

STUBORE® Drilling system

Drilling Method

The STUBORE® drilling system is distinguished by its unique casing drilling method: The drill bit is securely connected to the telescopic casing, providing support to the borehole walls during the drilling process. Inside the casing, a core catcher collects the loosened soil. This allows for drilling with a double core barrel in all types of geological formations. The excavated material is expelled using a specially designed mechanism.

The STUBORE® drilling system ensures **consistently high-quality core samples throughout the drilling process.**

Application Areas

The STUBORE® drilling system enables both vertical and horizontal drilling in unconsolidated soils as well as in solid rock. Its robust design handles complex alternating strata and landfill bodies with ease.

Operations from floating platforms or pontoon systems are also within its scope—making it ideal for situations requiring water column bridging or drilling in water-affected zones.

The STUBORE® system stands out for its adaptability across a wide range of geological and environmental conditions.

Drilling Process

The STUBORE® drilling system **integrates three processes:** casing, drilling, and core sampling occur simultaneously.

Soil loosening is achieved either through rotary-percussive or rotary drilling. Air or water flushing can be applied when needed. The integrated core catcher ring minimizes core loss.

Additionally, the STUBORE® system offers flexibility in adjusting the drill diameter, drill bit, and core catcher ring to suit changing ground conditions. Hydraulic fracture is reliably controlled.

Core sampling

The STUBORE® drilling system offers multiple options for core extraction. In addition to storage in core boxes or plastic tubes, cores can also be collected in liners. Furthermore, there is the option to extract undisturbed soil samples.

Testing

All standard geotechnical and geophysical tests, such as SPT, dilatometer, and vane shear tests, can be performed in the borehole.

Installations

Within the protection of the casing, standard installations such as piezometer pipes or inclinometer tubes can be implemented.

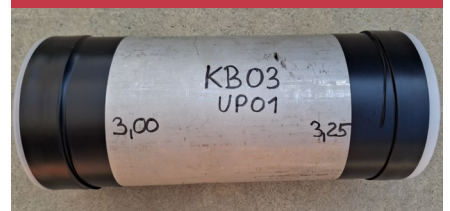
Drill cores Loose rock and rock



Liner



Undisturbed sampling



Ejection of a drill core

