

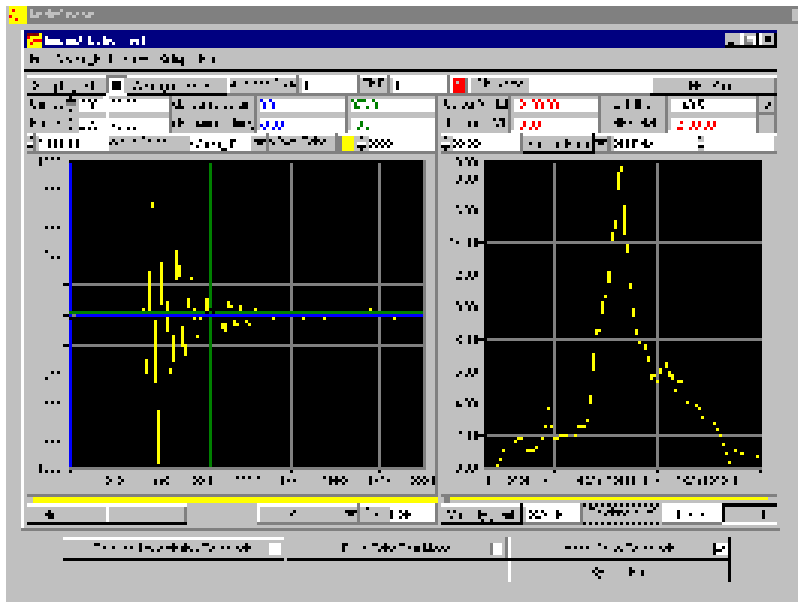
AndeScope Model AC200

The AndeScope is designed to assist the operator in determining the quality or integrity of concrete and masonry structures. The AndeScope operates in three modes: Ultrasonic Through-Transmission, Ultrasonic Pulse-Echo, and Impact-Echo. The ultrasonic mode of this instrument can generate up to 2,500-volt pulses in spike, tone-burst, square-wave or chirp format. The Impact-Echo mode can use an optional manually controlled impactor with exchangeable heads.

The AndeScope can be used for instant detection of flaws, depth of surface opening cracks, discontinuities, honeycombing, reinforcement bar detection, and thickness measurements from a single available face (echo technique) or from two accessible sides (through-transmission). It can also be used for the inspection of concrete dams, bridges, parking garages, docks, piers, tunnels, shafts and masonry structures.

The advanced Windows™ based data acquisition software is capable of real-time frequency analysis, de-convolution, high and low pass filtering, averaging, two and three-dimensional data presentation etc. As part of its analysis package, the AndeScope is capable of measuring stress wave velocities, thickness, attenuation, and Poisson's ratio of various structures.

The flexibility and diversity of available options in the AndeScope allows it to be used both in the field and as a research tool in the laboratory.



AndeScope Display

Inspection Capabilities:

- Concrete Inspection, including:
 - Dams
 - Bridges
 - Parking garages
 - Docks & offshore platforms
 - Piers & foundation piles
 - Hollow circular & semi-circular concrete structures such as concrete shafts & tunnel linings
- Masonry bricks & structures
- Rock inspection – mine shafts & stopes
- Wood inspection – communication & electric utility poles
- Graphite electrodes

Applications:

- Quality inspection
- Concrete thickness measurement
- Monitoring micro-fractures, ASR and freeze & thaw
- Masonry brick inspection
- Crack depth measurement
- Detection of internal voids, flaws, cracks delaminations, deterioration & honeycombs
- Detection and position determination of reinforcement bars
- Concrete strength estimate
- Stress wave velocity measurement
- Measurement of elastic properties for concrete and rock
- Stress wave attenuation measurement
- Q-factor determination

The Andec ultrasonic computer controlled concrete and rock testing system, model AC200, includes the following:

- 1 Interactive ultrasonic system, 15.75" wide, 11.5" high, 8.25" deep, total weight 25lb. Including Pentium IV processor with 512MB RAM, colour 14.1" TFT display and 100GB hard disk.
- 1 Pulser subsystem including high power tone-burst, chirp, and square-wave pulsers.
- 2 Amplified receiver channel including hardware filtering.
- 1 MS-Windows XP™ operating system.
- 1 Set of software for spectrum analysis, including transit time, velocity, attenuation, decay constant, *Q*-factor and Poisson's ratio measurement.
- 1 Set of operating instructions.
- 2 Ultrasonic transducer, element diameter 1.5", with BNC connector. Frequency range 20, or 50 or 100 kHz (specify frequency at time of order).
- 2 10' long coaxial transducer cable with BNC connectors.
- 1 Shipping Case