

Geotextile Shear Friction Tester

This geotextile shear friction tester is mainly used for friction testing of soil geosynthetics and surrounding soil tensile resistance, as well as direct shear friction testing between geosynthetics and soil. It assesses the performance and stability of geotextiles in soil reinforcement, erosion control, and drainage systems.



Overview

Geotextile Shear Friction Tester

This specialized test system is designed for evaluating the frictional resistance between geosynthetics and surrounding soil. It performs both direct shear friction tests and tensile pull friction tests, making it an essential tool for civil engineering quality control and material characterization. The system features automated testing capabilities, precise displacement control, and comprehensive data analysis software to ensure accurate performance assessment.

Technical Specifications

Stress Range

10 KN

Max Shear Stress

600 KPa

Normal Force Range

Test Box Dimensions

| Test Type | Dimensions (mm) |
|------------------|-----------------|
| Shear Box | 300 x 300 x 50 |
| Drawing Test Box | 250 x 200 x 200 |

Performance Metrics

- Displacement Stroke: 50mm
- Displacement Accuracy: 0.01mm
- Shear Stress Accuracy: 0.5%
- Normal Force Accuracy: 10KPa
- Speed Regulation: 0.1-5mm/min (Stepless)

Compliance & Features

System Features

- Precision ball screw drive for smooth, low-noise operation
- Automated test completion and result display
- Real-time tensile and displacement curve visualization
- Integrated micro printer for immediate reporting
- Dedicated software for data storage and processing

Standards Compliance

JTG E50-2006 T1129, JTG E50-2006 T1130, GB/T17635.1-98, Water Conservancy Standards

Power Supply

220V (50HZ ± 1%)