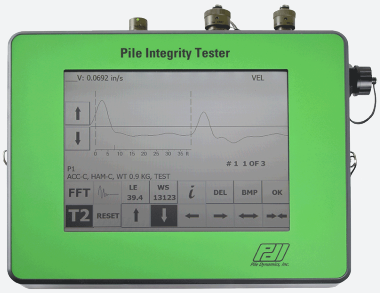
Pile Integrity Tester (PIT-Q)

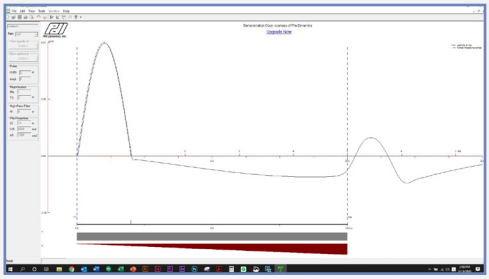
The PIT-Q assesses the structural integrity of drilled shafts/bored piles, ACIP/CFA, and drilled displacement piles, driven concrete or timber piles and concrete filled pipes. The PIT-Q performs wave equation-based, non-destructive foundation investigations known as Low Strain Impact Integrity Tests or Low Strain Dynamic Tests, providing assurance that a pile or shaft is free of major cracks and voids.

- Low strain integrity testing by pulse echo or transient response methods
- Reveals major cracks or defects
- May determine unknown pile lengths
- Available in: velocity only, or force and velocity channels
- Additional Parallel Seismic analysis feature



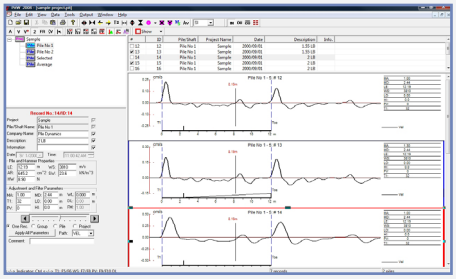
Conforms with ASTM D5882

PIT-Q Software



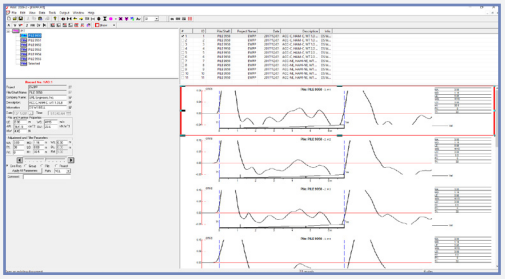
PIT-S

- Simulates the performance of low strain integrity testing
- Curves simulated by PIT-S may be compared to measured curves for a simple signal matching process that helps investigate the cause of observed reflections
- User enters pile shape, soil layer, and characteristics of hammer impact



PIT-W

- Allows data to be filtered and magnified with an exponential amplification as a function of time
- Analysis in the time domain helps locate the depth of a potential defect
- Outputs user customized tables and reports



PIT-Professional (Upgrade Option)

- Offers advanced modeling and analysis reporting
- Estimates the impedance (and shape) of the pile and quantifies the severity of defects
- Analyzes records from two accelerometers or from an instrumented hammer

PIT-Q Models for Various Applications

Features	PIT-QV	PIT-QFV
Channels of data acquisition	1	2
Displays velocity vs time graph	✓	✓
Displays force vs time graph		✓
Optional second velocity graph		✓
Data acquisition	Instrumented	Instrumented
Real-time data	✓	✓