

# Temperature Controlled Triaxial System

**Applicable Standards: BS 1377-7 & 8, ASTM D2166/D2166M-13, D2850-03A & D4767-11, AS1289.6.4.1 & 2 and GEOSPEC 3**

The VJ Tech Pro Temperature Controlled Triaxial System is capable of providing fully automatic total and effective Temperature Controlled Triaxial testing including;

- Consolidated Drained (CD)
- Consolidated Undrained (CU)
- Unconsolidated Undrained (UU) &
- Stress Path tests

The Temperature Control Unit (TCU) is operated remotely from the PC and enables Triaxial Testing from -20°C to +80°C.



### Heating and Cooling:

- The coil surrounds the sample within the Temperature Controlled Triaxial Cell
- The sample is heated or cooled via the cell fluid through a Stainless Steel coil
- Sample sizes up to 50 mm can be completely assembled, and the coil fitted afterwards

The has a maximum pressure of 2000 kPa. The cell is made of corrosion resistant materials and is insulated to protect against thermal loss.

The Pro Dual Automatic Pressure Controller is used to control and measure both Cell and Back Pressure & Volume. The Cell Pressure fluid is a 50/50 mix of antifreeze & de-aired water.

The Testing is carried out using our renowned Clisp Studio software, which provides all the necessary test configuration, control, data acquisition, results export and reports.

### System Features

- Triaxial Testing from -20°C to +80°C
- Maximum Cell Pressure 2000 kPa
- USB or Ethernet Interface from TriSCAN Pro to PC and RS232 link from TCU to PC

Pro Instruments have;

- Up to 10 input channels between them (1 x digital & 9 x analogue)
- Integrated 7" Touchscreen Colour Display for standalone input if required
- On-board data logging with large data storage (up to 14 million records) on SD card (8 Gb)



*Pro Temperature Controlled Triaxial System*

### Ordering Information

#### Main System Components

**VJT5110-P** TriSCAN Pro 100 kN Advanced Load Frame

**VJT-TEMPCO NTROL** Temperature Control Unit:  
Range -50°C to +200°C  
(200-230VAC/50-60Hz)

**VJT2267D-P** Dual Automatic Pressure Controller  
(up to 3500 kPa/250cc per Channel)

**VJT0549-TEMP** Temperature Controlled Triaxial Cell:  
- Up to 50 mm dia sample size  
- Temperature Range -20°C to +80°C  
- Maximum cell Pressure up to 2000 kPa

#### Transducers

**VJT0271** LSCT Displacement Transducer (25 mm)

**VJTS0366** 100 kN S-Beam Load Cell

**VJT0260-G** 20 bar Pressure transducer (2 MPa)

#### Accessories

**VJT0280** De-airing block with valve for pressure transducer

**VJT0280-SOL** Automatic Solenoid Valve (optional)

**VJT0281Q-TEMP** Adapter set to use 100 kN S-Beam Load Cell for Temperature Controlled System

**VJT0520-DP** APC Water Distribution Panel (2-way)

**VJT0505T** Installation Kit for Triaxial System

#### Software

**VJT-csTRIAX** Clisp Studio Triaxial Software