arrangement is provided to facilitate the specimen with a uniform and smooth feeding motions. This unit is provided with a 1 HP, Single Phase, 230 V A.C. Motor.

PSC-L-030

Test Sieves

Test Sieves: Test sieves are manufactured to the highest quality and are available to every National and International Specification. The sieves are certified, each sieve is supplied with a Certificate of Conformity and is individually numbered to provide full traceability



Diameters range from 100mm or 3inch up to 450mm or 18inch, with the frame materials being manufactured from Brass, Stainless steel or Plated steel. The “screen” is made from either woven wire mesh or alternatively perforated plate with apertures from 125mm to 20 micron (1mm for perforated plate sieves). See below for sieve chart

Flakiness & Elongation Test Gauges

Specification : Aggregates which are flaky and/or elongated will often lower the work ability of a concrete mix and may also affect long term durability. In bituminous mixtures, flaky aggregates make for a harsh mix and may also crack and break up during compacting by rolling. The flakiness of aggregate is determined by measuring the thickness of individual particles. Hence we offer thickness gauge and length gauge to check flakiness and elongation index of the aggregate respectively.

PSC-L-001

PSC-L-002

Model	Description
Flakiness Gauge **PSC-L-001**	Used for Determination of flakiness index of coarse aggregates. It consists of a steel frame with a sliding panel having slots of different dimensions
Elongation Gauge **PSC-L-002**	Used for determination of elongation index of aggregates. It consists of a steel frame having slots of different dimensions. The frame is fixed on a hard wooden base.

Cylindrical Measures PSC-L-003

Determines bulk density or unit weight of aggregates.Specifications: Calibrated cylindrical measures of sheet iron with handles. Consists of 3 measures one each 3 liters capacity, 15 liters capacity and 30 liters capacity. Complete with one tamping rod, round, 16mm dia. and 600mm long, one end rounded.

PSC-L-003

Metal Measures PSC-L-004

For the determination of the unit weight of aggregate.
Specifications: Made from sheet iron, complete with handle, capacity 10litres or 20litres.

PSC-L-004

Density Basket PSC-L-005

For Density Tests on Aggregates as per Procedure Laid Down. Specification :Made of Brass/GI with Stainless steel Wire Mesh 6.3mm/4.75mm size Ruggedly Constructed, Approximately 20cm dia x 20cm high. Complete with Handle.

PSC-L-005

Riffle Sample Divider PSC-L-006

Specification : Riffle sample divider is required for the rapid collection of true representative samples from aggregates, sand and fillers. Riffle Sample Divider consists of a metal box fitted with series
of chutes of equal width which discharge the material alternatively in opposite directions into separate pans. The chutes of the riffle are

PSC-L-006

Model PSC-L-006	Description
A. Riffle Sample Divider	Riffle Sample Divider having slots 10mm each.
B. Riffle Sample Divider	Riffle Sample Divider having slots 13mm each.
C. Riffle Sample Divider	Riffle Sample Divider having slots 20mm each.
D. Riffle Sample Divider	Riffle Sample Divider having slots 25mm each.
E. Riffle Sample Divider	Riffle Sample Divider having slots 40mm each.
F. Riffle Sample Divider	Riffle Sample Divider having slots 50mm each.

Aggregate Crushing Value PSC-L-007

Specification : The selection of proper aggregate for a given application is essential to attain the desired quality. Various characteristics are required to be determined for the selection of appropriate aggregate from the wide range available. Aggregate crushing value test apparatus is used for measuring resistance of an aggregate to crushing. Made of Mild Steel comprising of: Cylindrical Cell, 150mm internal dia x 130 to 140mm height, Plunger, 148mm dia x 100 to 115mm height, Base Plate, 200 to 230mm square x 6mm thickness, Tamping Rod, 16mm dia x 450 to 600mm length. Metal Measure, 110mm internal dia x 180mm height

PSC-L-007

Aggregate Impact Value Tester PSC-L-008

Specification : Aggregate Impact Value Test Apparatus is used for determining the aggregate impact value. The Sturdy Construction consists of a base and support columns to form a rigid framework around the quick release trigger mechanism to ensure an effective free fall of the hammer during test. The free fall can be adjusted through 380±5mm. The hammer is provided with a locking arrangement. Aggregate impact value test apparatus is supplied complete with a cylindrical measure of 75mm dia x 50mm depth, an automatic blow counter and a tamping rod.

