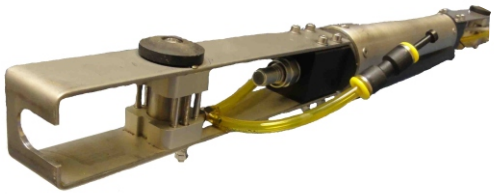
tomography | crosshole | downhole | surface seismic

geotomographie
manufacturer of seismic borehole equipment

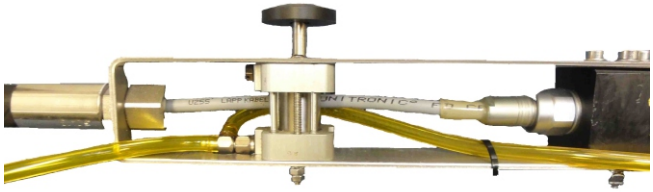
MBAS | Multistaton Borehole Geophone

The multistation borehole acquisition system (MBAS) is a digital three-component geophone string used to receive P- and S-waves in dry or water filled boreholes. The system is especially designed for S-wave borehole tomography.

Array of seven three-component stations.



An individual station.



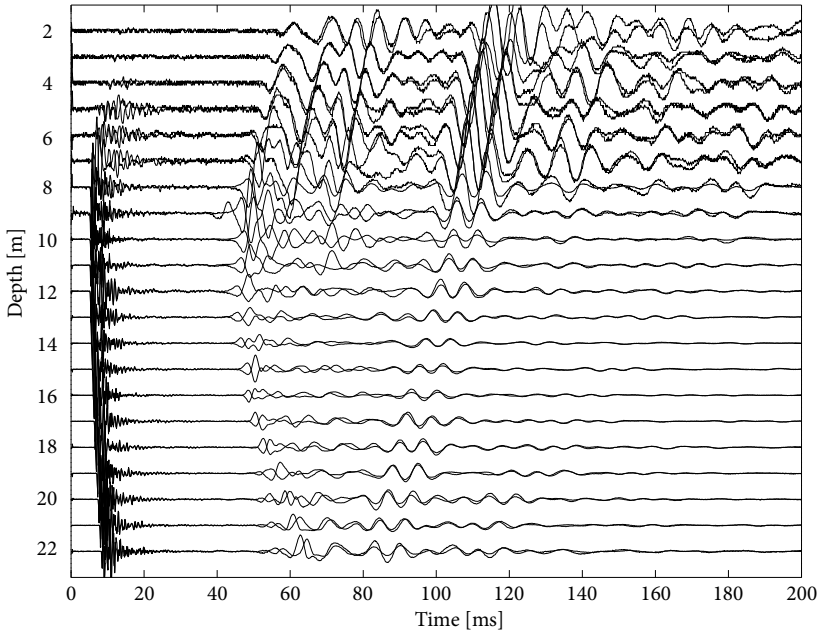
Pneumatic coupling mechanism (cylinder).

Technical Details

Natural sensor frequency: 30 Hz
Sensor arrangement: Tri-axial
Operational depth: Up to 100 m
Max. number of stations: 10
Station interval: 1 or 2 m
Station length: 735 mm
Station diameter: 65 mm
Station weight: 2.5 kg
Cable weight per metre: 460 g
Borehole diameter: 75 mm
Clamping system: Pneumatic cylinders
Orientation: Torsionally stiff hose
Depth indicator: Cable marking every 2 m
Storage: On drum and in boxes

Digitisation
Design: Micromed
Power supply: PC USB interface
A/D conversion: 24 bit
Sampling frequencies: 256-32768 Hz
Trace length: Max. 4 s
Trigger: TTL, geophone
Software: Soilspy (Micromed)

Data Example



Unconsolidated sediments
Borehole Distance: 10 m

Geotomographie GmbH | Am Tonnenberg 18 | D-56567 Neuwied
Tel: +49 2631 778135 | Fax: +49 2631 778136 | **www.geotomographie.de**