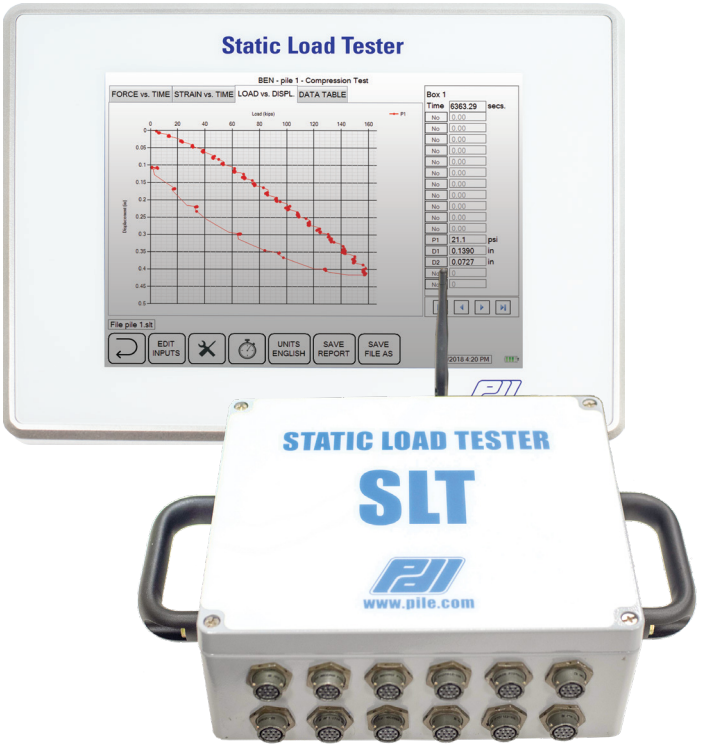
Static Load Tester

Static Load Tester (SLT)

Provides quick and accurate monitoring of force and displacement during a static load test



Accurate. Proven. Reliable.

The Static Load Tester (SLT) automatically obtains and records reliable readings at programmable time intervals during a static load test. The system allows for monitoring of up to 16 independent channels taken from traditional pile-top measurements or from embedded sensors from each data acquisition box. As many as 16 boxes can be connected to the Static Load Tester at once. Automatic data collection and display allows real time monitoring, analysis, and interpretation of results.

What is Static Load Testing?

Static load testing is used to evaluate the load resistance behavior of deep foundations prior to structure construction. It differs from rapid and dynamic load testing in that the load is applied to the deep foundation slower. Static Load Tests can be performed to validate foundation design assumptions regarding the axial compression or axial tension resistance provided by a deep foundation element, or its deflected shape under a lateral load. Conventional readings of the applied load determined from the jack pressure gage and load cell, and deep foundation head movement determined by LVDTs, digital dial gages, or mechanical dial gages, can be combined with the SLT to determine the capacity or nominal soil resistance, the load-transfer behavior under axial loads, or deflected shape under lateral loads. The Static Load Tester also reads strain gages and vibrating wire gages.

- Allows monitoring of multiple data collection boxes at once
- Up to 16 channels per data acquisition box with smart universal inputs
- Offers real-time graphical presentation of load, strain, displacement and pressure measurements

SiteLink® (Remote Testing)

- A cost and time efficient alternate to traditional on-site testing
- Real time field to office data transmission via Internet
- Simple field setup

PDI's Static Load Tester includes:

- 16 Channels (12 analog and 4 digital) for each data acquisition box with smart universal inputs
- Remote data collection box(es) capable of being daisy-chained for a large number of sensors
- Wireless configuration for easy set up and remote operation
- Real-time graphical presentation of load, strain, displacement, and pressure measurements
- SLT-S software will handle compression (both top-down and bi-directional), tension, and lateral load

Remote Operation

The SLT Tablet is equipped for high-speed internet access and remote operation, error checking and updating. The SLT operates in traditional, SI or metric units.

Static load tests are standardized by ASTM D1143, Standard Test Methods for Deep Foundations Under Static Axial Compressive Load; ASTM D3689, Standard Test Methods for Deep Foundations Under Static Axial Tensile Load; and ASTM D3966, Standard Test Methods for Deep Foundations Under Lateral Load.

Pile Dynamics, Inc. (PDI) is the world leader in developing, manufacturing and supplying state of the art QA/QC products and systems for the deep foundations industry. The company is headquartered in Cleveland, Ohio, USA, with offices and representatives worldwide. For additional information visit us at www.pile.com or contact info@pile.com.

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