CPT System Delivery and Immediate Deployment

Coastline Surveys, UK, has taken delivery of its new Datem 5000 CPT system (C-Pen35). After a series of robust acceptance tests, the system was delivered on time to Scotland and has immediately commenced work on a cable route survey in the North Sea for the renewables sector.

The DATEM 5000 unit is a coiled rod design offering the latest technology and increased push capability compared to similar CPT designs available. The C-PEN35 system is designed for performing in-situ soil testing from near shore to water depths up to 3,000m. The unit is compact enough for deployment from smaller vessels of 20-25m length making it a versatile and adaptable system for most client applications and soil types and importantly reducing overall vessel spread costs.

The Cone Penetration Test concept is based on pushing a calibrated steel cone into the ground at a constant speed of 2cm/sec, with continuous measurement of the cone end resistance, sleeve friction along the cone, and the pore water pressure. These measurements make it possible to accurately determine in-situ ground condition strengths and infer stratigraphy over the penetrated depth and is often used in conjunction with vibrocoring and geophysical surveys also undertaken in house. This system has been purchased to support the strategic expansion of Coastline Surveys Ltd geotechnical capabilities for the routes studies for offshore renewables cables, pipelines, port and coastal engineering and dredging studies.