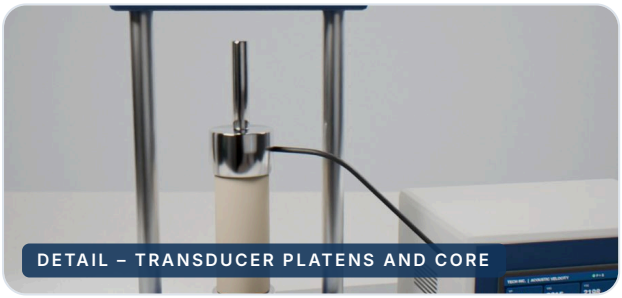
PRODUCT DATASHEET

Acoustic Velocity System for Rock Cores

P- and S-wave velocities and dynamic moduli





DETAIL – TRANSDUCER PLATENS AND CORE

OVERVIEW

The Tech Inc. Acoustic Velocity System for Rock Cores sends ultrasonic compressional and shear pulses through a core and times their arrival. From the travel times, length and density it calculates P- and S-wave velocities and the dynamic elastic constants, including Young's modulus and Poisson's ratio.

MODELS AND CONFIGURATIONS

- **Bench model** – atmospheric pressure.
- **Confined model** – core holder with confining pressure.
- **Combined model** – with resistivity measurement.

TYPICAL DESIGN DATA

Model	TI-AVS-500 series
Frequency	About 500 kHz centre frequency
Waves	P, S1 and S2
Core size	1 and 1.5 inch diameter, up to about 3 inches long
Outputs	Vp, Vs, dynamic E and Poisson's ratio

APPLICATIONS

Geomechanics, seismic calibration, wellbore stability, hydraulic fracture design and rock typing.

KEY ADVANTAGES

- **Complete** – P and two S waves
- **Clear** – waveform display with arrival picking
- **Quick** – minutes per core
- **Expandable** – confined version later

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

Offices: Chennai · Toronto · Tallinn · Al Khobar

mail@techincresearch.com · +1 (289) 622-1032 · www.techincresearch.com

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