

PET—Pile Echo Tester

Piletest's Pile Echo Tester (PET) is a user-friendly, highly flexible solution for testing a large number of deep foundations quickly and accurately.

Requiring little-to-no training, PET is a modular, computer-independent system that attaches to the USB port of any regular notebook, Tablet PC, or USB-host-enabled Pocket PC.

The PET system utilizes the pulse-echo method. To test a pile, the user strikes it with PET's lightweight handheld hammer. The resulting signal, or reflectogram, is captured by PET's digital accelerometer. It is then transmitted to the computer to produce information about the pile's length and shape.

Main Advantages

Ease of use: PET's user-friendly software makes it possible to master the system in less than a day. No additional expensive training is required

Excellent signal quality: PET's low noise level enables the system to handle extremely long piles

Computer independence: Unlike other system based on an embedded computer (which may soon become obsolete) PET connects to the USB port of your regular notebook computer, Tablet PC or USB-host-enabled Pocket PC

Labor saving: PET includes a number of labor-saving features such as advanced project organization; software-suggested wave velocity; Smart Trigger™ and AutoSort to reject anomalous blows; one-touch controls of scale, amplification, and filtering; plus many more

Robustness: Specially designed to test piles, shafts and caissons in construction site environments. The PET sensor is IP67 waterproof and comes with a three year warranty.

The PET package includes:

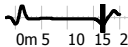
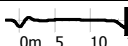


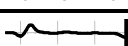
- A digital transducer with waterproof USB cable
- A nylon hammer, spare tips, special putty
- Testing, analysis and reporting software (unlimited number of licenses)
- Interpretation assistance package



PET with a Tablet PC



The PET package

Pile	Depth (m)	Reflectogram	Details	Remarks
S*/9	16.8 m		Amp:75 Planned:16.0m Avg:5	
S*/13	15.0 m		Amp:55 Planned:15.0m Avg:9	
S*/14	15.4 m		Amp:55 Planned:15.0m Avg:12	
S*/15	14.0 m		Amp:50 Planned:13.0m Avg:17	Anomaly at 5.1m
T/13	14.2 m		Amp:120 Planned:14.0m Avg:11	

Typical output



In site

Technical Specifications

Physical	Housing	Industrial grade transducer enclosed in a durable stainless steel housing
	Dimensions	25.4 mm (diameter) x 90 mm (Length)
	Weight	270gr (Transducer) 2.3kg (Shipping)
	Temperature range	-20°C to +55°C (Operating) -40°C to +80°C (Storage)
	Waterproofing	IP67 (Protection against submersion in water)

Transducer	Sensitivity	100mV/g
	Linearity	Within 1%, 0 to 50g
	Resonance frequency	30kHz
	Sampling frequency	50kHz

Standards	ASTM D5882-07	Meets or exceeds
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Performance	Pile lengths	2m to 100m (depending on diameter and soil profile.)
	Productivity	Up to 100 piles/hour by single operator (under favorable conditions)
	Storage	Unlimited

Requirements	Computer	Win2000 / WinXP / Vista 800x600 resolution USB port Recommended: Tablet PC (outdoor display) — OR — PocketPC (USB host enabled) Windows mobile 5/6
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