

## **Saitec Offshore completes test campaign in IHCantabria for the SATH Platform —floating foundation for offshore wind turbines in intermediate to deep waters— within the DemoSATH Project, funded by SODERCAN.**

After five years of development, SATH (which stands for ‘Swinging Around Twin Hull’) aims to be a revolutionary solution for installation of wind turbines in intermediate to deep waters, thanks to its adaptability to a wide range of turbine sizes and power, together with an innovative strategy regarding its construction and installation.

Saitec Offshore Technologies —the company which conceived the solution—, aims at entering the offshore wind market in locations from intermediate (30 m) to deep waters, where the SATH platform is highly competitive thanks to its low construction and installation costs. SATH technology allows a greater standardization, since its precast and prestressed concrete structure is easily scalable. Unlike other solutions which require expensive and complex steel manufacturing techniques, concrete allows also local industries to take part in the manufacturing process.

One of the objectives of DemoSATH project was to validate the performance of the SATH platform. Saitec Offshore just completed a new test campaign, aimed at the future installation of a 2 MW wind turbine in BiMEP, the open-sea test site in the Basque Country.

This 1:35 scale test campaign was performed in the facilities of IHCantabria, and a wide variety of metocean conditions were simulated, including waves, currents and wind, implementing the real conditions of the wind turbine through a multi-fan system, taking into account turbulent wind and the effects of the control system. This way, the SATH floating solution was analyzed under the most demanding sea states, and proven to be an excellent technology even in the most unfavorable conditions.

The results obtained have been incorporated to the technological development of Saitec Offshore Technologies and they will serve as a basis for design optimization and validation. This optimization is focused on further cost reduction of SATH platform, even in comparison with fixed offshore wind foundations.

These improvements, together with the installation of the 2 MW prototype in BiMEP, will help SATH achieve the necessary maturity for future commercial launching of this technology.

## About IHCantabria

The University of Cantabria, located in Santander, on the north coast of Spain, is one of the three universities that has been amongst the top 10 in the Spanish ranking, both in educational quality and research. IHCantabria, one of its centers, is the leading research center in the countries in the areas of coastal and oceanic engineering, with more than 140 researchers and scientists focused on a wide range of engineering challenges. It also manages a unique set of experimental facilities specializing in ocean engineering issues. The University of Cantabria, and the research carried out at IHCantabria, are the sixth in the world ranking of the University of Shanghai and world leader in the CNCI indicator (Normalized Category of Impact Citation).

## About Saitec Offshore Technologies

Saitec Offshore Technologies is a spin-off from Saitec S.A., which was founded in 2016 to commercialise SATH technology and its associated engineering services in offshore wind. Originally founded with Saitec's staff, Saitec Offshore Technologies has grown and achieved a deep knowledge in offshore engineering; added to the previous experience from its mother company in the energy field.

Saitec is an engineering firm with over 30 years of experience and worldwide presence with more than 300 people in 4 different continents. Its main activity is related to the development of projects on the following fields: roads, railways, water, environment, industry & energy, and architecture & town planning. SAITEC's area of activity extends to the whole engineering value chain (planning, design, construction and operation) providing its services both to private and public societies.