

GEOQUIP ELENA + DEEP-PUSH CPT

The Geoquip Elena is fitted with one of Geoquip Marine's 200kN seabed CPT units. She has been acquired to add much-needed extra capacity for deep-push CPT work to satisfy the increasing demand from offshore windfarm developers and other valued markets, especially in Europe and the Eastern Seaboard of the United States. The CPT unit itself is deployed from the vessel's moon pool.



The Geoquip Elena operates Geoquip Marine's 20T deep-push seabed unit which safely and efficiently conducts an array of in situ tests.

The unit can reliably push to depths of more than 40m and is therefore ideally suited for gathering data for the construction of foundations for offshore windfarms.



When your project requires in situ testing, in either shallow or deep water, our seabed unit can be quickly deployed, offering shorter turnaround times of tests and therefore reducing costs. The seabed system is deployed through the vessel's moonpool.

Once operational on the seabed, the CPT unit relays data to an operator on board in real-time, where it is then processed. The 200kN system provides a continuous profile of tip resistance, sleeve friction and pore water pressure, which can be used for the derivation of shear strength in cohesive soils and the relative density of non-cohesive soils.

GEOQUIP ELENA	
Power	5 x ME: 9500 kW total Main Generators - each 2025 KVA 690V/60 Hz 1 x Emergency generator 370 kWt Deck supply: 440V/60Hz total 1600A
Deck Cranes	Offshore Crane Hydramarine HMC 3568 LKO 250-35 AHC Capacity: 100 t/15 m - 75 t/20 m - 25 t/35 m - 15 t/37 m Offshore Crane (25 t) Hydramarine HNC-2398-LK Capacity: 25 t/15 m - 12,5 t/19 m
Flag, IMO, Call Sign	Vanuatu, IMO 9249439 Call Sign: YJVL7
Class	ABS A1, AMS, ACCU, DPS-2
Principal Dimensions • LOA • Beam • Draft (max)	91,05 m 19.7 m 7.45 m
Tank Capacity • Fuel Oil • Fresh Water	1551 m3 963m3
Speed / Consumption	Economic speed: 10,5 kts at 12m3/day Full speed: 14,5 kts at 28m3/day On DP: 8 m3/day - Activity & Environmental dependent Type of Fuel: LS MGO (Marine Gas Oil)
Machinery	Main engines (genset) 5 x Caterpillar 3516B 1901kW ach Main propulsion 2 x 2200 kW Aquamaster Contaz15 CRP Thrusters, forward 1 x 883 kW Azimuth retractable Thrusters, forward 2 x 883 kW tunnel thrusters
Moon Pool	6 m x 5.25 m

GEOQUIP ELENA	
Dynamic Positioning System	(DP-2) KONGSBERG SDP-22 Kongsberg Simrad SPD 21 (DP II+) and SDP11 3 x Seatex MRU-M (Mk 2 & Mk5) 2 x Fugro GNSS receivers 3 x Ultrasonic Anemometers 1 x C-Joy 1 x Independent C-Joy Joystick 1 x Kongsberg HiPAP 501 1 x Fanbeam 1 x Tautwire Bandak
Anchoring & Mooring	Anchors: 2 x Stockless Bower Anchors (3,78 T) STUD-LINK chain cables 522,5 m Mooring lines : Nylon, certified, as per requirements Windlass (Anchor) 2 off, 10 t Aker Brattvåg Mooring winch aft 2 off, 8 t Aker Brattvåg
Navigation Equipment	Radars 1 x Furuno FAR 2827 X-Band, 1 x Furuno FAR-2837 S-Band GPS Furuno GP-170 Simrad GN70 Gyros 3 x Gyrocompass NAVIGAT X MK 1 ECDIS Dual ChartWorld eGlobe AIS Furuno FA-170 VDR SSAS Speed Log ANTHEA Autopilot SIMRAD AP70MK2 3x gyrocompass Sperry Marine Navigat x MK2
GMDSS Station	2 x VHF DSC Sailor 2 x VHF Sailor 2 x GPS Furuno GP-170 1 x Navtex - FURUNO 2 x Furuno Inmarsat C 1 x MF/HF DSC station - FURUNO FS-2575C 1 x Echo Sounder Furuno FE-700
MISCELLANEOUS	1 x Fast Rescue Boat 8 x Life rafts (25 person each, 4 life rafts on each side) Garbage Compactor provided. 1 x Food waste disposer unit