



GOVERNMENT ENGINEERING COLLEGE, DAMAN
DEPARTMENT OF CIVIL ENGINEERING
TRANSPORTATION ENGINEERING LABORATORY

ROLLING THIN FILM OVEN



Basic Details: -

1. Double-walled construction, interior corrosion resistant stainless steel and exterior mild steel duly painted. 75 mm of high density fibre glass insulation
2. Thermal Protection prevents oven from overheating in the event of control failure
3. Temperature Range : Ambient to 200°C
4. Temp. Control Accuracy: 0.5 °C. Rotating Speed: 15R \pm 0.2R/min. Double exhaust vents for dissipation of expended volatile from specimen
5. Air Pressure Gauge: Range 0 - 60 PSI
6. Electrical Supply: 230 V AC 50 Hz single phase



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DIGITAL SAY BOLT VISCOMETER



Basic Details: -

1. Say bolt Two-tube Digital Viscometer 220-240 V, 50-60 Hz
2. Filter Funnel with Wire Mesh and Clip
3. Thermometer support for a set of 6 thermometers with the temperature ranges; 19 to 27°C, 34 to 42°C, 49 to 57°C, 57 to 65°C, 79 to 87°C (250 mm length) and 95 to 103°C
4. Viscosity Flask, Glass (60 ml)
5. Universal orifice and Furol orifice Heat transfer oil capacity 5 litres



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AUTOMATIC DIGITAL RING AND BALL APPARATUS



Basic Details: -

1. Temperature Resolution: 0.01°C
2. Uniform Temp. Rise @ 5°C to +/- 0.5°C as per BIS 1205
3. Uses both water and glycerol as bath liquid (30-150°C)
4. Real time display of the Temperature (°C)
5. Automatic pre-conditioning and test start
6. Controlled heating and cooling system
7. Freezing of Softening Point on Failure of the sample



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**FULLY AUTOMATIC DIGITAL BITUMEN
PENETROMETER**



Basic Details: -

1. Penetration measurement with 0.01 mm resolution, in a range of 0 - 50 mm.
2. Total Test Load: 100 g (plunger 97.5 g + 2.5 g penetration needle)
3. Loading Time: 5 seconds
4. Electro-magnetic needle probe release to perform the test.
5. Screen display equipped with an user friendly software and clear interface.
6. Real time display of penetration/time curve, average result and test temperature.



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AUTOMATIC MARSHALL STABILITY TEST MACHINE



Basic Details: -

1. Load Cell Capacity 50 kN
2. Penetration Piston for Marshall Stability Test
3. Linear Potentiometric Displacement Transducer
4. Software for support
5. Cable for connection to PC
6. Hand Wheel for Manual Control



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**CENTRIFUGE EXTRACTOR ELECTRICALLY
OPERATED**



Basic Details: -

1. Electrical Operated Double Centrifuge Extractor
2. Capacity 1500g, with a Dimmer stat for speed control from 0 to 3,600 rpm.
3. Suitable for operation on 230 V, 50 Hz, Single Phase, A.C. supply.



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AUTOMATIC COMPACTOR FOR BITUMINOUS MIXES



Basic Details: -

1. This equipment consists of a drive mechanism that lifts a 4.5kg weight and drops it through a height of 457mm.
2. A removable rammer foot facilitates preheating.
3. A compaction pedestal with specimen holder is fixed to the base.
4. An automatic blow counter enables the number of blows to be present before each test and automatically stops the machine on completion.
5. Suitable for operation on 230 V, 50 Hz, Single Phase, A.C. supply.