

Pro Series



*Submersible load cell positioned in the water bath to measure load as close as possible to the sample.*



*Water carriage removed and Consolidation Cell placed on adaptor, ready for Oedometer testing*

*ShearSCAN Pro Motorised Shear System with Internal Submersible Horizontal Load Cell*

# ShearSCAN Pro Motorised System

## Ordering Information

**VJT2585** ShearSCAN Pro with 10kN load cell and built-in 4 channel data acquisition

**VJT-csCONSHEAR** Clisp Studio Constant Shear Software

## Optional Ordering Information for Oedometer Testing

**VJT-csODO** Clisp Studio Oedometer Software

**(See ACONS Pro Datasheet for further details)**

## Specifications

Horizontal Travel	+/- 20 mm
Maximum Strain Rate	0.00001 to 99.99999 mm/min
Vertical Load	10 kN max
Horizontal Shear Force	10 kN max*
Power Supply	(90-240) VAC, 1ph, 50/60 Hz
Dimensions (L x W x H)	950 x 500 x 750 mm
Net Weight	68 kg Nominal

\* From November 2018 onwards

## Related Standards

**British** BS1377-5, BS1377-7, BS EN ISO 17892-5 : 2017  
BS EN ISO 17892-10 : 2018

**American** ASTM D2435-04, D2435-11, D3080-04,  
D3080-11, D6528-17

**Australian** AS1289.6.2.2, AS1289.6.6.1 : 1998

**French** XP P94-090-1

The VJ Tech ShearSCAN Pro Motorised System uses stepper motors for applying vertical and horizontal load to the sample. The self-contained tabletop model eliminates the need for the numerous weights required for dead weight systems.

The Advanced electronics enable the ShearSCAN Pro to carry out Constant Shearing, in addition to Direct and Residual shear. It is also capable of Oedometer testing using the supplied adaptor (requires csOEDO and associated Consolidation Cells).

Using our versatile csCONSHEAR software (which includes csSHEAR), a Test can be set up with 3 possible Consolidation Modes, 3 possible Vertical Control methods for the Shear Mode and 6 possible Shear Modes for the selected Vertical Control Method.

The system features a built-in Auto engaging function with a definable engage value and auto reverse from limit switch activation to prevent damage. It also includes inbuilt auto protection from sensor limits.

# ShearSCAN Pro Motorised Shear

## Accessories

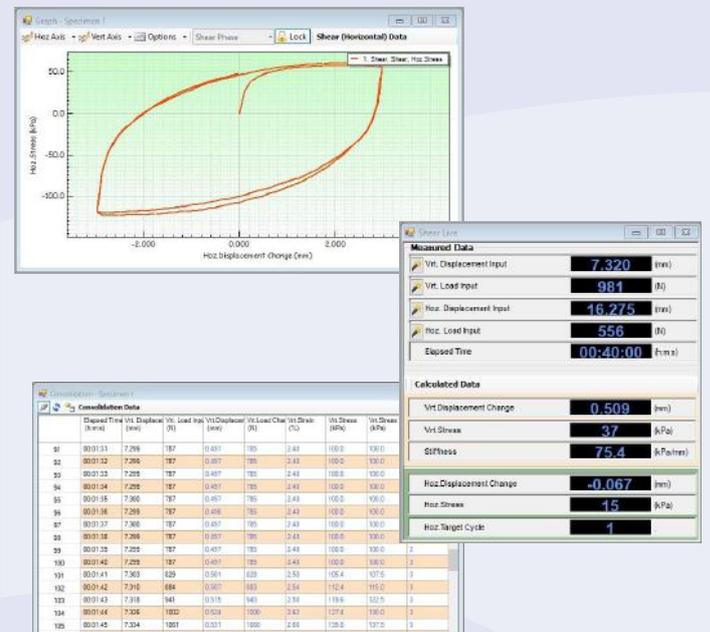
<b>VJT0352C</b>	Compact ISLC (10 kN)
<b>VJT0270</b>	Vertical Strain Transducer 10 mm
<b>VJT0272</b>	Horizontal Strain Transducer 50 mm
<b>VJT0284</b>	Mounting Brackets for transducers (x2)
<b>VJT2585-SBLOCK</b>	Spacer Block & Cradle (60 mm) *
<b>VJT2585-SBLOCK-100</b>	Spacer Block & Cradle (100 mm) *

\*Only required for multiple shearbox assemblies on a single unit

- Compact design (small footprint) able to fit on a table top
- Capable of Cyclic Shear & Direct Shear and/or Residual Shear
- Also capable of Oedometer testing with supplied adaptor (requires csOEDO)
- USB or Ethernet Interface for PC control
- Integrated 7" Touchscreen Colour Display for Standalone use
- Test setup and control facilities with large data storage using SD card (8GB standard)
- Stepper motors for Vertical and Horizontal force
- High Speed ARM Processor
- High Speed sensor conversion (24 bit, up to 4000 samples/sec)
- 4 Analogue input channels (Vertical & Horizontal Load and Displacement)
- Includes 10kN Vertical Load cell
- Horizontal ISLC not included
- Built-in live data table and graphs
- Built-in Auto engage function
- Built-in auto protection for sensor limits

## Sample Accessories (Sample Height 20 mm)

Sample size	60mm sq.	60mm dia.	2.5" sq.	2.5" dia.	70mm sq.	70mm dia.	100mm sq.	100mm dia.
Shearbox Assembly	<b>VJT2761S</b>	<b>VJT2761D</b>	<b>VJT2763S</b>	<b>VJT2763D</b>	<b>VJT2765S</b>	<b>VJT2765D</b>	<b>VJT2762S</b>	<b>VJT2762D</b>
Cutter	<b>VJT2552.06S</b>	<b>VJT2552.06D</b>	<b>VJT2552.2.5S</b>	<b>VJT2552.2.5D</b>	<b>VJT2552.70S</b>	<b>VJT2552.70D</b>	<b>VJT2552.10S</b>	<b>VJT2552.10D</b>
Dolly	<b>VJT2553.06S</b>	<b>VJT2553.06D</b>	<b>VJT2553.2.5S</b>	<b>VJT2553.2.5D</b>	<b>VJT2553.70S</b>	<b>VJT2553.70D</b>	<b>VJT2553.10S</b>	<b>VJT2553.10D</b>
Porous Stone	<b>VJT2554.06S</b>	<b>VJT2554.06D</b>	<b>VJT2554.2.5S</b>	<b>VJT2554.2.5D</b>	<b>VJT2554.70S</b>	<b>VJT2554.70D</b>	<b>VJT2554.10S</b>	<b>VJT2554.10D</b>



VJT-csCONShear Example Graphs & Live Data View

- 3 possible Consolidation Modes:
  - Single Stage,
  - Multiple Stage
  - Over Consolidation mode
- 3 possible Vertical Control methods for each Shear Mode:
  - Constant Normal Stress
  - Constant Normal Height
  - Constant Normal Stiffness
- 6 possible Shear Modes for selected Vertical Control Method
  - Static Push Shear tests
  - Static Push-Pull Shear tests
  - Static Push-Pull Loop Shear tests
  - Cyclic Displacement Shear tests
  - Cyclic Displacement Paused Shear tests
  - Cyclic Stress Shear tests
- Live data view of logged and calculated data
- Live Tabular display of logged and calculated data
- Live Graphical display of logged and calculated data
- Export of data to Excel and test script export & import