



SLT2

Static load test system



SLT2 is a purpose designed system for monitoring static pile tests and improving operation safety.

SLT2 is a highly accurate and robust system that enables you to monitor static pile tests whilst also ensuring the safety of site operatives.

Featuring a 25m cable, users are able to monitor safely and accurately from distance, eliminating the need for personnel to enter potentially dangerous testing zones.

The user friendly software allows operators to view data in real-time whilst plotting the load settlement data as the test progresses. Should the test be stopped for any reason, there are back up routines which enable testing to recommence without any loss of data..

Benefits:

- Rugged transducers suitable for use on construction sites
- Will work with any notebook PC
- Displacement and load displayed in real-time
- Load / settlement graph plotted in real-time
- Can be combined with TDR2 pile testing system
- Full equipment training available
- James Fisher Straininstall complete test package available



Software

The SLT2 logging software is designed to operate on a PC with Windows operating software, and the data acquisition unit is connected to the PC running this software during the test.

There are two viewports to the software:

Data viewport - This enables you to enter the site details, calibrate and zero transducers, view load and settlement in real-time and also plot the load test in progress. Displayed transducer readings are refreshed every second.

Table viewport - This enables you to view a table of values saved during the tests at one minute intervals. This includes time, elapsed time, load (KN), individual gauge displacements (mm), average settlement (mm) and rate of settlement (mm/hr).

Once a test is stopped it is possible to print the following results:

- Table of results showing time, elapsed time, displacement readings, load readings and settlement rate
- Graph of applied load versus settlement at the pile head
- Graph of applied load and settlement at pile head versus elapsed time

All data is sorted in ASCII format making it possible to export and use in other applications.



Acquisition unit	
Features	Real-time load and displacement display Safe and automatic logging of data Rugged site suitable transducers ASCII output of data Automatic report generation
Acquisition unit	8 channel DAQ unit
Data storage	Data files are stored to the connected PC as the test proceeds and includes real-time, elapsed time, load, 4No displacement readings, average settlement and rate of settlement Full header information is also stored including site, job number, weather, operator, pile number, pile diameter, pile type, working load, max test load, date and start time
Dimensions	L 218mm x W 187mm x D 55mm
Weight	Approx 6Kg
Connectors	Waterproof Mil spec and rugged Jaeger type, each uniquely marked
Power	110/250VAC inputs - can be battery powered by 12VDC/250VAC power converter which can also power site PC
Displacement transducer type	4No linear potentiometer
Displacement transducer range	0-100mm
Displacement transducer resolution	0.01mm
Load cell type	Stainless steel, non-indicating compression type, IP68 protected
Load cell range	25 to 1000 Te
Operating temperature	-20°C to +65°C
Accuracy	± 0.3% of applied load
Pressure transducer (optional)	0-700Bar, IP67 protection, 0.25% accuracy, operating temperature range -20°C to +65°C
Real-time display	Average settlement v load curve Settlement for each displacement transducer Load Rate of settlement
Print output	Table: Time, elapsed time, displacements, load and settlement rate Graph: Applied load v settlement Graph: Applied load and settlement v time

All of our equipment is supplied fully calibrated to UK national standards.

SLT2 user training

We provide full training for all equipment purchased from J Straininstall. Our training sessions are created and led by our in-house experts, providing you with the skills and knowledge needed to operate the equipment safely, efficiently and with confidence.

We offer classroom and site training within the UK, on-site training overseas and virtual classroom training. No matter what your needs or technical experience we can provide the right training solution for your requirements.

