

CIVIL TECHNOLOGY LEFTOVER TRAINING EQUIPMENT FOR GPI SARDAR GARHI PESHAWAR

Concrete Technology		
Item No	Name of Items as per PC-1 description	QTY
1.	<p>LE- CHATLIER'S APPARATUS: BS 4550</p> <p>(For soundness of cement)</p> <p>LE CHATELIER WATER BATH,</p> <p>Made of stainless steel and incorporates a 1000 W heater enabling the water to reach boiling point within 25 minutes. Regulation of temperature through hydraulic thermostat from +5 to 100°C. Complete with resistance-tray, cover and thermometer. Allow to realize different tests simultaneously.</p> <p>Power supply: 220 V. 50 Hz.</p> <p>LE CHATELIER MOULD, Ø 30 x 300 mm. Long.</p> <p>LE CHATELIER GLASS PLATES (2), 50 x 50 mm.</p> <p>LE CHATELIER CLIP to hold the glass plates</p>	01
2.	<p>LE CHATELIER FLASK, ASTM C188; BS 4550</p> <p>(Relative density of hydraulic cement).</p> <p>Graduated from \emptyset to 1 ml. and from 18 to 24 cm³</p> <p>Capacity: 250 ± 0.05 cm³</p>	01
3.	<p>FLEXURAL/COMPRESSION TESTING MACHINE,</p> <p>300 KN. Capacity, ASTM C 190</p> <p>With motorized hydraulic power pack fitted with adjustment of the load gradient, rapid approach device and relive valve.</p> <p>The frame is assembled seamless, with electronic display of load.</p> <p>Accuracy: ± 1%.</p> <p>Power supply: 220-240 V. 50 Hz.</p>	01
4.	<p>MOTORISED FLEXURAL/TENSILE MACHINE, 10 KN, ASTM C 349</p> <p>Used to determine the flexural strength of 40 x 40 x 160 mm. mortar specimens and the tensile strength of briquettes. Composed of a massive aluminium frame with a horizontal graduated beam, complete with weights and counterweights. The steelyard comprises a graduated beam with three read-out scales. The machine is motorized and it ensures a constant increase of the load of 50 ±10 N/sec. It can be operated either in non-stop automatic mode or in start-stop mode driven by the operator's commands. When the specimen fails, the machine automatically stop. A limit switch is however foreseen at full scale. The specimen jaws have to be ordered separately.</p> <p>Accuracy: ± 1%.</p> <p>Power supply: 220-240 V. 50 Hz.</p> <p>Accessories:</p> <p>FLEXURAL JAWS, for flexural test according to ASTM.</p> <p>FLEXURAL JAWS, for tensile test according to BS and ASTM.</p> <p>SINGLE MOULD, used for the preparation of mortar briquettes, according to ASTM standards.</p> <p>Dimensions: 320 x 110 x 400 mm.</p> <p>THREE-GANG MOULD, used for the preparation of tar briquettes, according to ASTM standards.</p>	01
5.	<p>ELECTROMAGNETIC SIEVE SHAKER, with Standard sieves set , ASTM C 33-13</p>	01

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	<p>Activated by electromagnetic impulses. It is particularly recommended to carry out sieving test where high precision and performance are important. This electromagnetic shaker is of simple and sturdy construction, it is also suitable for wet sieving tests along electronic control panel. The vibrating intensity and the pauses between one vibration and the following one (this is especially indicated for fine material sieving). The sieve shaker can hold up to 10 sieves.</p> <p>Standard sieves set , ASTM C 33-13</p> <p>(for fine and Coarse aggregates): Of \varnothing 200 mm x 50 mm with hole With compatible electromagnetic sieve shaker.</p>	
<p>6.</p>	<p>Determine clay percentage in aggregate.</p> <p>ASTM C 117</p> <ol style="list-style-type: none"> 1. This is a gravimetric method for determining the clay, silt, and dust content of that portion of the material finer than 75 μm. <ul style="list-style-type: none"> • BOTTLE ROLLER, with rotation speed 80 rpm. • BOTTLE 1 L., capacity with lid. 2. BLUE METHYLENE TEST Set for determination of Blue Methylene composed by: <ul style="list-style-type: none"> • ELECTRONIC STIRRER, with digital display. It is supplied complete with stirring rod, support and fixing nut. Reliable speed between 400-700 rpm. • BURETTE, with glass key, 100 ml. capacity. • FILTER PAPER, \varnothing 125 mm. • GLASS ROD, length 300 mm. • BEAKER, capacity 600 ml. • BLUE METHYLENE, (25 gr). <p>OR</p> <p>EQUIVALENT</p>	<p>01</p>

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Transportation technology

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7.	<p>SEARLE YOUNG'S MODULUS APPARATUS</p> <p>The instrument consists of two frames connected by a link. The frames are fitted with self-centering chucks. An accurately graduated micrometer screw to read to 1 mm is fitted on one frame. One end of a sensitive spirit level is pivoted to one of the frame, the other end rests on the points of a micrometer screw fitted in the other frame. Complete with chucks, ceiling attachment and tension weight. With case. Consists of a brass scale 10 cm long and venire to read 1/10 mm with V slides clamps, guides for wire ceiling attachment and tension weight.</p>	01
8.	<p>UNIVERSAL TESTING MACHINE (UTM) (Computerized).</p> <p>TECHNICAL SPECIFICATIONS:</p> <ul style="list-style-type: none"> - Maximum tensile load: 1000 KN - Maximum compression load: 1000 KN - Distance between the jaws: 700mm or more - Distance between the compression platens: 700 mm - Distance between the columns: 650 mm - Piston's stroke: 250 mm -Speed test : 100 mm/min - Precision and repeatability: $\pm 1\%$ of read value - Power supply: 230 V 1 ph 50 Hz 2.5 kW - Bending test pressed rolling distance 70 to 600 mm - Shear test fitting with size of shearing specimen =0- 20 mm - Grip for round and deformed (20- 60 mm) and flat (40mm thick x 80mm wide) samples. <p>Extensometer.</p>	01