



# DIRECT SHEAR TEST MACHINE / APPARATUS FOR SOIL

## **STANDARDS**

---

AASHTO T236

ASTM D3080

BS 1377-7

NF P094071-1/2

## **APPLICATIONS**

---

### **Direct Shear Test Machine / Apparatus for Soil**

Direct Shear Test Machine / Apparatus for Soil is used to assess the shear strength of soil. This method is essential for various engineering applications, including the design of foundations, retaining walls, bridge slabs, pipelines, and sheet piling structures. Accurate determination of soil properties such as internal friction angle and cohesion is critical for effective design.

The Direct Shear Test provides a fast and reliable way to estimate these parameters. Laboratory reports outline the procedures for testing and evaluating cohesionless soils.



## **QualiShear™ 1**

The strain-controlled direct shear machine includes essential components such as a shear box, soil container, loading unit, proving ring, and a dial gauge (ordered separately) to measure shear deformation and volume changes.

One common soil container is a two-piece square shear box. The proving ring is used to measure the shear load exerted on the soil along the shearing plane.

**QualiShear™ 2(Light weight and portable)**



### **QualiShear™ 3 (Quadruplet)**

Dial indicators need to be ordered separately.



## QualiShear™ 4 (Duodenary)

Dial indicators need to be ordered separately



# Direct Shear Test Machine / Apparatus for Soil Technical Specifications

<b>QualiShear™ 1</b>	
Max Vertical Load	400KPa
Vertical Load	50KPa, 100KPa, 200KPa, 300KPa, 400KPa
Corresponding Weight	1.275, 2.55, 5.1, 7.65, 10.2 kg
Lever Ratio	1:12
Level Shear Force	Max. 1.2KN
Sample Area	30cm <sup>2</sup> , height 2cm
Shear Rate	0.02, 0.8, 2.4 mm/min
Power Source	220V±10%, 50Hz (110V is also available)
Dimension	850 x 550 x 1100 mm (LxWxH)
Weight	40 Kg
<b>QualiShear™ 2</b>	
Soil Sample Area	30cm <sup>2</sup> x 2cm (H)
Vertical Load	50KPa, 100KPa, 200KPa, 300KPa, 400KPa (hanger is first grade)
Lever Ratio	1:12
Level Shear Force	Max. 1.2KN
Sample Area	30cm <sup>2</sup>
Power Source	Manual
Corresponding Weights/ Weight(kg)	1.275, 2.55, 5.1, 7.65, 10.2 kg

<b>QualiShear™ 3</b>	
Vertical Load	50KPa, 100KPa, 200KPa, 300KPa, 400KPa
Lever Ratio	1:12
Shear Box Quantity	4
Level Shear Force	Max. 1.2KN
Sample Area	30cm <sup>2</sup> , 2cm height
Shear Rate(mm/min)	Stepless speed regulation, with digital display controller
Power	<100W
Power Source	220V±10%, 50Hz (110V is also available)
Dimension	680 x 740 x 1050 mm (LxWxH)
Weight	200 Kg
<b>QualiShear™ 4</b>	
Vertical Load	400KPa, 300KPa, 200KPa, 100KPa, 50KPa
Lever Ratio	1:12
Max Load	1.2KN
Load Method	Weight
Sample Area	30cm <sup>2</sup>
Soil Sample Container Quantity	12, sample 36 at the same time
Dimension	760 x 880 x 1100 mm (LxWxH)
Weight	220 Kg (includes weights)



ADVANCED TESTING TECHNOLOGIES

USA | CANADA | UAE | GCC | EU | INDIA | APAC | AFRICA | LATIN AMERICA

## Connect with us

Contact our **QualiTeam** today to find out how we can help your organization **select the most suitable testing solution** for your application, requirements, and budget.

### Qualitest USA (Corporate Sales Office)

Toll-Free: 1.877.884.TEST (8378) | Fax: 954.697.8211  
E-mail: [info@qualitest-inc.com](mailto:info@qualitest-inc.com)  
Address: 8201 Peters Rd., #1000,  
Plantation, FL 33324, USA.

### Qualitest Canada & International

Tel: +1.905.944.9825 | Fax: +1.905.944.0304  
E-mail: [sales@qualitest-inc.com](mailto:sales@qualitest-inc.com)  
Address: 70 East Beaver Creek Rd., #9, Richmond Hill,  
Ontario L4B 3B2, Canada.

### Qualitest Latin America (Mexico and LATAM Region)

E-mail: [ventas@qualitest-inc.com](mailto:ventas@qualitest-inc.com)

### Qualitest KSA (Regional Office)

Tel: +966 11 500 6659  
Address: Level 7, 3.09, District 3, King Abdullah  
Financial District, Riyadh, Saudi Arabia

### Qualitest Singapore (ASIA PACIFIC Regional Office)

Tel: +65 6393 5480 | E-mail: [singapore@qualitest-inc.com](mailto:singapore@qualitest-inc.com)  
Address: 50 Raffles Place, Singapore Land Tower,  
Level 46, Singapore, 048623.

### Qualitest Indonesia (Representative Office)

Tel: +62 21 2985 9522 | Fax: +62 21 2985 9889  
E-mail: [indonesia@qualitest-inc.com](mailto:indonesia@qualitest-inc.com)  
Address: One Pacific Place Level 11, Jl. Jend. Sudirman,  
Kav. 52-53, SCBD Area, Jakarta 12190, Indonesia.

### Qualitest FZE (Regional GCC/ME Office)

Tel: +971 4 8819252 | Fax: +971 4 8819262  
Email: [gcc@qualitest-inc.com](mailto:gcc@qualitest-inc.com)  
Address: Jafza One, BB 1610, Jebel Ali Free Zone,  
PO Box 261440, Dubai, UAE.

### Qualitest India

E-mail: [india@qualitest-inc.com](mailto:india@qualitest-inc.com)  
Address: 15th Floor, Dev Corpora, Pokhran Road No.1,  
Eastern Express Highway, Thane, Maharashtra,  
Mumbai, 400601, India

