

# Core cone

We developed a CPT and rotary coring system, which can be used for offshore, near shore and land investigations. The core cone is a CPT system to be used in combination with a drilling system for taking cores. The CPT cone latches into the drilling system.

## Deployment

The system is deployed with a combined lifting and communication umbilical cable, which is attached to a winch for recovering the tool on completion of the CPT. The surface logging system for real time recording of the CPT data, is connected via the umbilical cable.

The system has been designed to offer the full range of cones. The results are displayed on a computer screen for real-time assessment of ground conditions.

## Advantages

The advantage of this system is that an offshore style borehole can be performed whereby it is possible to alternate coring, sampling and CPT testing within the same borehole. It also enables CPTs to be performed at any depth within a borehole, where a conventional surface CPT can reach refusal in very dense or cemented layers, the borehole can be advanced through these strata utilising drilling techniques and CPTs then performed in suitable strata below.

- Coring, push sampling and CPT testing at any depth within a borehole
- Versatility of investigation
- Cost effective – no need for separate CPTs and boreholes, reduced moves and more productive working time
- Real time data acquisition in each borehole
- Full advantages of geobore drilling system
- Core and CPT testing capability up to 500m
- Can be utilised on a drill ship, jack up or land boreholes

## Typical Applications

- Offshore wind farm developments
- Ports, harbours and jetties
- Dredging projects
- Offshore site investigations in shallow water <100m
- Land projects requiring deep penetration