Automated Geotechnical Laboratory Testing Systems

Geocomp’s Products Division has delivered fully automated geotechnical testing systems for more than 35 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 a unique, highly accurate, fully automated equipment.

What Do Geocomp Products Offer?

- Unmatched automation from test start to finish - 2 to 32 times faster results and labor time savings of 30% to 95% vs. manual testing
- Flexible design - perform additional testing on the same platform to save money and space in your lab
- Full test control and remote monitoring allow you to take your testing on the go - view real-time results, check test quality, and change parameters
- Convenient reporting - produce complete, complaint reports instantly or export data for desired manipulation
- Designed for consistent and repeatable testing you can be confident in

Additional Benefits of Geocomp Automated Systems:

- Time-tested design for years of reliable and repeatable testing
- High accuracy and precision with low electronic "noise" - stable to one part in 65,000
- Common Windows® based user-interface across all test types for easy learning and operation
- Remote accessibility allows for convenient and interactive technical support
- Precise control of loading and displacement rates for both monotonic and cyclic testing
- Built-in smart protection systems to minimize damage to equipment
- Measure strain to as low as 10⁻⁷ and displacement as low as 0.01µm, even at high sampling rates
- Detailed load or strain control for cyclic testing at rates up to 10 Hz
- Maintain precise control of cyclic deviator stress on 6 in. high specimens up to 5% peak-to-peak axial strain at 1 Hz
- Built-in data reduction and reporting saves considerable time and gets results out faster
- Raw data format and tabular export for research or advanced analysis
- Designed, manufactured, and supported by Geocomp's full-time staff of degreed and experienced professionals

Standards Compatible

- Full reports of graphs and tables compatible with ASTM, AASHTO, ISO, and BS
- Quality assured systems to industry standards so you can rely on the results
- Links using our systems are accredited and/or validated by government agencies and other accrediting bodies, including AASHTO, USACE, A2LA, and GAI-LAP

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GEOCOMP PRODUCTS

We design and manufacture automated laboratory testing systems and remote monitoring devices. We focus on creating premium products and delivering expert technical support to help our clients accomplish their goals efficiently and successfully, whether it be in testing, 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 50 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.

www.geocomp.com
(978) 635-0012
### Consolidation
- Incremental Consolidation and Swell Testing
- Unconfined Compression
- California Bearing Ratio (CBR)
- ASTM D2435, D4546, AASHTO T 216

### Triaxial & Stress Path
- Triaxial
  - ASTM D2850 (UU), D4767 (CU), D7181 (CD)
  - AASHTO T 296, T 297
- Incremental Consolidation and Swell Testing
  - ASTM D2435, D4546
- CBR

### Resilient Modulus
- Resilient Modulus
  - ASTM D4186
  - AASHTO T 294, T 307
- Incremental Consolidation and Swell Testing
  - ASTM D2435, D4546
- CBR

### Constant Rate Consolidation
- Constant Rate of Strain Consolidation
  - ASTM D4186
- Incremental Consolidation and Swell Testing
  - ASTM D2435, D4546

### Unconfined Compression
- ASTM D2166, AASHTO T 208

### California Bearing Ratio (CBR)
- ASTM D1883, AASHTO T 193

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

### Cyclic Triaxial
- Cyclic Triaxial Stress and Strain Control
  - ASTM D3999, D5311
- Incremental Consolidation and Swell Testing
  - ASTM D2435, D4546

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

### Resonant Column-Torsional Shear
- Resonant Column
  - ASTM D4015
- Post Cyclic Residual Strength
  - ASTM D4767 / D7181
  - AASHTO T 297, COE EM 1110

### Triaxial
- Cyclic Triaxial
  - ASTM D4767, D7181
- AASHTO T 296, T 297

### Permeability
- ASTM D5084

### Cyclic Triaxial Stress and Strain Control
- ASTM D3999, D5311

### 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

### Rowe Consolidation
- ASTM D2435, D4186

### Permeability
- ASTM D5084

### Advanced or Bidirectional Cyclic Direct Simple Shear
- Cyclic Direct Simple Shear
  - ASTM D6528

### Standard Cyclic Direct Simple Shear
- Cyclic Direct Simple Shear
  - Post Cyclic Residual Strength
  - Direct Simple Shear
  - ASTM D6528

### Direct Shear
- Direct/Residual Shear
  - ASTM D3080, AASHTO T 236
  - ASTM D4767, D7181

### Interface Shear
- ASTM D5321, D6243

### Rock Shear
- ASTM D5607

### Cyclic Large Shear
- Cyclic Direct Simple Shear
  - Post Cyclic Residual Strength
  - Direct Simple Shear
  - ASTM D6528

### Post Cyclic Residual Strength
- ASTM D4767 / D7181
  - AASHTO T 297

### P-and-S Wave Measurement
- PC-based digital storage oscilloscope
  - USB-connected with built-in signal excitation

*Systems also compliant with British, ISO/TS, and Australian standards*