

News

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Floating Offshore Substations - Semco Maritime, Inocean and ISC Consulting Engineers join forces

The international partnership merges two decades of offshore wind experience from fixed bottom offshore substations with naval architecture expertise and seeks to bring a reliable and cost-effective floating offshore substation concept to the market.

COPENHAGEN/ESBJERG, DENMARK / OSLO, NORWAY - Semco Maritime and ISC Consulting Engineers, based in Denmark, along with Technip Energies' affiliate Inocean based in Norway and Sweden have announced a partnership that will combine Semco Maritime and ISC's extensive offshore wind farm and fixed-bottom substation engineering and construction experience with Inocean's expertise as naval architects through design work on floating structures for floating wind turbines and for major floating oil & gas topsides.

The team has developed a reliable, cost-effective, and scalable floating offshore substation concept for the market to help clients in their maturation, development, and construction phase of floating offshore wind projects. Floating wind turbine technology is, in general, well understood in the market whereas floating substations is still a concept in its market maturation phase. A substation layout has been developed to fit the shape of a 3-column stabilized substructure; all known technology combined in a new wrapping.

"As floating wind farms develop in terms of size, distance from shore and water depth, the need for a floating offshore substation as a key element of the transmission asset is becoming vital," said Tommy Flindt, Senior Director, Technology & Market Development, Renewable Energy, Semco Maritime. "There are many technical risks to manage. By merging Semco Maritime and ISC's two decades of successful track-record with offshore substation with that of Inocean's two decades as a naval architect for floating structures, we believe we are the right team to manage and control these risks."

"The floating wind industry is believed to enter a growth trajectory and our experiences with the INO™ series of floating wind turbine foundations together with an extensive track record of integration/interface work related to HVDC substations will benefit the growing industry," added Øystein Nilsen, MD at Inocean. "We look forward to joining Inocean's floating international experience with that of ISC and Semco Maritime to bring a solid offering to the market".

“As pioneers in offshore wind, ISC designed the world’s first fixed bottom substation for an offshore wind farm and since 2003 ISC has provided detailed engineering design for more than 45 offshore substations. We are now ready to venture onto floating substations by offering our track record and experience to create value for our clients, said Andreas Laungaard, Vice President of Renewable Energy & Operations Offshore at ISC. “We believe our joint team will provide a cost-effective solution with solid reliability while delivering to the highest safety standards”.

About Semco Maritime A/S

Semco Maritime is an international engineering and contracting business undertaking and solving assignments across the value chain of the global energy sector. The company also helps its customers to seize opportunities in the green transition and to ensure responsible fossil fuel extraction processes. Since 1980, we have applied our specialist competencies as a platform for the work carried out at all stages of offshore and onshore assignments – from preliminary analyses over design, procurement and manufacturing to installation, commissioning, and subsequent service as well as rental of manpower and supply of bespoke components, systems and solutions. Semco Maritime has 1,900 employees, who secure our customers cost-effective project management and operations from our head office in Denmark. www.semcomaritime.com.

About Inocean

Inocean is an affiliated company of Technip Energies and has delivered innovative naval technology to complex marine and offshore projects for more than 25 years. In 2001 we introduced the first floating wind turbine foundation. Our experience has developed to include participation in some of the world’s first and largest offshore wind grid connection projects with capacities of 500-900MW+ through partnership with industry leaders. This gives us a unique competence especially for integration of High Voltage (HV) equipment into the offshore environments.

Inocean delivers Engineering Expertise, Project Management and Interface Management from concept to offshore installation and commissioning, particularly in the business fields of Offshore Wind HVAC & HVDC (High Voltage AC and DC) converter substations and cables for offshore wind fixed and floating concepts. For further information, please see www.inocean.no.

About ISC Consulting Engineers

ISC is an engineering consultancy company working worldwide to create value for our clients through innovative engineering solutions. We have been in the offshore wind sector since we designed the world’s first offshore substation almost 20 years ago in 2003 and in the offshore business for more than 45 years. Today ISC are one of the leading consulting engineering companies in offshore wind with a long track record of successful projects worldwide. The track record includes the world’s first offshore substation to the largest offshore substation.

ISC provides engineering design service solutions within sectors such as offshore wind substations, offshore WTG foundations, green hydrogen/PtX and offshore oil & gas. ISC is based in Denmark with head office situated in Copenhagen and has 230 employees. For further information, please visit www.isc.dk.

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