

DIRECT SHEAR TEST MACHINE

STANDARDS: ASTM D3080; BS 1377:7; AASHTO T236, CEN-ISO/TS 17892-10

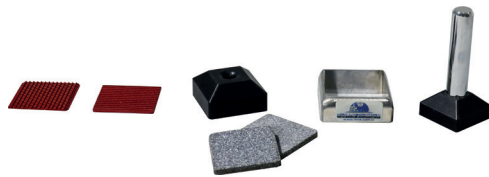
The test measures the consolidated drained shear strength of a soil material in direct shear. Automatic Direct Shear Test Machine is motorized with servo motor and measuring sensors are electronically connected to a digital readout unit to get accurate readings. Supplied with carriage assembly load hanger and integral 9:1, 10:1 and 11:1 lever loading device as standard. The loading arm 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.

The shear machine is driven by high resolution servomotor and gear box assembly. Speed range is fully steeples variable over the range 0.00001 to 9.9999 mm/min. 5 kN load cell is used for load measurement. 10 x 0.002 mm and 25 x 0.01 mm sensitivity displacement sensors are used for vertical and horizontal displacement measurements respectively. Displacement limits are controlled by limit switch.

The machine shear box tests on 60 mm and 100 mm square, Ø60 mm round, Ø100 mm round and Ø2,5" round samples. All Shear box assemblies can contain water that surrounds the specimen. The Assemblies consist of a shear box with a rigid wall square, complete with a Vertical Loading Pad grooved back face, a Grooved Retaining Plate, 2 pieces Porous Plates, 2 pieces Plane Grids and 2 pieces Perforated Grids.

Direct Shear Test Machine Supplied with Slotted Weight Set.

Shear Box Assembly, Specimen cutter and Extrusion Dolly should be ordered separately depending on the sample size.



Shear Box Accessories



HR-S2000

Spare Parts & Accessories:

Product Code	Product Name
HR-S2000/1	Slotted Weight Set, 50 kg (4x10 kg + 1x5 kg + 2x2 kg + 1x1 kg)

Technical Specifications:

Product Code	Product Name	Dimensions (cm)	Weight (kg)	Speed Range (mm/min)	Maximum Shear Force (kN)	Maximum Vertical load (N)	Power Supply
HR-S2000	Automatic Direct Shear Test Machine	65x155x135	120	0.0001 to 9.9999	5	0 to 500 N applying 5000 N using 10:1 beam loading device	220 V, 50-60 Hz, 1 ph

The Accessories of Shear Box Assemblies:

Product Name	Product Code				
	60x60 mm	Ø 60 mm	100x100 mm	Ø 100 mm	Ø 2.5 inch
Shear Box Assembly	HR-S2100	HR-S2200	HR-S2300	HR-S2400	HR-S2500
Shear Box	HR-S2100/1	HR-S2200/1	HR-S2300/1	HR-S2400/1	HR-S2500/1
Loading Pad	HR-S2100/2	HR-S2200/2	HR-S2300/2	HR-S2400/2	HR-S2500/2
Retaining Plate	HR-S2100/3	HR-S2200/3	HR-S2300/3	HR-S2400/3	HR-S2500/3
Porous Plate	HR-S2100/4	HR-S2200/4	HR-S2300/4	HR-S2400/4	HR-S2500/4
Plane Grid	HR-S2100/5	HR-S2200/5	HR-S2300/5	HR-S2400/5	HR-S2500/5
Perforated Grid	HR-S2100/6	HR-S2200/6	HR-S2300/6	HR-S2400/6	HR-S2500/6
Specimen Cutter	HR-S2100/7	HR-S2200/7	HR-S2300/7	HR-S2400/7	HR-S2500/7
Extrusion Dolly	HR-S2100/8	HR-S2200/8	HR-S2300/8	HR-S2400/8	HR-S2500/8