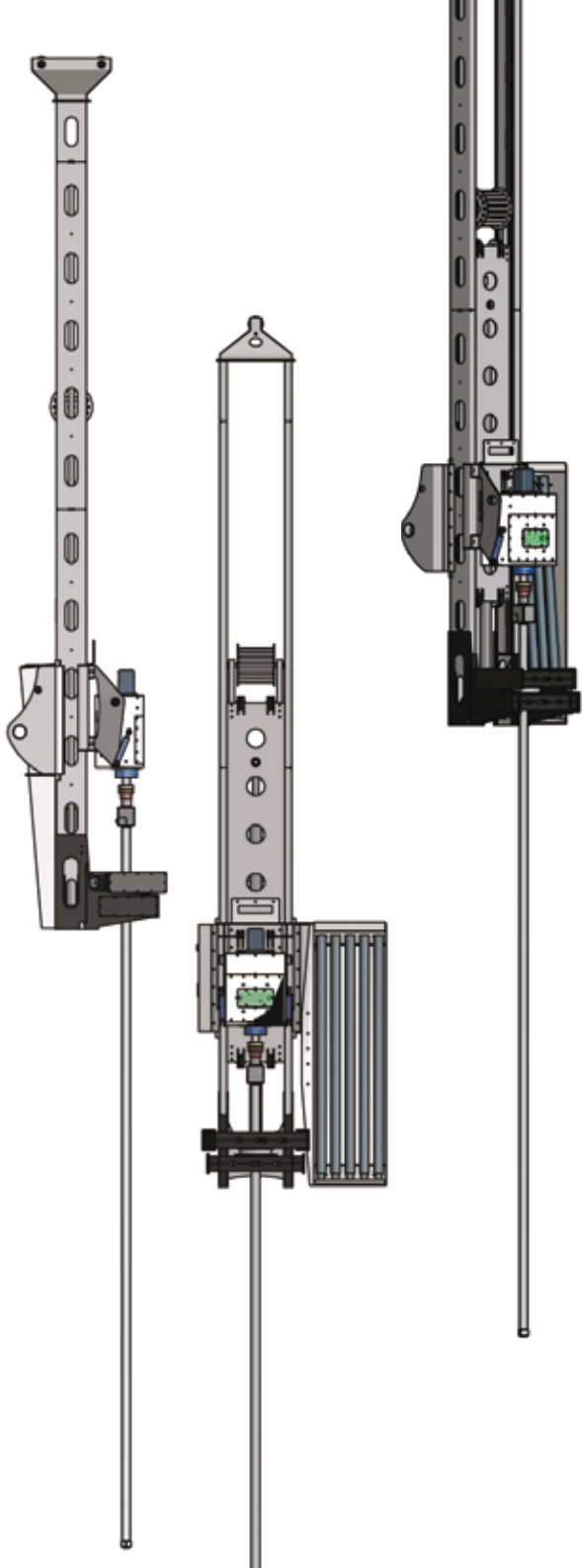


GEOTECHNICS



soundcore

sonic drilling solutions®



geotechnics



SONIC – the *dynamic energy*

Sonic Drilling employs the use of high-frequency, resonant energy to advance a core barrel or casing into subsurface formations. During drilling, the resonant energy is transferred down the drill string to the bit face at various sonic frequencies simultaneously rotating the drill string evenly distributes the energy and impact at the bit face.

When the resonant sonic energy coincides with the natural frequency of the drill string, resonance occurs. This results in the maximum amount of energy being delivered to the face. At the same time, friction of the soil immediately adjacent to the entire drill string is substantially minimized, resulting in very fast penetration.

Why Sonic Drilling?

Whether your drilling needs are for environmental, water supply development, geo construction, geotechnical or mineral exploration, Sonic drilling technology offers several distinct advantages over conventional drilling in overburden ground conditions.

Superior Information

Sonic drilling provides a continuous, relatively undisturbed core sample of unparalleled quality and accuracy through any type of formation. When using the Iso-Flow groundwater profiling system, hydro geological and geochemical data can be easily obtained.

Waste Reduction

Sonic drilling reduces waste by up to 80% relative to conventional methods by other competitors.

Speed

Sonic drilling is two to three times faster than conventional overburden drilling methods when sampling.

Superior Well Construction

Sonic drilling causes minimal disturbance to the surrounding bore hole wall, resulting in more efficient well development and performance.

Risk Minimization

Sonic drilling greatly reduces the risk of project failure due to unknown or difficult subsurface conditions. Projects finish on time and on budget. Sonic drilling obtains the lowest total project cost possible.

Flexibility

Sonic drilling advances a temporary outer casing as the borehole is drilled, allowing you to do more within a single borehole.



