Last year, two major West of Africa FPSO projects focused on the same two issues: a safe journey to the field and a reliable mooring once arrived there. Chevron, Daewoo and SBM tested their Agbami FPSO, whereas TOTAL, Hyundai and Saibos, performed experiments with their Akpo FPSO.

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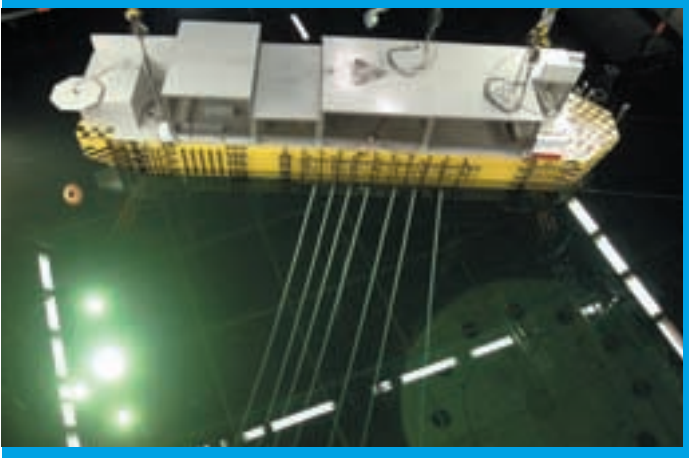
The Agbami FPSO (Chevron, Daewoo and SBM) during the towing (course stability and survival) tests in the Seakeeping and Manoeuvring Basin.

West of Africa FPSOs: a straight course to a reliable mooring



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The Akpo FPSO (TOTAL, Hyundai and Saibos) during the mooring tests in the Offshore Basin.

The towing tests were carried out in the long Seakeeping and Manoeuvring Basin and these focused on the weather conditions from Korea to the fields. With wave flaps on its short and long sides, all relevant wave conditions during tow can be simulated: head, bow quartering, beam, stern quartering and following seas. These features are unique and important for the generation of realistic weather conditions during the tow of the FPSO. The basin length allows long uninterrupted towing and its width allows fishtailing on long towlines. The hulls of the FPSOs were optimised such that a stable course was achieved without fishtailing behind the tugs.

Besides these towing and transportation tests, during both projects mooring tests were carried out in the deep Offshore Basin for input to the mooring evaluation of the FPSO. Short wind seas and long swells were investigated and these were combined under different angles, which is a unique capability of the Offshore Basin. MARIN