HORIZON GEOSCIENCES

TERRA-SURF

Horizon's owned Terra-Surf is a Self Elevating Platform (SEP) purpose built for nearshore and shallow water operations. It is self propelled which allows the Terra-Surf to be operated in areas where support vessels cannot access.

GEOTECHNICAL EQUIPMENT

- Hydraulic Top Drive Drill Rig
- Geobor S and PQ3 wire line systems
- Pressure meter testing
- SPT
- Undisturbed sampling
- Down-hole Vane Testing Equipment

GENERAL

- Length: 12 m
- Beam: 10 m
- Depth of Hull: 1.5 m
- Free deck area: 50 m²
- Draft: 0.4 m
- Generator: 10 kVA
- Legs: 4 x 16 m
- Max water Depth: 12 m
- Derrick: 2 ton
- Drilling: 150 m bsb
- Drill String: PQ wireline

SAFETY EQUIPMENT

- Life jackets: as per Solas
- Lights: as per Solas

The Terra-Surf is a self propelled, self elevating platform which is capable of carrying out the following Geotechnical sampling:

- Undisturbed and disturbed soil sampling
- Rock coring
- Downhole vane testing
- Pressure measure

The Terra-Surf can be transported by road, or transported by vessel.

WEATHER CRITERIA

- Max. wave height when elevated: 1.5 m
- Max. wave height when relocating: 0.6 m
- Current: 1.0 m/sec.
- Wind speed working: 25 knots
- Wind speed transit: 10-15 knots

GENERAL DESCRIPTION

- The vessel is bolt together type for easy assembly on site; this can be considered as more of a pontoon, consisting of 2 pontoon hulls with a steerable out-drive propeller which is driven from the hydraulic power pack.
- Overall dimensions are LOA 11.5 m, BOA 8.5 m, individual pontoon beam 3meters wide with overall weight of 40 tons.
- The unit is provided with 4 jack-up legs 16 meters long with removable base plates to allow elevated operations. This elevates the barge on 4 legs by hydraulic rams driven by the hydraulic power unit.
- The drill tower is designed for short 1 ½ m pipe sections & not compensated.
- Main engine, GM V71 diesel which drives the hydraulic units with 250 hp capacity.

OPERATION

- The power pack drives the steerable propeller through flexible hydraulic hoses. The operator has a steering position (removable seat) with engine controls & steering compass on the port side of the bridge deck.
- The 200 AH battery provides power for the engine starting which is located on a power unit box and Navigation Lights, 3 floodlights on the mast with 10 watts, 12 volts bulb.
- A fuel tank is fitted in the starboard hull.
- On the portside of the bridge deck is the control station for the drilling package, where the operator has a clear visibility from the control position.
- To the port side of the drilling package has 2 general service pumps with 1 ½ "fittings. These are suitable to utilize for pumping out pontoons, if required.
- Behind the drilling package is the hydraulic power unit with a partially soundproofed specially constructed, vented container where in the heat exchanger located.

INSPECTION

- The vessel is well painted & in good order, with marine blue hull topsides with grey waterline and the 4 jack legs are painted with red marine paint.
- The forward & aft of the hull is fitted with solid bulwarks, between which are fitted handrails.
- The forward & aft of the pontoons are provided with mooring bitts and a fairlead leading out to the beam. In addition the aft bit also has a fairlead leading astern. These mooring bitts are small, suitable for ropes of 32 mm diameter or thereabouts. The capping on the fairleads is minimal, and heavy chafe is expected. For this reason wires may be preferred for mooring up over extended periods.

Note: This specification is subject to change without notice.