PSC-L-008

Determination of Specific Gravity PSC-L-009

Specification :The density of hardened concrete specimens such as cubes and cylinders can be quickly and accurately determined using a Specific Gravity / Buoyancy Balance. The apparatus consists of a rigid support frame, incorporating a water tank mounted on a platform. A mechanical lifting device is used to raise the water tank through the frame height immersing the specimen suspended below the balance in this Buoyancy Balance. Any type of Electronic Balance fitted with an under bench weighing facility can be fitted. The balance supplied can also be used as a standard weighing device, thus providing a versatile and comprehensive weighing system in the laboratory. (i) Cap. 5 Kg (5000gm) Accuracy 0.5 gm (500mg) (ii) Cap. 15kg (15000gms) Accuracy 1 gm (1000 mg)

PSC-L-009

AGGREGATE

Los Angeles/Abrasion Testing Machine PSC-L-010

Specification : Los Angeles Abrasion Testing Machine is used fordetermining the resistance to wear of small size coarse aggregates and crushed rock. The abrasion testing machine consists of a Closed hollow cylindrical steel drum rotating around its horizontal axis on ball bearing units mounted on a sturdy base framework at a speed of between 30-33 rpm. Supplied complete with subtracting revolution counter to preset the number of revolutions, a sample collection tray for removal of the sample on completion of testing and set of 12 abrasive charges.The los Angeles Abrasion testing machine is fitted with 1 HP Motor. Suitable for Operation on 440V, Three Phase, 50Hz, AC Supply.

PSC-L-010

Devel Abrasion Testing Machine PSC-L-011

For The Determination of Resistance of Aggregates to Wear by Abr sion.
Specification : It consists of two hollow cylinders closed at one end and provided with Fitting covers at the either end. These cylinders are mounted an a shaft 0 at angle of 30 with the axis of rotation of the shaft. The shaft rotates at 30-33 RPM. Through a reduction gear operated by a motor and is provided with a revolution counter. Complete with Abrasive Charge consisting of 12 Nos. Hardened steel Balls of 48mm dia. Suitable for operation on 440 Volts, Three Phase, 50 Cycles, A.C. supply.
Note : Option of Digital Preset Counter can be provided at an Extra Cost

PSC-L-011

Dorry Abrasion Testing Machine PSC-L-012

For Testing Aggregates for Resistance to Abrasion.
Specification : It consists of a disc rotating about a shaft connected to a reduction gear box coupled to a motor. The disc rotates at 28-30 RPM. Under the rotating disc is a tray with an outlet to facilitate the removal of sand. Two Conical Hoppers are mounted on a bracket fixed to the circular tray. An arrangement is made for start and stop the flow of sand. Two containers with weights are supplied to keep the specimens pressed against the rotating disc. Suitable for operation on 220 V, 50 cycles, A.C. Supply.

PSC-L-012

Pug Mill for grinding Lime Mortar PSC-L-013

This is used for determination of resistance to wear for Cement & Concrete flooring tiles. Tiles specimen of size 7.06 cm x 7.06 cm is pressed face-wise under specific load on a grinding path and abrasive powder is evenly spread on the rotating 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 for the purpose.The machine consists of a disc rotating at a speed of 30 R.P.M. in a circular tray. A bracket is provided to hold the specimen. A counter balance lever loads the specimen. Load applied is 30 Kgf. A funnel is fitted to evenly spread abrasive powder on the grinding path. A Preset Counter automatically stops the machine after 22 revolutions.This counter is Re-adjustable. The machine works on 440 V A.C. Three Phase electrical supply. On Request machine to operate on 230 V A.C. Supply can also be supplied.

Laboratory Jaw Crusher PSC-L-014

The laboratory jaw Crusher is designed for fast crushing of Aggregates, Ores, Minerals, Coal, Coke, Chemicals and other similar materials. It is compact and of rugged construction for general laboratory of small pilot plant operations. Two jaws of manganese steel are provided in this laboratory jaw Crusher. The moveable jaw produces tow blows for every revolution, thus reducing over sizing to a minimum. A combination of forward and downward strokes with a rocking action exerts pressure on the coarser material, yet permits the finished material to pass through the jaws. A hopper is provided at the top for feeding material The smooth jaws ensure a uniform product and easy cleaning is possible.
Jaw Size: 100x150,
Feed Size: 25 To 30,
Discharge Size: 6mm To 15mm
1lhr. 250k9,
Motor, 3hp,3ph.

PSC-L-014

Laboratory Pulveriser PSC-L-015

The Laboratory Pulverize is a disc type grinder, designed to grind virtually any material to produce a fine mesh sample in one operation. The instrument is useful for assaying , mining and for metallurgical, quarrying, aggregate processing, chemical, geological and industrial laboratories. It is a self contained grinder, with a rotary disc, having a planetary movement in a vertical plane. This feature gives added life to the moving parts and produces a sample of uniform fineness.Grinding is done between two discs-one stationery and the other revolving eccentrically at high speed. The discs are made from heat treated machinate metal. With the help of a convenient hand wheel, the size of the final product can be adjusted. This can be done, even while the machine is in operation. A self locking device holds the hinged grinding chamber in place and affords easy and quick access to it, for removal of ground samples and for cleaning. The Pulverize has a capacity of reducing about half of a kilogram of a quartz type sample to 100 mesh in a about a minute. The Pulverser is supplied complete with a 3 H.P motor, a starter, a "V" belt pulley drive and mounting wired for 440V, 3 Ph, 50Hz, Disc Diameter:175m, Maximum Feed size: 6mm. Yield: 250gms./min, Size of Finished Product: 100mesh

PSC-L-015