

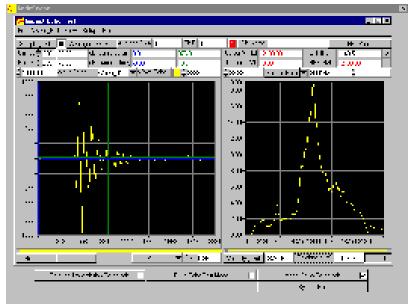
**AndeScope Model AC300** 

The AndeScope is designed to assist the operator in determining the quality or integrity of concrete and masonry structures. The AndeScope operates in the Impact-Echo mode. The Impact-Echo mode uses a manually controlled impactor with exchangeable tips.

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. 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 & honeycombings
- 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 AC300, includes the following:

- 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.
- 2 Amplified receiver channel including hardware filtering.
- 1 MS-Windows XP™ operating system.
- 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 Impact Echo Broadband Ultrasonic transducer, with BNC connector. Maximum frequency sensitivity 80 kHz.
- 2 10' long coaxial transducer cable with BNC connectors.
- 1 Surface wave measurement aluminium bracket.
- 1 Shipping Case