

# Semi-Automatic Air/Water Pressure Triaxial Testing System

**Related Standards: BS1377-7 & 8; ASTM D2166/ D2166M- 13, D2850-03A, & D4767-11; D4767-11; AS1289.6.4.1 & 2; GEOSPEC 3**

The VJ Tech Semi-Automatic Air/Water Pressure Triaxial Testing System provides a low cost, effective solution to laboratory Triaxial testing.

The system incorporates a 50 kN TriPLEX load frame with built-in data logging for measuring Load, Displacement, Pore Water Pressure and Volume Change. The built-in RS232 interface allows the instrument to be networked and connected to the PC running Clisp Studio.

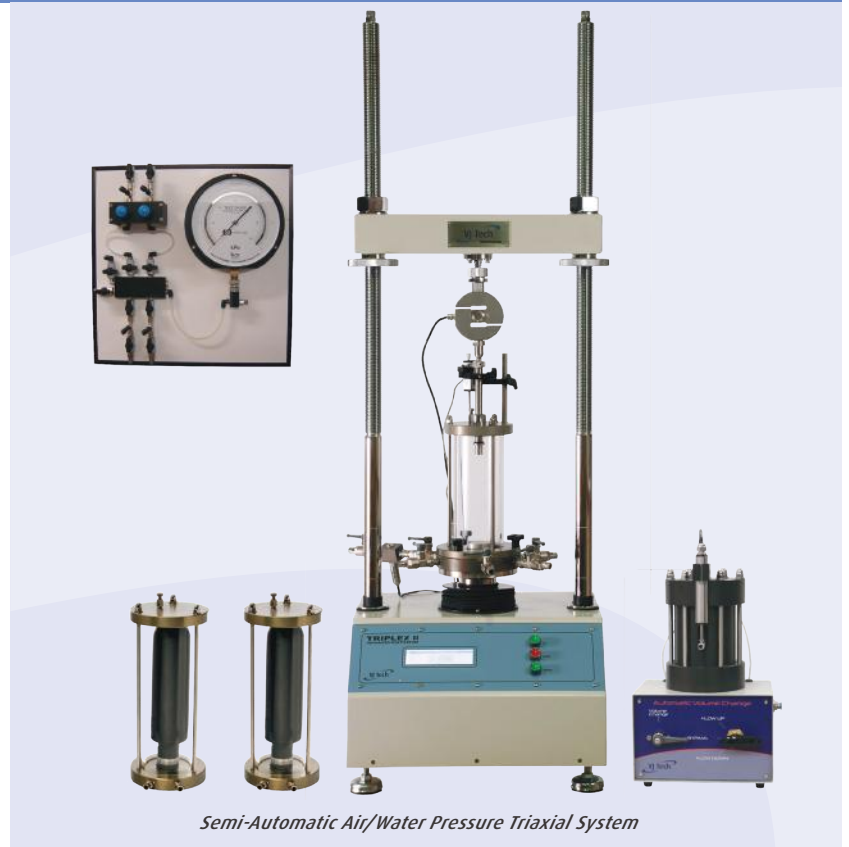
A vacuum pump is used in conjunction with a de-aired water tank to deliver de-aired water to a pressure distribution panel.

An existing compressed air supply (or an air compressor) supplies compressed air to the pressure distribution panel. Two air/water cylinders will then provide the Cell and Back water pressure to the Triaxial Cell holding the sample to be tested.

Triaxial Cells of 50, 76 and 100 mm are available to handle different sample sizes from 35 mm to 100 mm.

An Automatic Volume Change device is connected between the air/water cylinder and the Back pressure valve. Volume change measurements are passed back to the TriPLEX for onward transmission to the PC.

VJ Tech's user friendly Clisp Studio software provides the necessary test and instrument set up and configuration, test control and data acquisition and output to perform the standard range of Triaxial tests.



*Semi-Automatic Air/Water Pressure Triaxial System*

## Ordering Information

### Main System Components

|                    |  |
|--------------------|--|
| <b>VJT5011-ADV</b> | TriPLEX 50 kN Advanced Load Frame                                    |
| <b>VJT0520</b>     | Air/Water Pressure Panel (2-way)                                     |
| <b>VJT0500</b>     | Air/Water Cylinder (1000 kPa)  |
| <b>VJT0670</b>     | De-aired Water Tank  |
| <b>VJT0300A</b>    | Automatic Volume Change with LSCT transducer, cable & plug & bracket |

### Transducers

|                 |   |
|-----------------|---|
| <b>VJTS0362</b> | 10 kN S-Beam Load Cell with cable & plug        |
| <b>VJT0271</b>  | 25 mm Displacement transducer with cable & plug |
| <b>VJT0250</b>  | 1000 kPa Pressure transducer with cable & plug  |

### Accessories

|                      |  |
|----------------------|--|
| <b>VJT0280</b>       | De-airing block with valve for pressure transducer |
| <b>VJT-USB-RS232</b> | USB-Dual RS232 Converter Interface                 |
| <b>VJT0505T</b>      | Installation kit for Triaxial System               |

### Software

|                    |                                |
|--------------------|--------------------------------|
| <b>VJT-csTRIAX</b> | Clisp Studio Triaxial Software |
|--------------------|--------------------------------|

Assorted accessories are available for different size Triaxial Cells and sample preparation.  
Air compressors and Vacuum Pumps available on request.