

# ShearTEST Pro Direct/ Residual Shear System

## Related Standards

**British** BS1377-7 : 1990, BS EN ISO 17892-10 : 2018

**American** ASTM D3080-04, D3080-11

**Australian** AS1289.6.6.2 : 1998, Q181C

VJ Tech's new ShearTEST Pro is an upgraded version of our popular ShearTEST Lever Loading, Direct/Residual Shearbox, which shears a sample under applied normal load along a predefined plane, until it is stressed to failure.

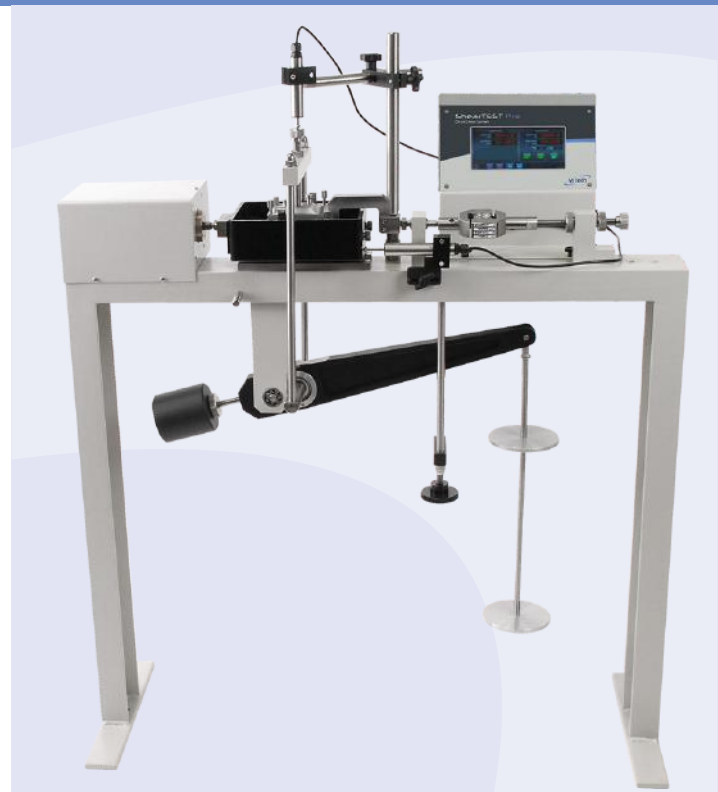
The apparatus is supplied complete with a lever loading device, hanger and shearbox carriage all mounted on a floor standing frame. The horizontal sensor, sample preparation kit, weights and Software are additional. The maximum lever loading arm load is 100 kg.

## Features

- 4 Analogue input channels (Vertical & Horizontal Load and Displacement)
- USB or Ethernet Interface for PC control
- Compact Design for a small footprint
- Integrated 7" Touchscreen Colour Display for Standalone use
- Test setup and control facilities with large data storage (up to 14 million records on internal SD card (8 Gb standard))
- High Speed ARM Processor
- High Speed sensor conversion (24 bit, up to 4000 samples/sec)
- Built-in live data table and graphs
- Data export via USB link to PC for manipulation in Excel if required
- Auto reverse from limit switch activation
- Built-in auto protection for sensor limits

## Specifications

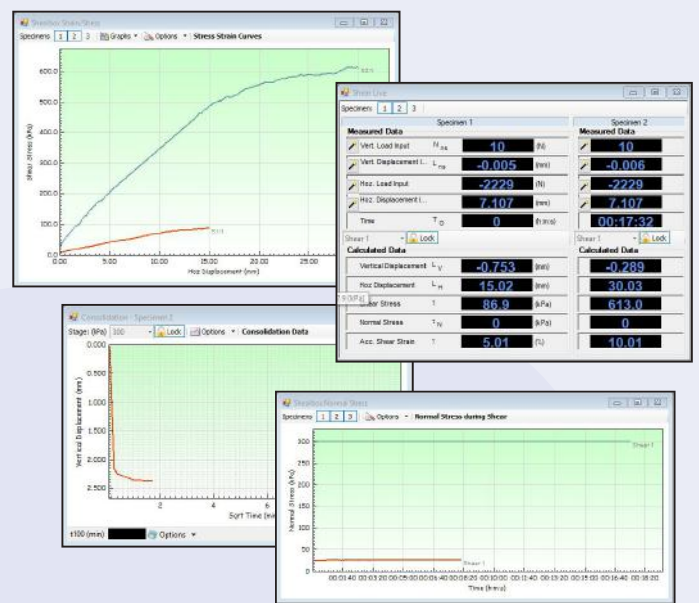
Horizontal Travel	20 mm
Speed Range: Standard	0.00001 to 10 mm/min
Fast Forward/Reverse	10 mm/min
Vertical Load	10 kN
Horizontal Shear Force	5 kN
Power Supply	220/240V 50/60 Hz 1ph
Dimensions (W x D x H)	940 x 420 x 1140 mm on stand
Weight	54 kg



