



CRD100 Seafloor Drill

CELLULA ROBOTICS LTD.

KEY FEATURES

65 METER CONTINUOUS CORING DEPTH WITH 12 METER CASING / UP TO 120 METER DEEP CPT
AUTONOMOUS TOOL HANDLING / WIRELINE CORE RECOVERY / 3000M OPERATING DEPTH



CRD100

Seafloor Drill

The CRD100 is a state of the art, fourth generation seafloor drill capable of providing a complete suite of accurate and reliable geotechnical services.

An integrated hydraulic power unit, thrusters, telemetry and control system enables the CRD100 to operate without any subsea support in water depths down to 3000m.

Applications

- Geotechnical seabed drilling and sampling
- Mineral exploration characterization
- Methane gas hydrate sampling
- Downhole instrument deployment

Vessel Interface

- Matched launch & recovery system available
- 15,000kg A-frame (3g DNV approved)
- Active heave compensated winch
- Lifting umbilical



Specifications

DRILLS

- Conventional or wireline
- 1500 N-m torque at 200 RPM
- Up to 800 RPM
- Up to 100 mm per minute bit advancement (depending on ground conditions)
- 100 kN push and pull force
- Onboard polymer injection drilling fluid system

TOOLS

- 65m continuous coring depth with 12m casing
- Industry standard H-size tooling
- 1.5 m rods and core samples
- 61.1 mm core diameter
- Capacity for up to 96 tools

CPT

- 120m CPT push
- 10 & 15 cm² cones
- 2 cm / second at up to 100 kN
- Wireless real-time transmission of data

CONTROL

- Dedicated 20' ISO container control van
- Dual operator chairs
- Autonomous tool handling
- Eight video channels & sensor feedback on all actuators

OPTIONS

- Jack up legs for variable height seabed
- Outriggers for soft seabed
- Custom tooling up to 450mm outside diameter
- Downhole logging tools including natural gamma, conductivity, temperature and magnetic susceptibility

PHYSICAL

- 3000m operating depth
- 13,500 Kg in air (with full tool suite)
- 10,500 Kg in water
- 5.3 m x 2.4 m x 3.1 m (H x W x D)
- Ships in a standard 20' ISO high cube container

Benefits

- ✓ **Improved sample quality:** Decoupling the vessel motion provides a stable drill platform on the seafloor.
- ✓ **Precise seabed positioning** using four thrusters, auto heading & auto levelling legs.
- ✓ **Deployed off any suitable DP vessel.**
- ✓ **HSE benefits** compared to drill ships by eliminating manual tool handling.

