

## DIRECT SHEAR TEST APPARATUS

In a direct shear test, the failure of the soil sample in shear is caused along a predetermined plane. Test is performed as per IS 2720 part XIII the normal load, strain and shearing force are measured directly during the test. It is also used to estimate residual stress of soil. The **direct shear testing apparatus** utilizes a square box divided horizontally into two halves. The box containing the sample is placed in a water jacket and subjected to constant normal load while a horizontal force is applied till the specimen fails along the plane of juncture of the two halves. A number of specimens are tested under different loads and from the data obtained, the angle of internal friction and shearing strength of the soil can be evaluated. Following pages, give details of both hand operated and motorised versions of direct shear test apparatus conforming to different Indian Standard Specifications.



### SERVO CONTROLLED LARGE DIRECT SHEAR APPARATUS

**Max Capacity** : 1500kN, Shear Load – 2000kN

**Sample Size** : 75 cm x 75 cm x 100 cm

**Experiment** : To determine Shear Strength parameter i.e. angle of shearing resistance and cohesion of soil & aggregate.

**Year of Purchase:** 2011

**Cost** : 68.19 L



### DIGITAL LARGE DIRECT SHEAR APPARATUS

**Max Capacity** : 50kN

**Sample Size** : 30 cm x 30 cm

**Experiment** : To determine Shear Strength parameter i.e. angle of shearing resistance and cohesion of soil & aggregate.

**Year of Purchase :** 2018

**Cost** : 3.67 L



### DIGITAL LARGE DIRECT SHEAR APPARATUS

**Max Capacity** : kN

**Sample Size** : 6 cm x 6 cm

**Experiment** : To determine Shear Strength parameter i.e. angle of shearing resistance and cohesion of soil & aggregate.

**Year of Purchase :** 2010

**Cost** : 0.67 L