

NDE360

Acoustic testing techniques can be used for the investigation of concrete, rock and soil elements above or below ground, and offer engineers or technicians powerful tools with which to assess parameters such as: the thickness of a slab or sub-base, length of a pile, location of construction defects such as voids and cracks, slab support or even detailed geotechnical investigation.

Many techniques have been developed in the last 20 years (i.e. Impact Echo, Impulse Response etc.) but the technology was either prohibitively priced or far too cumbersome to use practically. The NDE 360 testing platform addresses these issues by separating the test paraphernalia from processing, now one system can support up to 9 testing methods in a robust, ruggedized, battery powered system giving the mobility and simplicity an engineer in the field needs. Tests can be taken and analysed on site with minimal fuss or data taken back for detailed analysis at the office using robust software while the NDE 360 package keeps working on a different site supporting a different test.

Testing Packages

The NDE 360 system is purchased with one or more testing packages. You can upgrade your NDE 360 at anytime with the purchase of a new add-on. Please see the below for full list of the test packages.

Pavement, Structural and Tunnel Systems

- Impact Echo
- Impact Echo Scanner (IES)
- Slab Impulse Response
- Ultrasonic Pulse Velocity (UPV)
- Surface Wave Testing (SASW)
- Multiple Impact Surface Waves (MISW)
- Resonance Testing

Foundation Depth and Integrity Systems

- Sonic Echo/Impulse Response - Pile Integrity Test
- Parallel Seismic (PS)
- Ultra-Seismic (US)

Geophysical Seismic Surface Wave Systems

- Surface Wave Testing & Multiple Impact Surface Waves (SASW-G, MISW-G)

Features

- Multiplex up to 4 Channels
- Handheld/Ruggedized Use
- Colour Touch Screen
- Backlit Screen
- 8+ Hours Battery Life
- 1 Gigabyte Removable Compact Flash
- Test, Accept, Reject Key Buttons
- Windows-Based WINTFS Analysis Software

Specifications

- 16 Bit A-D Converters for 4 Channels
- Up to 2 Microseconds, Simultaneous Sampling Rate on Two Channels
- Maximum Nyquist Frequency 250 KHz
- Steps x1, x10, x100, x1000, Selectable per Channel

About PCTE

PCTE have over 30 years' experience in the measurement and testing of construction materials. PCTE can provide more than just the equipment, they can provide expert training. PCTE have a service centre in Sydney in which they can provide calibration, repairs and warranty repairs.

Other Equipment

PCTE supply three main ranges: NDT, Lab and Geotech Instrumentation.

NDT includes: Rebound Hammers, Covermeters, Ultrasonics, GPR, Corrosion Testing, Coating Testing and Foundation Testing

Lab includes equipment for: Concrete, Cement, Aggregate, Soil, Asphalt and Metal

Geotech Instrumentation includes: Strain Gauges, Piezometers, Inclometers, Extensometers, Tiltmeters, Load Cells and Dataloggers