# **Direct Residual Shear Apparatus**

# BS 1377, EN 1997-2, ASTM D3080, AASHTO T236

## **DESCRIPTION:**

The Digital Residual Direct Shear Apparatus is used for determination of the direct shear strength of soils specimen. The process is known as a shear failure and occurs when shear stresses set up in the soil mass exceed the maximum shear resistance which the soil can offer, i.e. its shear strength.

The Automatic Direct Residual Shear Testing Machine comes complete with, Digital control of speed and data acquisition unit, infinitely variable speed drive from 0.00001 - 9.000000 mm/min via servo motor, wide-screen TFT control unit, 1/9, 1/10, 1/11 loading ratios, complete with a 5 kN load cell, a 25 x 0.001 mm linear potentiometric displacement transducer (for horizontal displacement), a 10 x 0.001 mm linear potentiometric displacement transducer (for vertical displacement). Supplied complete with Geotechnical software. Shear box assembly, slotted weight set, specimen cutter and extrusion dolly.

## **TECHNICAL**

## **SPECIFICATIONS:**

0. 20. 20. 20. 20. 20. 20. 20. 20. 20. 2	
Maximum shear force	5 kN
Maximum vertical force	5 kN or 50 kN using 10:1 cantilever
Maximum horizontal travel	150 mm
Test speed	from 0.00001 to 9.99999 mm/min
Sample type and size	up to 100 mm square or round
Overall dimensions	1040 x 350 x 1200 mm (l x d x h)
Multivoltage	230 V, 50 Hz, 60Hz or 110 V, 60 Hz
Weight	130 Kg



## **MAIN FEATURES:**

- Display of both speed and displacement with high resolution.
- Box group mounted on ball track with high quality antifriction system.
- Read value results are immediate and of extreme accuracy
- Extremely easy and practical use .

## **ORDERING:**

# SL 0782

Digital Residual Direct Shear Apparatus

# **ACCESSORIES:**

## SL 0782-1

Square Shear Box Assembly, 60x60 mm

### SL 0782-2

Square Shear Box Assembly, 100x100 mm

## SL 0782-3

Square Shear Box Assembly, Ø 2.5 inch

#### SL 0782-4

Circular Shear Box Assembly, 60x60 mm dia.

### SL 0782-5

Circular Shear Box Assembly, 100x100 mm dia.

#### SL 0782-6

Circular Shear Box Assembly, Ø 2.5 inch dia.

## SL 0782-7

Set of Weights for consolidation, 16 kg

## **SL 0782-8**

Set of Weights for consolidation, 32 kg **SL 0782-9** 

#### 3L U/02-3

Set of Weights for consolidation, 50 kg

#### SL 0782-10

Set of Weights for consolidation, 64 kg **SL 0782-11** 

Set of Weights for consolidation, 80 kg