Pile Dynamics, Inc. introduces the Static Load Tester

Static load testing is used to evaluate the load resistance behaviour of deep foundations prior to structure construction. 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. PDI’s Static Load Tester (SLT) automatically obtains and records reliable readings at programmable load intervals during a static load test. The system allows for monitoring of up to 256 independent channels (192 analog and 64 digital) taken from traditional pile-top measurements or from embedded sensors connected to a PDI data acquisition box with smart universal inputs. Each data acquisition box can accept up to 16 independent channels with up to 16 data acquisition boxes connected together to the Static Load Tester at once with wireless configuration for easy set up and remote operation. This automatic data collection and display allow real time monitoring, analysis and interpretation of results.

Conventional readings of the applied load determined from the jack pressure gage and load cell, and deep foundation head movement determined by LVDI’s, 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.

The SLT tablet is equipped for high-speed Internet access and remote operation, error checking and updating. Offering real-time graphical presentation of load, strain, displacement and pressure measurements, the SLT operates in traditional, SI or metric units.


The Static Load Tester (SLT) joins Pile Dynamics’ extensive line of quality assurance and quality control systems for the deep foundation industry. The company is located in Cleveland, Ohio, with offices and representatives worldwide.