



Performance in every detail

Product Catalog Soil Sampling Robot

Major

- The soil sampling is precise, reliable and non-disruptive, allowing soil samples to be taken with accuracy down to every meter. This ensures the analytical accuracy and representativeness of the samples.
- The system can take different types of soil samples, including soil, silt, mud and sand
- It can be used with various sizes of drilling tools and is equipped with a high torque spiral power unit.
- The system can be used for tasks such as establishing monitoring wells and spiral drilling operations.

Safe and Reliable

- After long-term market verification, the failure rate is low, the construction is reliable, modular design is adopted, and the structure is compact.
- Easy to operate, can be remotely controlled, separates man and machine, avoids safety hazards.
- During construction, front and rear supports are stable, weight is distributed evenly, and the equipment does not shake.

Good Energy-saving Performance

- No soil samples taken, the construction site requires no tedious cleaning, the drilling hole has no impurities generated, no need to add drilling fluid, the borehole is non-polluting.
- Compared with traditional equipment, the noise and vibration is smaller, the degree of damage to the environment after construction is minimized.

Flexible and Portable

- The left and right tracks can adapt to various terrains, with three-speed adjustable travel.
 It is equipped with a pusher blade that can clear obstacles at any time. The equipment can also be lifted for easy maintenance and regular upkeep.
- The trailer frame is at the rear and the carrier tray is at the front, allowing it to carry more construction tools, reducing and eliminating problems with transporting and storing tools. The tools remain with the vehicle, making the system convenient and reliable.

High Efficiency

- The soil sampling is fast, with adjustable two-speed spiral drilling. It features straight-pusher and spiral exploration with a hydraulic winch to assist operations, saving some labor.
- The equipment is flexible for transferring between sites, without requiring heavy equipment lifting and transportation. This makes it convenient, efficient and greatly improves construction efficiency. The machine has strong rapid mobility.

HCZ450 Soil Sampling Robot

Direct Push Soil Sampling Drill

The crawler-type direct push soil sampling drill rig is a robust, durable and compactly structured piece of equipment designed for work in confined spaces and rough terrain. Due to the adoption of direct push drilling method, undisturbed samples can be obtained, the drill bits include both inner and outer tubes, so it has the features of fast drilling speed, complete sampling and high working efficiency. It can travel autonomously, which makes it easy to transport and reach complex terrain.



Wide Applications in:

- Mineral exploration
- Soil pollution research
- Grain size distribution
- Typical soil grading
- Profile delineation
- Concrete coring

Technical Parameters

Performance	
Machine weight	4620kg
Track width	300mm
Tilting stability angle	±13°
Mast stroke	520mm
Extension	400mm
Transverse movement	±5°
Rear frame lifting weight	980kg
Rear frame width	1524mm
Ground load	0.32kg/cm ²
Hydraulic system	
Pump flow	150Lpm
System pressure	250bar
Operating environment temperature	-29°C to 49°C
Down pressure	160kN
Pull/Push-Back Force	238kN
Dynamical System	
Power/Speed	61.3kW
Diesel Tank Capacity	95L
Workspace Level	
Piston stroke	1980mm
Working height with mast, max	4990mm
Two-speed screw drive head	
High torque	5840N • m
Low torque	1635N • m
High speed rotation	0-180rpm
Low speed rotation	0-88rpm
Hexagonal adapter	50.8mm
Hydraulic winch	
Winch power	8kN
Winch speed	0-38m/min
Rope length	15m

















Inner Rod

Spiral Drill Rod

Hammer Cap

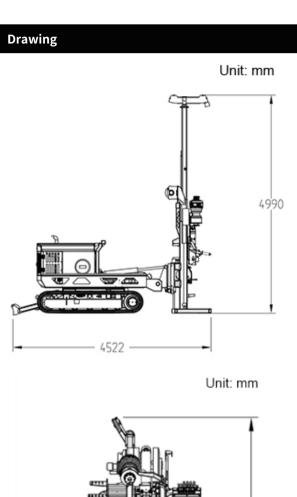
Spring Collar Core Barrel Coupling Soil Auger Bit Percussion Head

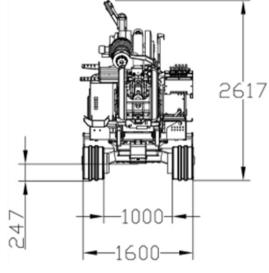
35MM EARTH DRILLING TOOL

Name	Figure NO.
35mm outer pipe tapping cap	HCZJ2.25.01
35mm externallever retractor	HCZJ2.25.02
Common inner pipe impact cap 1 (65)	HCZJ2.25.03
Common inner pipe	HCZJ2.25.04
35mm coring pipe connector	HCZJ2.25.05
35mm outer pipe	HCZJ2.25.06
35mm soil bit	HCZJ2.25.07
35mm inner punch	HCZJ2.25.08
35mm breaking head	HCZJ2.25.09
35mm internal lever retractor	HCZJ2.25.10
Common inner pipe impact cap 2 (95)	HCZJ2.25.11
Common internal short pipe	HCZJ2.25.12
Rubber scraper (inner hole 45mm)	HCZJ2.25.13

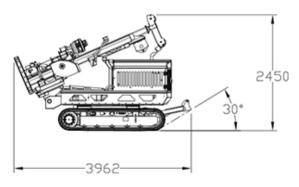
53/63 MM EARTH DRILLING TOOL

Name	Figure NO.
53mm soil bit	HCZJ3.25.01
53mm outer pipe tapping cap	HCZJ3.25.02
53mm external lever retractor	HCZJ3.25.03
53mm outer pipe	HCZJ3.25.04
53mm drill sleeve of discarded bit	HCZJ3.25.05
53mm inner punch	HCZJ3.25.06
53mm breaking head	HCZJ3.25.07
53 mm coring pipe connector	HCZJ3.25.08
63mm inner punch	HCZJ3.25.12
63mm soil bit	HCZJ3.25.13
63mm coring pipe connector	HCZJ3.25.14
Rubber scraper (inner hole mm)	HCZJ3.25.15





Unit: mm



































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