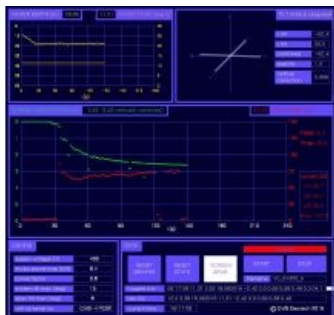


CMS-Geotech Launches Monitoring System



CMS-Geotech, UK, has developed a monitoring system, the vibrocore acquisition monitoring platform (VAMP), to maximise the reliability and robustness of the sampling procedure whilst improving core sample integrity and efficiency. VAMP has been put through a series of rigorous field tests at over 75 locations around the UK in variety of offshore environments by [CMS-Geotech](#) engineers

over the last 12 months with proven results.

It is now used daily in all vibrocore operations carried out by CMS-Geotech using its own in-house built High Powered Heavy Duty vibrocorers.

Vibrocoreing is an established fundamental phase of marine seabed investigations but it's importance is often underestimated and much vibrocoreing is carried out somewhat blindly, i.e. lowering the unit to the seabed, vibrating for a set time, and recovering to the surface in the hope that an adequate sample has been obtained.

VAMP provides the operator with live, integrated telemetry information on screen. Key features include

- frame inclination – vital for both when there is a maximum deviation angle specified for engineering purposes and improved safety against slope instability in areas of soft muds or shifting sands and falling over due to tidal current forces
- barrel penetration – real-time indication of penetration distance and rate of advance enables operator to stop the test when no useful penetration is being gained minimising sample disturbance and maximise sample integrity. Reduction in lost seabed bottom time improves the operational cycle time with associated cost saving implications.
- power consumption – logging of power consumption indicates relative difference between different strata in different locations due to insitu strength and particle characteristics
- live video feed of core barrel penetration and seabed conditions where conditions allow

All data is logged continuously and provides the Client with reassurance that the best possible test was undertaken and test cessation was for a specific and identifiable reason. The impact of varying the frequency can also be assessed.

Further developments will assess the penetration/power consumption data, accounting for barrel skin friction and sediment characteristics to give better overview of relative insitu soil density & stiffness across the project site.