



## EXPLANATION SHEET SDMT – FOR S-WAVE & P-WAVES

The Marchetti Seismic Dilatometer (SDMT) is a probe for measuring the shear wave velocity  $V_s$  of the soil profile. The design of the modules incorporates two geophone sensors spaced at a true interval spacing of 0.5m apart.

The SPDMT is an enhanced version of the SDMT that has two additional fixed interval geophone sensors that also allows measurement of the compression P-wave velocity  $V_p$ .

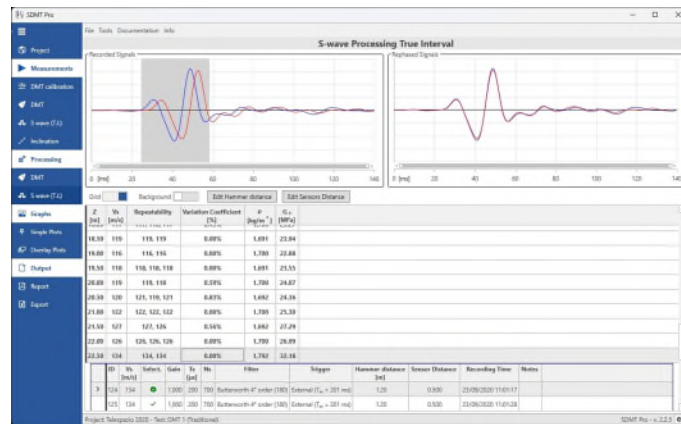
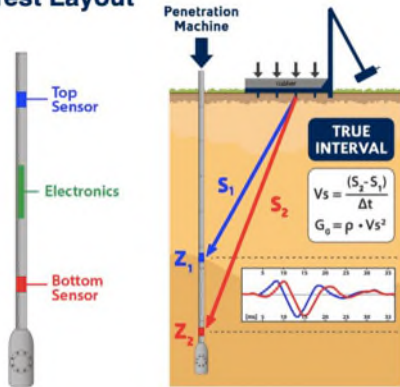
The electronic board provide very accurate AD signal conversion and uses digital data transmission. Accelerometers monitor the inclination of the probe during penetration.

Using the software package SDMT Pro developed by Marchetti real time assessment of seismic wave velocities  $V_s$  and  $V_p$  is possible.

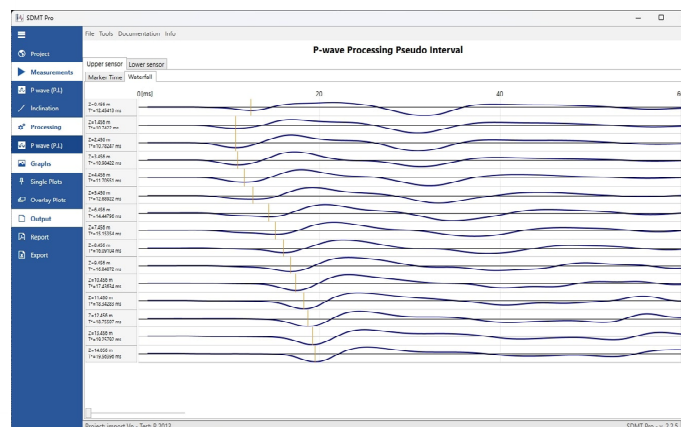
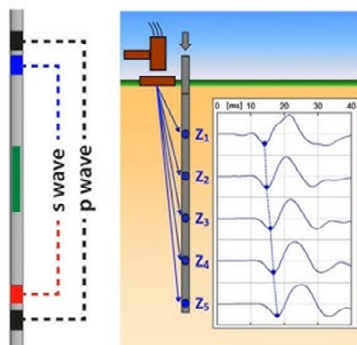
### Main Applications

- Max Shear Modulus  $G_0$
- In situ G-gamma decay curve
- Sample Quality Assessment
- Local Seismic Response
- Soil category ( $V_{s30}$ )

### SDMT Test Layout



### SPDMT Test Layout



Also refer to our Data Sheets on the Medusa DMT and DMT for full details of our DMT testing capability.