

Vibro Coring System

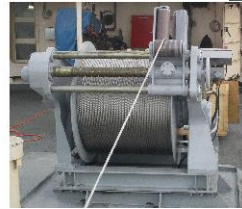
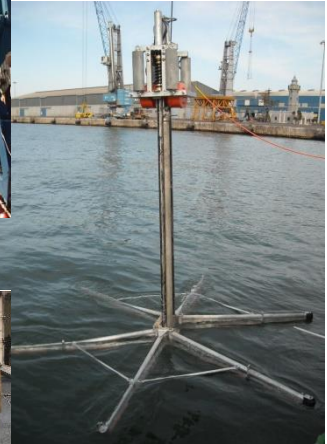
Geo-Vibro Corer 3000 + 6000

Operational Features

- Proven performance & high quality cores
- 30 kN impulse at 30 Hz for fast penetration
- Reliable, lightweight & cost effective
- Modular construction (cores of 3 m or 6 m)
- Pivoting core barrel for horizontal retrieval
- Water injection for deep cores of 12 m and applications onshore & in transition zone
- Optional pre-pressured or compensated model for deep water operation

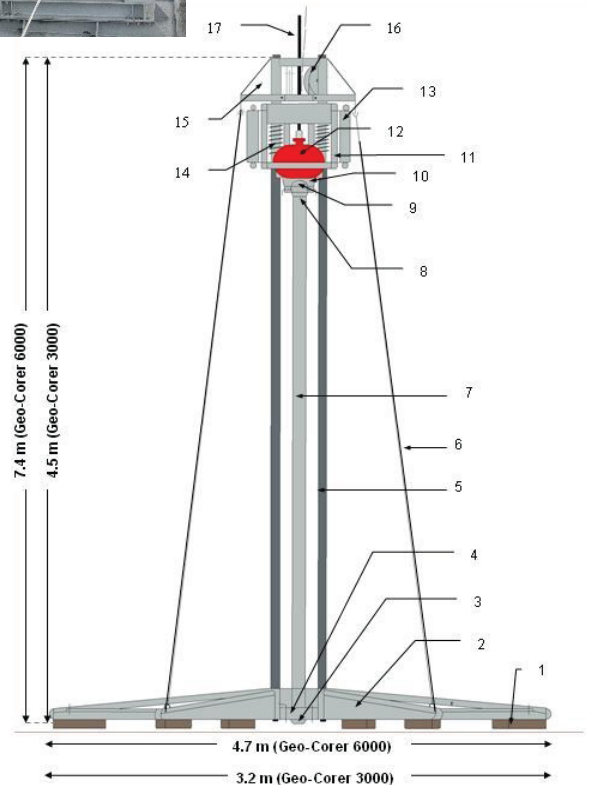
Applications

- Geotechnical survey
- Stratigraphic studies
- Geological mapping
- Mineral exploration
- Environmental surveys



Technical Specifications

Maximum weight in air	1000-1200 kg, depending on ballast weights
Maximum weight in water	850-1050 kg, depending on ballast weights
Total height	7.4 m (6 m core barrel) 4.5 m (3 m core barrel)
Footprint base frame	Diameter 4.7 m (6 m core barrel) Diameter 3.2 m (3 m core barrel)
Vibro motor	Electrically driven double vibrator (5.5 kVA)
Vibrating frequency	28 Hz
Vibration swing force	30 kN
Dead weights on vibrator head	Adjustable, from 100 kg to 300 kg
Electric power	380 /440 V AC, 3 Phase, 50 / 60Hz Running power 2 A to 6 A, depending on soil type. Minimum Generator Power: 7.5 kVA
Core barrel and accessories	ID / OD: 113 mm / 121 mm (stainless steel 316) <ul style="list-style-type: none"> • Length: 6 m or 3 m Core catcher (stainless steel 316) • Cutting shoe (carbon steel) • Special anti-return valve • Pivoting core barrel head
Core liner	ID / OD: 106 mm / 110 mm, PVC or transparent PVC length: <ul style="list-style-type: none"> • 5.9 m (6 m barrel), • 3.0 m (3 m barrel)
Hoisting requirements	Minimum 5 t crane or A-frame 14 mm anti-twist steel cable, type 35 x 7 (N.B. The provision of a hoisting cable is optional)
Required height below A-frame	8.5 m minimum (6 m core barrel) 5.5 m minimum (3 m core barrel)
Required deck space	Minimum 12 m length for placing the core barrel into horizontal position to extract the core liner



No.	Item	Material
1	protective anti-slip blocks	high quality waterproof plywood
2	spider base frame	carbon steel, hot-dip galvanised (can be folded)
3	core barrel cutting shoe	replaceable cutting shoe, carbon steel, with stainless steel core catcher
4	core barrel guiding block	HMPE
5	guiding poles	high strength steel
6	stays to rigging head	stainless steel 316
7	core barrel	ID/OD 113 x 121 mm stainless steel 316
8	pivoting core barrel head	stainless steel 316
9	non-return valve	Delrin and stainless steel
10	core barrel pivot	stainless steel, hot-dip galvanised
11	sliding frame	stainless steel, hot-dip galvanised
12	vibromotor	3-phase AC motor; 5.5 kVA
13	dead weights	adjustable to six pieces of 50 kg each (on vibrator head)
14	springs	transferring resonant vibration motion to 30 kN
15	rigging head	hot-dip galvanised
16	hoisting wire	anti-torsion 14 mm steel cable, type 35 x 7
17	underwater power cable	polyurethane, Kevlar-reinforced (12 x 1 mm ²)