

Digital Direct Shear Test Apparatus Model UMI-115DS

Digital Direct Shear Test Apparatus – Motorized with Single Speed.

Complies with following International Standards:
IS : 2720 (PART 13) 1986 / IS : 11229 - 1985, ASTM D3080

Objective:

In many engineering problems such as design of foundation, retaining walls, slab bridges, pipes, sheet piling etc. the value of the angle of internal friction and cohesion of the soil involved are required for the design and development. Direct shear test is used to predict these parameters quickly. The laboratory report cover the laboratory procedures for determining these values for cohesion less soils.

Salient Features :

- **Aesthetical appearance**
- Powder coated exterior body
- Tactfully designed complete system
- Multiple reversal type system
- Motorized, Single speed design
- Electrically operated to give Single Speed constant rate of strain at 1.25 mm/min.
- Supplied with loading yoke with direct and lever for applying load.
- Normal stress capacity 8 Kg/Sq. cm
- Load is applied either directly or through a counter balanced detachable lever.
- Provision is made for the load to be applied either through a steel ball recessed in the loading Pad or direct through a boss on the pre-calibrated loading yoke.
- The loading unit is provided with V-strips and roller strips for frictionless movement of shear Box housing.
- Suitable for operation on 230 Volt,50 Hz, Single Phase, A.C. Supply



*Software at addtional cost



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Consists of following accessories:

- Loading unit with normal loading of 8 kg/cm² on 60 mm square specimen
- Shear box assembly for 60 mm x 60 mm x 25 mm thick specimen
- Shear box housing, complete with two ball roller strips, made of gunmetal material
- Two porous stones, each of 6 mm thick, fitting to the shear box
- Gripper assembly consisting of 2 plain grid plates, 2 perforated grid plates, one base plate and one loading pad, all made of gunmetal.
- Specimen cutter for a specimen size of 60 mm square & 25 mm thick specimen
- Set of weight to give normal stress of 3 kg/cm² through lever as follows.

To give kg/cm²:

- 0.05 - 4 Nos.
- 0.1 - 1 Nos.
- 0.2 - 1 Nos.
- 0.5 - 3 Nos.
- 1.0 - 1 Nos.