

# PROETI

## SOILMATIC SHEAR

### Advanced Automatic System for Direct/Residual Shear Testing

The SOILMATIC SHEAR is a high-precision automated system designed for the determination of shear strength in a wide range of soil types, including consolidated, drained, undisturbed, and remolded soils. Featuring cutting-edge technology, it ensures the accurate and uniform application of both vertical and horizontal loads, with minimal maintenance requirements and optimized energy efficiency. Its compact, robust, and noise-reduced design facilitates autonomous operation via a touchscreen interface or advanced software, while also supporting modular expansion for enhanced laboratory productivity.



#### ✓ High Sustainability: Quiet Operation and Simplified Installation

Incorporating a state-of-the-art electromechanical system, it eliminates the need for dead weights and large air compressors, thereby substantially reducing acoustic emissions within the laboratory. This advanced technology minimizes maintenance requirements and offers straightforward installation, optimizing spatial efficiency.

#### ✓ Total Flexibility: Compact and Modular Design

Provides a highly productive and flexible solution with a compact design that optimizes laboratory space. Additionally, its modular structure allows for future integration of multiple units, enabling scalable increases in laboratory productivity.

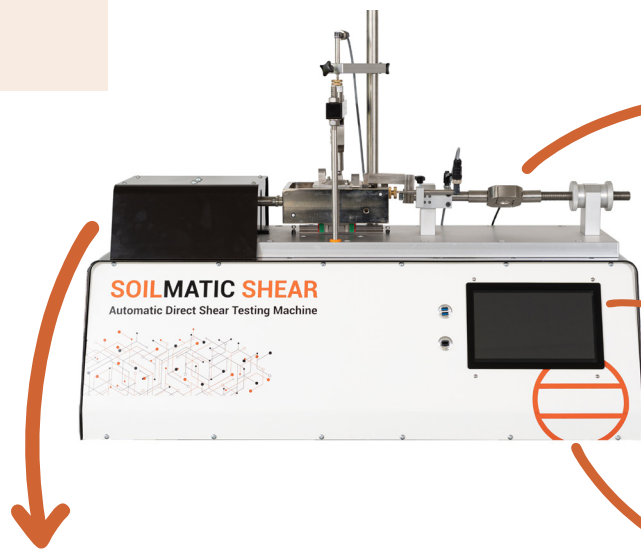
#### ✓ High Performance: Extensive Parameter Range

Featuring high-precision, durable sensors, the system supports a maximum horizontal and vertical force of 10 kN, with a speed range from 0.00001 to 10.00000 mm/min. The SOILMATIC SHEAR is designed to accommodate both standard testing and advanced research applications, allowing for the application of higher loads and greater displacement ranges to meet the demands of specialized studies.

#### ✓ Fully Automated: Increased Productivity

The entire test is performed fully automatically, optimizing both time and result accuracy. With its direct horizontal force transmission system, the head and 10kN load cell operate with high precision, eliminating any inaccuracies in the horizontal load measurement. This ensures reliable and consistent results while reducing operator intervention.

## SUPERIOR QUALITY DESIGN: PRECISION ENGINEERING AND HIGH-QUALITY COMPONENTS



### Robust Frame

Engineered to ensure test stability and equipment durability, featuring high-quality components that provide exceptional resistance to continuous use.

### High-Performance Sensors

Equipped with high-precision LVDT transducers and high-quality load cells to ensure optimal reliability and accuracy.

### 10" Touchscreen Display

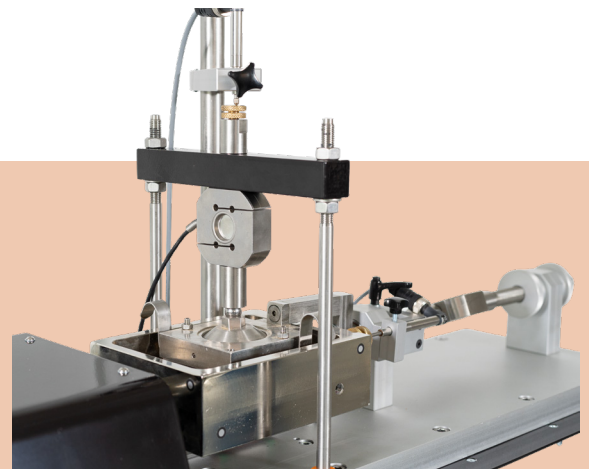
High-resolution screen with an intuitive interface, enabling seamless real-time monitoring and visualization of test parameters and results.

### Compact Structure

An efficient design that minimizes space impact in the laboratory without compromising performance.

## EDS 2.0 SOFTWARE

We present the latest version of Soilmatic software for soils: EDS 2.0. Developed by Proeti, EDS 2.0 represents the culmination of over 30 years of expertise in advanced material testing. This upgraded version refines the user interface, optimizes the configuration process, and introduces advanced features that enhance automation capabilities and enable in-depth data analysis.



### Enhanced and Intuitive Interface

The EDS 2.0 version features an optimized, user-centric interface with streamlined menus and advanced visual enhancements, enabling rapid and efficient test configuration and setup.

### Residual Displacement of 50 mm:

Intelligent control of residual displacement, enabling up to 50 mm, enhancing soil characterization and ensuring more representative and reliable results in advanced geotechnical studies.

### Regulatory Compliance and Customization

Ensures compliance with the highest international standards. Additionally, EDS 2.0 allows users to customize tests and calculations according to specific requirements.

### Data Storage and Analysis

All results are automatically recorded and stored. Additionally, graphs and data can be easily exported to Word or Excel files for further detailed analysis.

### Enhanced Automation

The system automates the progression of tests between load stages, optimizing productivity and reducing risk by eliminating the need for operator intervention.

### Centralized Management

The software supports the simultaneous control and monitoring of multiple units from a single PC, enhancing laboratory workflow efficiency and maximizing operational capacity.