

Limetree
project: drilling
to 270 m.

Workability
increase from
15% to 90%

24/7
operations

MOTION COMPENSATED DRILLING

Drilling for Floating wind foundations

Floating Wind is still in its early stages, but the potential it offers is enormous. With countries all over the world announcing their ambitious off-shore wind plans, floating wind will probably play an important part in realizing these goals. Fixed turbines are limited by water depth and seabed conditions, which are especially problematic outside of Europe, but also at the Atlantic Coast.

Contrary to fixed turbines Floating Wind is unlimited in water depth and soil conditions. However, this brings some serious installation challenges as well. Barge Master provides the solution for drilling the anchors in deeper waters, commissioning of floaters and maintenance of the WTG's.

The anchoring of the Floating Wind Turbines brings a whole new challenge since the traditional way of installing can be a problem. The large water depths, which makes the location suitable for Floating Turbines, makes the use of Jack Up Barge's (JUB's) impossible. The anchor piles can be secured by a piling hammer or suction piles, but these techniques cannot be used with hard soil conditions.

Therefore, this new market should look at new innovations, since the traditional working methods are not sufficient for the new challenges that arise. A perfect solution is to use motion compensation for drilling the anchor piles in large water depths with hard soil conditions.

Barge Master's motion compensated platform, the BM-T700, compensates the roll, pitch and heave motions of any vessel, with a load capacity of 700 tons. The horizontal movements of the vessel are held in position by a DP or mooring system. Combined this eliminates all the motions.

Therefore the motion compensated platform stabilizes the drill unit completely, making precise, reliant, and safe drilling possible, from a floating vessel, in much higher sea states. By using this setup, the vessel size can be significantly reduced, but also the workability increases, which makes it a very cost effective and reliable option.



Limetree drilling project for SBM offshore



Wikinger drilling project for Boskalis