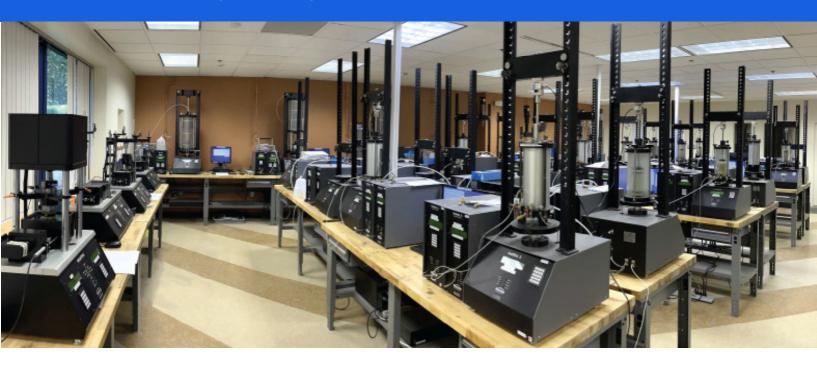


# **AUTOMATED LABORATORY TESTING SYSTEMS** FOR SOIL, ROCK, AND GEOSYNTHETIC TESTING





Construction/Infrastructure



Wind/Energy Engineering



Roadways/Pavement



Slope Stability/Embankments



Mine Waste/Tailings



Earthquake Engineering









# Consolidation

Incremental Consolidation and Swell Testing ASTM D2435 , D4546 AASHTO T 216

Unconfined Compression ASTM D2166, AASHTO T 208 California Bearing Ratio (CBR) ASTM D1883, AASHTO T 193



#### **Rowe Consolidation**

Rowe Consolidation ASTM D2435, D4186 Permeability ASTM D5084



# **Constant Rate Consolidation**

Constant Rate of Strain Consolidation ASTM D4186

Incremental Consolidation and Swell Testing ASTM D2435, D4546 AASHTO T 216

Unconfined Compression ASTM D2166, AASHTO T 208 CBR

ASTM D1883, AASHTO T 193





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#### Consolidation

Incremental Consolidation and Swell Testing ASTM D2435, D4546, AASHTO T 216 Unconfined Compression ASTM D2166, AASHTO T 208

#### **Constant Rate Consolidation**

Constant Rate of Strain Consolidation ASTM D4186

Incremental Consolidation and Swell Testing ASTM D2435, D4546, AASHTO T 216 Unconfined Compression ASTM D2166, AASHTO T 208





#### **Triaxial**

**Triaxial**ASTM D2850 (UU), D4767 (CU), D7181 (CD)
AASHTO T 296, T 297

Constant Rate of Strain Consolidation ASTM D4186

Incremental Consolidation and Swell Testing ASTM D2435, D4546. AASHTO T 216

Unconfined Compression ASTM D2166, AASHTO T 208

#### **Triaxial & Stress Path**

Triaxial ASTM D2850 (UU), D4767 (CU), D7181 (CD) AASHTO T 296, T 297

Constant Rate of Strain Consolidation **ASTM D4186** 

**Incremental Consolidation** and Swell Testing ASTM D2435, D4546

ASTM D2435, D4186

Permeability (need 3 FTIIs)



# **Resistivity Measurement System**

ASTM G187, AASHTO T 288





# Cyclic Triaxial

Cyclic Triaxial Stress and Strain Control ASTM D3999, D5311

Post Cyclic Residual Strength ASTM D4767, D7181, AASHTO T 297

Resilient Modulus AASHTO T 294, T 307

ASTM D2850 (UU), D4767 (CU), D7181 (CD) AASHTO T 296, T 297



# **Advanced or Bidirectional** Cyclic Direct Simple Shear

Cyclic Direct Simple Shear **ASTM D8296** Direct Simple Shear **ASTM D6528** 

#### **Direct Shear**

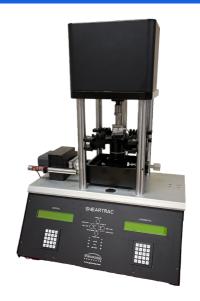
Direct/Residual Shear ASTM D3080, AASHTO T 236

