



tomography



crosshole



downhole



surface seismic



geotomographie

manufacturer of seismic borehole equipment



MBAS-A | Analog Multistation Borehole Acquisition System

The multistation borehole acquisition system can be used for S-wave borehole tomography or downhole surveying. It consists of up to eight geophone stations each equipped with a tri-axial sensor. The string is fully water proof and can be used to receive P- and S-waves in dry or water filled boreholes.

All geophone stations are aligned and mechanically connected by a torsional stiff hose to ensure a correct sensor orientation. A magnetic compass placed in the lowest station shows the azimuth to North. Compass values are displayed at a surface box. All geophone stations can be coupled to the borehole wall by a pneumatic clamping system (air packer). Air is supplied to the geophone stations through a separate air hose. The borehole geophone string is terminated by a seismograph connector. The system comes with the control unit which is mounted on the top cable drum. It hosts the surface electrical cable connections as well as the air supply to the downhole receiver system.



Technical Details

- Natural sensor frequency:** 10 Hz
- Sensor arrangement:** Tri-axial
- Operational depth:** Up to 200 m
- Max. number of stations:** 8
- Station interval:** 1 or 2 m
- Station length:** 595 mm
- Station diameter:** 60 mm
- Station weight:** approx. 2 kg
- Cable weight per metre:** 200 g
- Cable strength:** 4700 N
- Borehole diameter:** 75 mm
- Clamping system:** Inflatable bladder
- Orientation:** Magnetic compass (+/- 2.5°)
- Depth indicator:** Cable marking every 2 m
- Connector:** To any seismograph
- Storage:** On drum

The multistation borehole geophone string on drum with control unit. To unspool the cable use the spooler device and fix the string at top of the borehole using the clamping device during field operation.