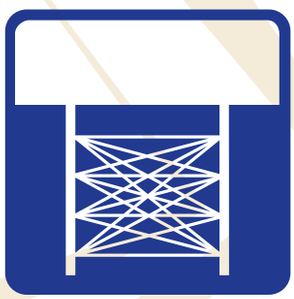
geotomographie

manufacturer
of seismic
borehole
equipment



tomography

crosshole

downhole

sales

rentals

field service

Seismic tomography provides high-resolution 2D or 3D images of seismic velocities between boreholes. The method is used to delineate geological structures, to map cavities and weak zones and to specify mechanical soil and rock properties. Geophysicists and engineers apply this method to investigate the foundation layer of buildings and bridges in order to characterize the subsurface before or after infrastructure is built and to monitor time-dependent processes.

The crosshole test provides a depth profile of shear wave velocities (V_S) and compressional wave velocities (V_P) between boreholes at a high vertical resolution. The method is used to determine soil dynamic parameters, such as shear modulus, Poissons ratio and Youngs modulus. Engineers use these key parameters to predict the response of soils to dynamic loading.

The downhole test provides shear wave velocities (V_S) and compressional wave velocities (V_P) for geological layers along a single borehole. Soil dynamic parameters, such as shear modulus, Poissons ratio and Youngs modulus can be determined to evaluate the soils response to dynamic loading. The downhole test has a lower vertical resolution compared to the crosshole test.

This section includes complementary seismic equipment for borehole and surface applications.