

Equipamentos para: Solo – Cimento – Concreto – Betume – Agregados – Metalografia – Areia de Fundação – Refratários
Rua Conselheiro Carrão, 275 - Bela Vista - CEP 01328-000 - São Paulo – SP - Brasil - TEL: 55 (11)3289-0211 - FAX: 55 (11) 3289-4516
Internet: <http://www.solotest.com> – E-mail: solotest@solotest.com

SonicSampDrill

SonicSampDrill is a unique concept for drilling and sampling, characterized by speed, quality, little annoyance for the surroundings and a minimal impact on the soil. The Eijkelkamp experience with Sonic started in 1995 and was basically directed towards seismic investigations. Nowadays the advantages of the SonicSampDrill are also highly appreciated by geo-technical and environmental experts. At the same time Sonic is becoming ever more interesting for, a.o. archaeological surveys.

The core of the Sonic drilling system consists of two ex-centers, driven by high rev hydro-motors. The highfrequency vibrations generated are efficiently transferred to the drilling casings. Because of this the first layer of soil around the sampler head and the sampler shaft become fluid. This process diminishes the resistance, so that the Sonic bodies can penetrate very quickly in sandy, gravel and clay soils.

Applications:

- High quality sampling
- Placing of monitoring well pipes, quality filter and / or Direct-Well filter for environmental investigation or water monitoring.
- Placing of all kinds of sensors, like e+ sensors or Divers
- Placing seismic blasting charges in the soil
- Placing aeration and / or rinse tubes for remediation processes
- Increase the possibilities for sounding machines with regards to depth and diameter
- Placing of heat exchangers for long-life energy applications.
- Placing of tubes for heat exchanging
- Profile description
- Chemical soil investigation
- Archaeological soil investigation
- Environmental investigation
- Installation of monitoring well pipes
- Boreholes
- Soil classification
- Seismic soil investigation

Characteristics

Sample depth : 25 meter
Max. sample length : 400 cm
Bore diameter : 63 / 100 mm
Max. Diameter monitoring well : 32 / 63 mm
Weight of set : 100 kg
Applicable above and under groundwater level.

Sampling with the AquaLock

The AquaLock is a patented sampling method that shows it's full effectiveness when used in combination with the Sonic drilling module. The sample tube of between 2,3 or 4 meter length is being introduced at high depths at a high velocity. During penetration the space in between in the AquaLock sampler is being filled with water, in which a piston is kept at the bottom. So here no drilling head is used. At the chosen depth the water is forced to escape through the overhead drill pipes. Because of the sonic vibrations a good core is being taken of which, for homogeneous soil types, only the outer crust of about 1,5 mm has been visibly influenced by the vibrations. Sampling can be done on, a.o. clay and coarse sand.

Characteristics

Sampling depth : 25 meter
Sample diameter : 50 mm
Sample length : 150 / 200 / 400 cm
Applicable above and under groundwater level and in a types of soil.

Applications:

- Soil profile description
- Chemical soil investigation
- Archaeological investigations
- Environmental investigations
- Palaeontological investigation