



### Interface Shear Tester (GDSIST)

**Overview:** The GDS Interface Shear Tester (GDSIST) has been designed to test the shear interface between the soil specimen and the sample top-cap. Top-cap interfaces of differing roughness can be used to simulate differing insitu conditions.

The GDSIST is a CRS consolidation cell with the ability for the base pedestal to infinitely rotate. The internal load cell measures the axial force on the specimen as well as the applied torque.

#### Key Features:

#### Benefits to the User:

|                                       |   |
|---------------------------------------|---|
| Interface friction studies:           | The most common uses for the GDSIST include studies of interface friction, for example between geomembranes, pipeline footings and natural materials. |
| Load cells:                           | Low range load cell for accurate low stress testing of axial load and torque.   |
| Stainless steel:                      | Available in stainless steel for corrosive sample testing.  |
| Internal submersible load cell:       | This allows the user to measure friction between the sample and material without errors being introduced by the seal friction on the ram.             |
| Compact:                              | Small laboratory footprint.   |
| GDS force actuators for axial stress: | Accurate electro-mechanical control of axial force and displacement with keypad + display for local control.  |

#### Tests that can be Performed:

Some typical applications of tests available in the GDSIST include one-dimensional specimen consolidation and rotational shearing under torque or rotation control.

#### Upgrade Options:

Unsaturated testing.

#### Technical Specification:

|                                  |  |
|----------------------------------|--|
| <b>Actuators:</b>                | 1 off vertical, 1 off torsional                            |
| <b>Axial Force Accuracy:</b>     | ±0.2%  |
| <b>Axial/Torque Force Range:</b> | 0.2kN/20Nm, 1kN/10Nm or 5kN/200Nm                          |
| <b>Computer Interface:</b>       | USB  |
| <b>Power:</b>                    | Table top frame: 240V, Control systems: 100-240V~1.6A MAX  |
| <b>Pressure Range (MPa):</b>     | 1, (2MPa cell available upon request)                      |
| <b>Sample Sizes (mm):</b>        | 38, 50, 70, 100, other sample sizes available upon request |

## Why Buy GDS?

### Technical Support:

GDS provide comprehensive on-site product training and installation. GDS understand the need for ongoing after sales support, so much so that they have their own dedicated customer support centre. The support centre allows the user to log queries, download helpsheets and get the latest information on product updates. The site is fully searchable and provides a great resource to customers.

Alongside their support centre GDS use a variety of additional support methods including...

- **Remote PC Support:** Remote PC support works by GDS providing a secure link to a customers PC, thereby allowing GDS to take control. Once in control of the PC, GDS can help with any problems associated to software, installation, testing etc.
- **Product Helpsheets:** The helpsheets are the GDS FAQ documents. They cover a multitude of hardware and software questions and are free to download from our online support centre.
- **YouTube Channel:** GDS YouTube channel holds both software and hardware video's aimed to give you better understanding of how the products work.
- **Email & Telephone Support:** If you prefer you can email requests to support@gdsinstruments.com where they will be automatically added to the support system and then allocated to a support engineer.

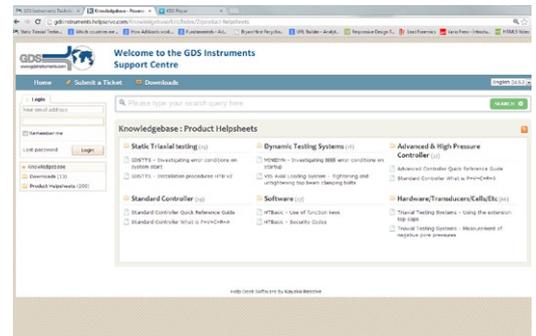


Fig. 1 GDS online customer support centre.

### GDS Awarded Queens Award for Enterprise in International Trade:

GDS have been presented with the most prestigious corporate award made in the UK – The Queen's Award for Enterprise in the International Trade category. GDS are delighted to have won the award which has been given to GDS for increasing overseas trade by 190% over six years of continuous sustained growth, and for selling over 85% of their production overseas. GDS have achieved this through a combination of continuous product development, understanding customer's requirements and a company wide dedication to customer support.



### Made in the UK:

All GDS products are designed, manufactured and assembled in the UK at our offices in Hook. Quality assurance is taken of all products before they are dispatched.



GDS are an ISO9001:2000 accredited company. The scope of this certificate applies to the approved quality administration systems relating to the "Manufacture of Laboratory and Field Testing Equipment".



Due to continued development, specifications may change without notice. See the GDS website for the full product range & to visit our Geotechnical Learning Zone.