## Ultrasonic Velocity Test System (ULT-200)

- 40 MHz sampling rate with 16-bit resolution
- Smart software features for accurate measurement of wave velocities
- Ultrasonic velocity measurements of compression and shear waves in asphalt, soil, rock, & concrete specimens
- Digitally controlled pulser and receiver including a switch to automatically select P- or S-wave transducers
- New hardware and software accomodate P, S1, S2 inputs
- State-of-the-art software for data acquisition, analysis, storage, plotting, & reporting
- Available transducer platens for use inside soil and rock triaxial cells

DESCRIPTION

The ULT-200 Ultrasonic Velocity Test System is a turnkey system and includes everything required to perform Ultrasonic Velocity measurements on laboratory specimens. The new hardware and software utilize the latest technology to allow for precise determination of wave velocities.

With the ULT-200 the user also has the ability to control the pulse signal polarity and number of pulses to stack, this is important in helping to eliminate the influence of the Compressional wave signals on the relatively weaker Shear wave signals. The ULT-200 system uses a fast-acting pulser that provides excitation to the ultrasonic sensor and an ultra high speed Analog-to-digital converter for storing the resulting waveforms signals. The sampling rate can be selected from 40 MHz to a sampling rate as low as 156 Hz allowing the user to capture a wide range of ultrasonic signals.
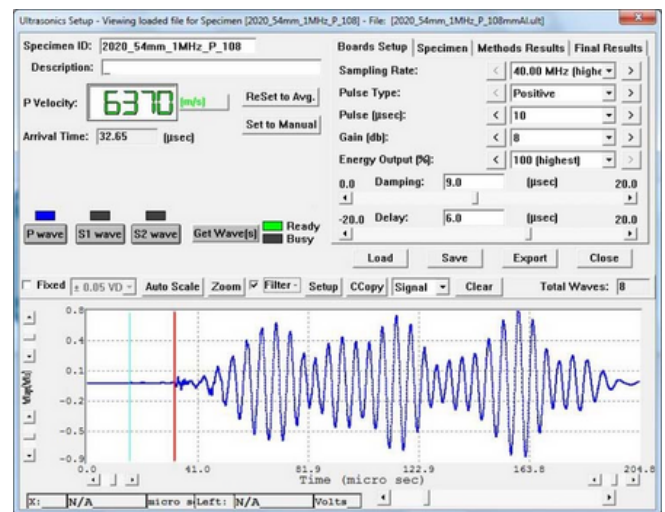
Within the CATS Ultrasonic software the user is able to digitally control the receiver and pulser ensuring an easy setup and high degree of repeatability.

This system is provided with software developed by GCTS that allows for automatic measurement while performing triaxial or unconfined shear loading. The ultrasonic data can be collected at any specified interval, such as time, stress, strain or any other test parameter.

Available platens include models for unconfined loading, soil triaxial loading, and rock (high pressure) triaxial loading.