Typical Sonic Drilling Procedure:

The processes which result in borehole advancement are fracturing, shearing and displacement. Drilling through cobbles, boulders and rock is caused by fracturing of the material by the inertial moment of the drill bit. Shearing takes place in dense silts, clay and shale's, provided the amplitude of the drill bit is high enough to overcome the elasticity of the formation material. Displacement occurs when unconsolidated formation material is moved away by the vibrating drill bit.

1. Sonic advances the core barrel into the undisturbed formation. No air, mud or water are used in the drilling process
2. Sonically override a larger diameter casing over the core barrel
3. Return the core barrel to the surface for sample extraction
4. Complete coring and overriding casing to desired depth.



soundcore gmbh

Our drilling services:

- Environmental
- Landfill investigation
- Geotechnical
- Geothermal (IBS)
- Water Wells and Piezometers
- Mineral Exlopration

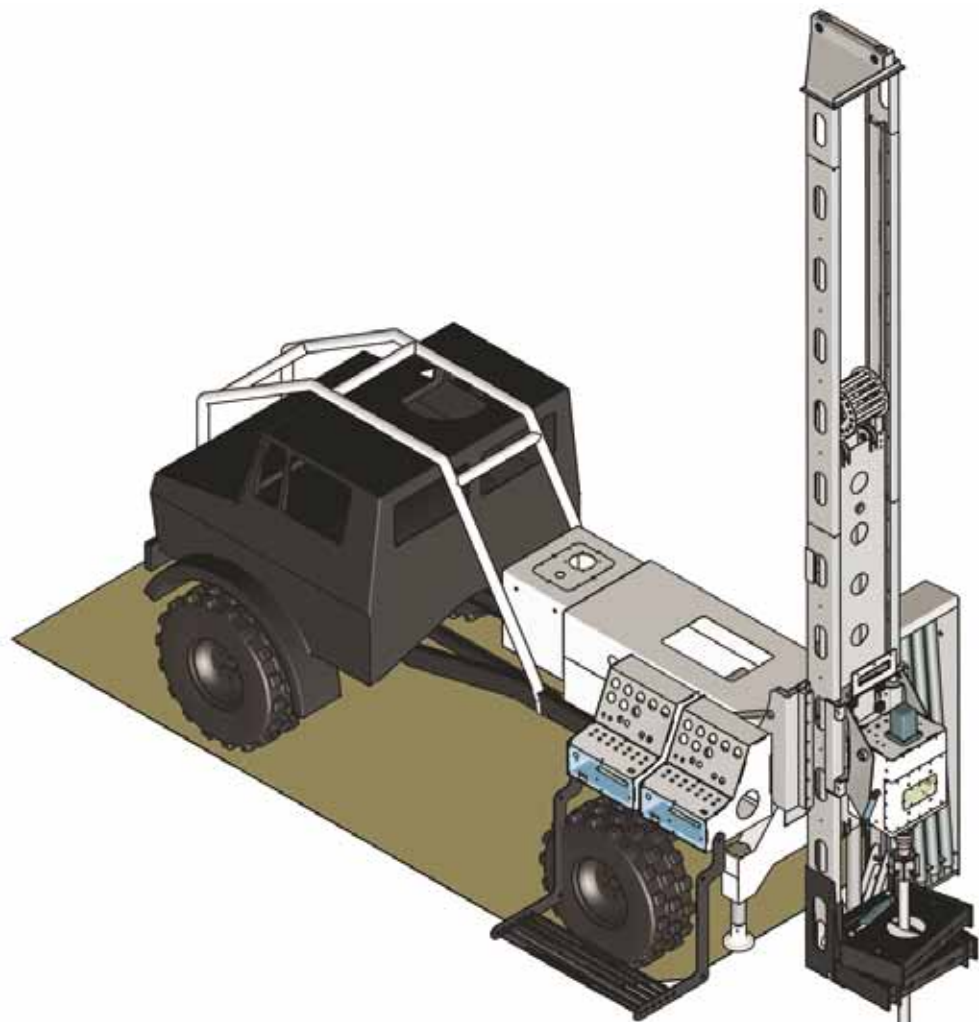
projects

- Peru - Yanacocha, Goldmine
- Rand Uranium, Uran/Goldmine
- Rio Tinto RBM, Titan
- Anglo Platinum, Goldmine
- Rustenburg, South Africa
- BHP BILLITON, Gabun, Mangan

All our products are manufactured and designed in-house.
This allows us to deliver customer specific solutions.

For more information please call +49 173 6627016





Headquarters
Soundcore Germany:
Herzbergstr. 122-123, 10365 Berlin

CEO: Paul Eisenkolb

Amtsgericht Charlottenburg
HRB 128547 B
UmSt-Ident Nr: DE272835488

www.soundcoredrilling.com

»THE SKILL IS SIMPLICITY!


soundcore | sonic drilling solutions®