

QUOTATION

Ref. No. ED/HE(TE)/2016/186

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Name of Lab.:- Geo Technical Engineering

Sl. No.	Item	Model & Make	Rate per unit	
			in figure	in words
1.	<p>Triaxial Cell (including loading frame and weights) : Triaxial Shear Test Apparatus motorized: (With Constant Pressure System) (Electrically Cum Manually Operated) having 2000 kg capacity operation on 220/230 Volts, single phase A.C. Supply and gives the following rates of strain. 1.25mm/minute. Conforming to specifications and tolerance in accordance to I.S.2720 Part XII</p> <p>Consists of followings:</p> <p>Load Frame: Hand operated load frame capacity 5000 kgs, mounted on a rigid frame.</p> <p>Triaxial Cell: Stationary bush type suitable to accommodate soil specimen of 38mm dia x 76mm long, in perpex chamber, suitable to withstand fluid pressure of 10 kg/cm sq, with no volume change type klinger valve at base.</p> <p>Lateral Pressure Assembly: Pressure chamber with foot pump. Complete with pressure gauge 0-10 kg/cm sq, shredder valve, foot pump and rubber hose pipe to connect with Triaxial cell.</p> <p>Proving Ring: High sensitive proving ring capacity 250 kgs made of special alloy steel to give maximum repeatability as stipulated in I.S. 4169 fitted with dial gauge least count 0.002mm of ISI certification mark IS 2092 calibration certificate in polished wooden box.</p> <p>Dial Gauge : For strain measurement 0.01mm x 25mm travel Complete with 12 nos rubber membranes, 4 nos sealing ring, mould for preparation of sample, sheath stretcher, pair of porous stone, pair of plain disc, loading pad and drainage tube</p>			
2.	<p>Vane shear apparatus laboratory motorized:</p> <p>Consists of a torque head adjustable in height by mean of a lead screw rotated by a drive wheel to enable the vane to be lowered in to the specimen. Rotation of vane is by means of a hand wheel which operates a worm gear arrangement turning the upper end of a calibrated torsion spring. The vane shaft is attached through the hollow upper shaft to a resettable pointer, which indicates the angle of torque on a dial graduated in degrees. The dial reading multiplied by spring</p>			

	<p>factor gives the torque. A container should also supplied with set of springs one each approx. 2 kg-cm, 4 kg-cm and 8 kg-cm in a wooden carrying case preferably electrically operated, rate of rotation is 1/16 RPM. Suitable for operation on 230V,50 Hz, Single phase, AC supply</p>		
3.	<p>Direct Shear Apparatus (including loading frame & weights) Direct Shear Test Apparatus ((Electrically Cum Manually Operated):- With Proving ring and dial gauge. Operated having 12 constant rats of strain. 1.25,0.625,0.25,0.125,0.05,0.025,0.01,0.005,0.002,0.001,0.0004 and 0.0002mm/minute. Conforming to specifications and tolerance in accordance to I.S. 2720 Part XIII. For Specimen size 60x60x25 mm, Manually operated. Consists of:- Loading Unit : with V strips on which shear box housing rests, load yoke with direct and lever system for applying normal load to the capacity of 8 kg/cm sq, fixture for proving ring, bracket for holding dial gauge, and manually operated lead screw for application of shear stress. Complicated counter balancing arrangement has been dispensed with and the unit is provided with pre-calibrated loading yoke. Shear Box Assembly for Square Specimen : Complete with two halves of shear box, pair of plain gripper plates, pair of perforated gripper plates, pair of porous disc, loading pad, base plate and 'U' bracket. Shear Box Housing: Suitable to accommodates shear box assembly complete with two ball roller strips. Specimen Cutter: For cutting specimen size 60mmx60mmx25mm obtained from field or from larger specimen. Set of Weights: To give normal stress of 3 kg/cm sq on specimen comprises of 4X0.05, 1X0.1, 1X0.2, 3X0.5 and 1X1.0 kg/cm sq. Proving Ring: Made of special alloy steel equipped with dial gauge least count 0.002mm with calibration certificate capacity 250 kgs. (2.5KN). Complete Set as above.</p>		
4.	<p>Liquid Limit Device with counter: It consists of a brass cup held on an adjustable bracket. The cup can be adjusted for a fall of 1 cm and can be raised and dropped on a rubber base of standard hardness by cam action Complete with one casagrande grooving tool, one ASTM grooving tools and fitted with a counter to register the number of bellows.</p>		
5.	<p>Plastic Limit Apparatus: The complete set consists of one each: Glass plate 20cm x 15cm having ground ends and one side frosted. Brass or stainless steel rod 3 mm dia x 150 mm long - 2 nos. Flexible spatula. Set of 6 moisture containers Porcelain</p>		

	basin 150 mm dia packed in nice Polished wooden box.			
6.	MOTORIZED SIEVE SHAKER MACHINE: Gyrotory type, with rotary motion with fine and course aggregate, with size: 20 cm dia. & Adaptor for 30 cm dia. with mechanical Timer of 0-99 minutes, The shaker is driver by 1/4 HP. Motor through a reduction gear. The sieve table does not rotate but is inclined from the vertical axis and the direction of inclination changes progressively on clockwise direction. By removal of stop pin fixed below the table, the shaker can have a rotary motion. In addition to gyrotory motion of the table, there is an upward and downward movement ensuring that each square of cm. of the sieve is utilized. The gear mechanism runs in an oil bath			

Dated signature & Seal of the Quotationer