



ZEAL INTERNATIONAL (An ISO 9001 Certified Company)

Head Office: 1, Netaji Subhash Marg Daryaganj, New Delhi - 110002 INDIA

Phone: +91-11-23276114, 23244474, 23250281, 23278846 **Fax:** +91-11-43580558

Branch Office: 4/20 Kirti Nagar Industrial Area New Delhi - 110015 **Phone:** +91 11 45380800

Warehouse: 4/26 Kirti Nagar Industrial Area New Delhi - 110015

info@zealinternational.com

sales@zealinternational.com

support@zealinternational.com

quotation@zealinternational.com

Visit us at: www.zealinternational.com

Digital Direct / Residual / Shear Apparatus ZI 3054

Standards: ASTM D3080; BS 1377:7; AASHTO T236, CENISO/ TS 17892-10

Specification:

The test covers the determination of consolidated drained shear strength of a soil material in direct shear. This Automatic Direct / Residual Shear Test Machine is motorized and floor mounted. Supplied with carriage assembly load hanger and integral 9:1, 10:1 and 11:1 lever loading device as standard. The beam loading device which is used to amplify the vertical load on the shear box assembly can receive up to 50 kg of weight. The total load on the specimen can reach up to 5 kN (5000 N). The machine accepts 60 mm square, 100 mm square, 60 mm dia. round, 100 mm dia. round and 2.5 inc. dia. round shear box assemblies. All shear box assemblies are designed to contain water that surrounds the specimen. The Assemblies consist of a shear box with a rigid wall square or round hole complete with a vertical loading pad grooved back face, a grooved retaining plate, 2 pcs. porous plates, 2 pcs. plane grids and 2 pcs. perforated grids.

The shear machine is driven by high resolution servomotor and gear box assembly. Speed range is fully stepless variable over the range 0.00001 to 9.99999 mm/min for both direction (forward and reverse). After test the reverse speed is 10 mm/min.). 5 kN load cell is used for load measurement. 10 x 0.001 mm and 25 x 0.001 mm sensitivity linear potentiometric transducers are



used for vertical and horizontal displacement measurements respectively. Displacement limits are controlled by limit switch. Shear Box Assembly, Slotted Weight Set and other optional accessories including specimens cutter and extrusion dolly should be ordered separately :

The Automatic Direct Residual Shear Test Machine is supplied complete with

- Load Cell 5 kN
- Linear Potentiometric Displacement Transducer (10x0.001 mm)
- Linear Potentiometric Displacement Transducer (25x0.001 mm)
- Software