Direct Simple Shear **ASTM D6528** 

**Incremental Consolidation** and Swell Testing ASTM D2435 / D4546 AASHTO T 216

**Unconfined Compression** ASTM D2166, AASHTO T 208





## Standard Cyclic Direct Simple Shear

Cyclic Direct Simple Shear

**ASTM D8296** 

Post Cyclic Residual Strength

Direct Simple Shear

**ASTM D6528** 

Direct/Residual Shear ASTM D3080, AASHTO T 236

Incremental Consolidation and Swell Testing ASTM D2435 / D4546, AASHTO T 216

**Unconfined Compression** ASTM D2166, AASHTO T 208

#### **Resonant Column-Torsional Shear**

Resonant Column ASTM D4015

Post Cyclic Residual Strength ASTM D4767 / D7181 AASHTO T 297, COE EM 1110

#### **Resilient Modulus**

Resilient Modulus AASHTO T 294, T 307 SHRP Protocol P46 NCHRP RPT 285

Incremental Consolidation and Swell Testing ASTM D2435, D4546 AASHTO T 216

Unconfined Compression ASTM D2166, AASHTO T 208 CBR

ASTM D1883, AASHTO T193



**Lab Vane Shear System**ASTM D4648





# Large Shear

Direct/Residual Shear ASTM D3080, AASHTO T 236 Interface Shear ASTM D5321, D6243 Rock Shear ASTM D5607



#### P-and-S Wave Measurement

PC-based digital storage oscilloscope (DSO). USB-connected with built-in signal excitation



#### \*Systems also compliant with British, ISO/TS, and other international standards

### Cyclic Large Shear

Cyclic Direct Simple Shear ASTM D8296

Direct Simple Shear ASTM D6528

Direct/Residual Shear ASTM D3080, AASHTO T 236

Interface Shear ASTM D5321, D6243



# **Automated Geotechnical Laboratory Testing Systems**

Geocomp's Products Division has delivered fully automated geotechnical testing systems for more than 40 years with the winning combination of technical sophistication, reliability, and ease-of-use. We have merged the latest technology in electronic and mechanical components with powerful software algorithms to create unique, highly accurate, fully automated equipment.

## What Geocomp Products Offer

- Built in safety features
- Smart and sophisticated technologies to simplify testing
- · Repeatable, reliable, and accurate results you can trust
- Real-time and remote test parameter changes for quality control
- Convenient reporting and data export
- Faster, smarter, better: designed with full automation and manual control options
- Easy upgrade to perform additional test types
- · Designed and manufactured in the USA

# **Benefits of Buying from Geocomp**

#### We Are Your Trusted Parter

- Geotechnical testing & consulting experts on staff
- Highly skilled and experienced technical support team
- Client portal with access 24 hours a day, 7 days a week
- Regional support around the globe
- Excellent customer satisfaction policies
- Clients in over 60 countries, including top-rated companies and universities

#### Collaboration and Innovation

- Laboratory design and setup support
- Advanced, affordable equipment to support a range of client needs
- R&D support for customized solutions
- Continuous product enhancements driven by client feedback
- Designed and testing in real-world environment (GeoTesting Express, LLC)

# **Compliant with Modern Standards**

- Application and reporting compliant with modern standards such as ASTM, AASHTO, ISO, BS and other international standards
- Quality assured systems to industry standards so you can rely on the results
- Labs using our systems are accredited and/or validated by government agencies and other accrediting bodies, globally



### Test Smart. Test with Confidence. Test for Success.

"I thoroughly researched the available market for triaxial and simple shear test equipment and I soon realized that Geocomp is far ahead of the competitors in terms of product and capabilities...I have also been impressed with their technical support and continued assistance."

- California State University, Los Angeles

"Thanks to Geocomp and its support team, we are recognized today for the quality of our services and for carrying out the most advanced tests in soil with great speed and efficiency."

- Pattrol Investigações Geotécnicas

"What really sets Geocomp apart from other geotechnical laboratory equipment suppliers, is the fast and knowledgeable technical support. It's exceedingly easy to get a hold of knowledgeable personnel who have a firm grasp of the equipment, the test procedures and challenges with various soil types and test conditions."

-Soil Engineering Testing

The equipment is highly versatile and reasonably priced which often is a key factor considering budget restrictions at public universities.

- University of Nevada Reno

"I would not hesitate to recommend Geocomp to other universities, governmental agencies and consulting firms for their geotechnical testing needs. Their equipment is highly reliable, simple to use and competitively priced...We have particularly found their technical assistance invaluable."

- University of New Hampshire

# **GEOCOMP PRODUCTS**

We design and manufacture automated laboratory testing systems and remote monitoring devices. We focus on creating premium products and offering expert technical support to help our clients accomplish their goals efficiently and successfully whether it be in teaching, research, commercial, or other applications. Our automated testing and remote monitoring systems are versatile, easy to use, and robust to work in varying environmental settings.

We serve numerous clients in more than 60 countries with a broad range of testing and monitoring needs. Join our many satisfied customers and make us your trusted source for automated laboratory testing systems and remote monitoring equipment.