



## Olson's Popular Crosshole Seismic Systems

Crosshole Seismic testing is performed at locations where it's necessary to have detailed information about subsurface conditions in order to design safe foundations for buildings and structures. Using the velocity profiles generated with this test method, parameters such as Poisson's ratio and Young's modulus can be determined. These dynamic soil and rock properties can then be used for site development, dynamic machine foundation design, liquefaction potential studies and earthquake design analysis.

The test method involves lowering an impact source and receiver(s) to the same depth in boreholes spaced  $\sim$  10 feet apart. These instruments are coupled to the side of the grouted borehole casing, and the source creates shear and compressional waves that are picked up by the receivers.

Olson Instruments' economical Crosshole Seismic systems, used with our Freedom Data PC data collection platform, are popular in many countries across the world. Our most complete system includes a borehole source and a pair of triaxial geophone receivers. Coupling to the borehole casing is achieved with an airpressure-activated piston inside the source and bladders on the receivers.



Various models are available, including systems that can perform Downhole Seismic testing as well as Crosshole Seismic testing. Call Olson Instruments today for more information and pricing on our Crosshole Seismic Systems and Freedom Data PC.

For more information see our website page

## Crosshole Seismic Systems

call 303.423.1212 email <u>info@olsoninstruments.com</u> or visit <u>olsoninstruments.com</u>





Olson ENGINEERING

Click on the image to the right to see the latest webinar videos at Olson Engineering's YouTube channel. Olson Engineering is Olson Instruments' sister company.

Seismic S	re classification webinar
23 /	April 2020
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Project Geophysicist	Principal Geophy 59:26

## **Upcoming Events**

Transportation Research Board

Annual Meeting

Olson Engineering has reserved a booth at the TRB 100th Annual Meeting which will be conducted as a virtual event over a series of dates throughout January 2021.



<sup>™</sup> Annual Meeting A Virtual Event January 2021