VJT2760A-P - ShearTEST Pro Direct/Residual Shearbox

## Clisp Studio csSHEAR Software Features

- Direct/Residual Shear tests
- Multi specimen tests
- Automatic start/stop of test/machine
- Live Tabular display of logged and calculated data
- Live Graphical display of logged and calculated data
- User defined views / graphs / tables
- Standard predefined presentation reports
- Export of data to Excel & test script export & import



# ShearTEST Pro Direct/ Residual Shear System

## Ordering Information

### Main Instrument

**VJT2760A-P** ShearTEST Pro Direct/Residual Shearbox

### Software

**VJT-csSHEAR** Clisp Studio Direct/Residual Shear Software

## Vertical Settlement Measurement

Part No	Specification	Bracket/Adaptor
<b>VJT0105-M</b>	Mechanical Dial Gauge, 12 mm travel x 0.002 mm divisions	Included
<b>VJT0105-MIT</b>	Digital Dial Gauge, range 0 - 12.7 mm x 0.001 mm resolution included	Included
<b>VJT0270</b>	Displacement LSCT Transducer, range 10 mm	<b>VJT0284</b>

## Horizontal Settlement Measurement

Part No	Specification	Bracket/Adaptor
<b>VJT0110-M</b>	Mechanical Dial Gauge, 25 mm travel x 0.01 mm divisions	Included
<b>VJT0110-MIT</b>	Digital Dial Gauge, range 0 - 25.4 mm x 0.001 mm resolution	Included
<b>VJT0271</b>	Displacement LSCT Transducer, range 25 mm	<b>VJT0284</b>

## Accessories

Sample Size	60 mm sq.	60 mm dia.	100 mm sq.
Shear Box assembly (including stone)	<b>VJT2761S</b>	<b>VJT2761D</b>	<b>VJT2762S</b>
Cutter	<b>VJT2552.06S</b>	<b>VJT2552.06D</b>	<b>VJT2552.10S</b>
Dolly	<b>VJT2553.06S</b>	<b>VJT2553.06D</b>	<b>VJT2553.10S</b>
Stone (porous plate)	<b>VJT2554.06S</b>	<b>VJT2554.06D</b>	<b>VJT2554.10S</b>

Sample Size	100 mm dia.	2.5" sq.	2.5" dia.
Shear Box assembly (including stone)	<b>VJT2762D</b>	<b>VJT2763S</b>	<b>VJT2763D</b>
Cutter	<b>VJT2552.10D</b>	<b>VJT2552.2.5S</b>	<b>VJT2552.2.5D</b>
Dolly	<b>VJT2553.10D</b>	<b>VJT2553.2.5S</b>	<b>VJT2553.2.5D</b>
Stone (porous plate)	<b>VJT2554.10D</b>	<b>VJT2554.2.5S</b>	<b>VJT2554.2.5D</b>

## Horizontal Load Measurement

Range	2 kN	2.5 kN	3 kN
Load Ring with mechanical dial gauge	<b>VJT0202</b>	-	<b>VJT0203</b>
Load Ring with digital dial gauge	<b>VJT0202-MIT</b>	-	<b>VJT0203-MIT</b>
S Beam Load Cell	-	<b>VJTS0360</b>	-

Range	5 kN	Bracket/Adaptor
Load Ring with mechanical dial gauge	<b>VJT0205</b>	<b>N/A</b>
Load Ring with digital dial gauge	<b>VJT0205-MIT</b>	<b>N/A</b>
S Beam Load Cell	<b>VJTS0361</b>	<b>VJT2700C</b>

## Weights

<b>VJT0727</b>	Slotted Weight 10kg
<b>VJT0728</b>	Slotted Weight 5kg
<b>VJT0729</b>	Slotted Weight 2kg
<b>VJT0730</b>	Slotted Weight 1kg
<b>VJT0650-100W</b>	Weight Set: 9 x 10kg, 1 x 5kg, 2 x 2kg, 1 x 1kg
<b>VJT0650-50W</b>	Weight Set: 4 x 10kg, 1 x 5kg, 2 x 2kg, 1 x 1kg



VJT2761S - Shearbox Assembly for 60 mm circular sample kit