

DAJIN HEAVY INDUSTRY ENTERS OFFSHORE LOGISTICS WITH LAUNCH OF FIRST SELF-BUILT HEAVY DECK CARRIER

Dajin Heavy Industry has taken a major step into marine logistics with the launch of its first self-constructed heavy deck carrier, King One, signaling the company's expansion beyond offshore wind component manufacturing into full offshore energy transport solutions.

The 240-metre-long, 51-metre-wide vessel, with a deadweight of around 40,000 tonnes and a 12,000-m² open deck, is purpose-built to handle oversized structures for offshore wind, oil, and gas projects. The launch took place on 10 October 2025 at Dajin's fabrication base in China, marking the company's entry into a new phase of integrated offshore operations.

King One will undergo sea trials before entering service in early 2026. It is the first of at least four sister vessels currently under construction, forming part of Dajin's ambition to develop a fleet of around 20 heavy deck carriers to support global offshore wind logistics.

Previously best known for producing monopiles and towers, Dajin now aims to strengthen the industry's transport infrastructure as turbine components become larger and supply chains more complex. The company stated that the vessel "demonstrates Dajin's evolution from equipment manufacturing to providing full-chain offshore energy logistics."

By establishing its own transport fleet, Dajin seeks to reduce dependency on external shipping capacity while improving reliability and cost efficiency — positioning itself as a key player in the offshore renewable supply chain.



RWE AND ARC MARINE PILOT ECO-ENGINEERED REEF CUBES® AT RAMPION OFFSHORE WIND FARM



RWE and UK-based ARC Marine have achieved a global first in nature-inclusive offshore engineering with the full-scale installation of patented Reef Cubes® scour protection at the Rampion Offshore Wind Farm in the UK.

Around 75,000 modular Reef Cubes®, ranging from 15 to 35 centimetres in size, were deployed around the base of one of Rampion's turbines by contractor Rohde Nielsen. This marks the first real-world use of the eco-engineered design as an alternative to conventional rock armour, combining structural stability with marine habitat creation.

Developed under the Reef Enhancement for Scour Protection (RESP) pilot, the installation follows RWE and ARC Marine's collaboration announced earlier in July 2025. The project aims to protect turbine foundations from seabed erosion while providing refuge and breeding grounds for marine species.

Unlike traditional rock layers, Reef Cubes® are lightweight,

modular, and easy to install. Their interlocking geometry and textured surface increase available habitat space by over 100% compared to standard materials, while also enhancing fish and shellfish populations. Each unit at Rampion adds to an estimated 25,000 m² of potential marine habitat.

RWE Offshore Wind COO Thomas Michel called the milestone "a step forward in combining asset protection with positive environmental outcomes." ARC Marine CEO Tom Birbeck added that the design's scalability and cost efficiency align with new biodiversity net gain requirements for offshore infrastructure.

The Rampion trial will continue to be monitored for performance and ecological impact, with results expected to guide broader adoption of eco-engineered protection systems across RWE's global offshore portfolio.



JAN DE NUL ORDERS NEW ROCK INSTALLATION VESSEL TO ENHANCE SUBSEA INFRASTRUCTURE PROTECTION

Offshore engineering group Jan De Nul has commissioned a new high-capacity Rock Installation Vessel (RIV), George W. Goethals, to support the increasing global demand for seabed protection of subsea cables, pipelines, and energy infrastructure.

The vessel, currently under construction, will feature a 37,000-tonne carrying capacity and deploy rock materials at depths up to 400 metres through both vertical and inclined fall-pipe systems — ensuring precise placement even in challenging marine environments.

Designed in-house, George W. Goethals will be the third rock installation vessel in Jan De Nul's fleet exceeding 30,000 tonnes. It will primarily serve offshore energy projects in the North Sea and Southeast Asia, reinforcing the company's commitment to safeguarding underwater power and communication networks.

Equipped with hybrid propulsion and classified as an ultra-low

emission vessel (ULEv), it will run on biofuel and be ready for green methanol use. The design integrates battery-assisted power management and advanced drive systems to cut emissions and optimize efficiency.

Onboard, four electric excavators will handle rock loading operations independently, further improving turnaround and reducing reliance on port infrastructure.

"This investment strengthens our ability to protect the infrastructure vital to offshore energy generation and transmission," said Philippe Hutse, Director of Offshore Energy at Jan De Nul. "The George W. Goethals represents another leap forward in sustainable and high-precision marine construction."

The vessel will play a key role in enhancing subsea resilience and supporting global energy transition efforts through environmentally responsible offshore operations.

EU-FUNDED OCEAN ENERGY PLATFORM TESTS STORM- RESISTANT TECHNOLOGY OFF GRAN CANARIA



An innovative ocean energy prototype capable of operating through extreme weather has been installed off Gran Canaria, Spain, marking a milestone for marine renewable energy resilience.

Developed under the EU Horizon Europe-funded PLOTEC project, the platform — nicknamed Don — is designed by UK company Global OTEC to demonstrate the potential of Ocean Thermal Energy Conversion (OTEC) as a 24/7 clean power source for island nations.

Deployed at the PLOCAN test site in late October 2025, the cylindrical hull will soon be connected to its deep-water pipe for full structural testing. The prototype's design builds on decades of earlier research following the historic Mini-OTEC and OTEC-1 trials in Hawaii.

"This project is about proving resilience as much as

performance," said Global OTEC Founder Dan Grech. "If OTEC can operate safely through severe storms, it can redefine how island regions achieve energy independence."

Advanced sensors supplied by Fugro will monitor the platform's motion, stress loads, and interaction with waves. The data will validate simulation models and inform future commercial-scale OTEC systems.

The initiative supports the EU's broader goals for energy security and climate resilience ahead of COP30, with partners including Cleantech Engineering, WavEC Offshore Renewables, PLOCAN, and Quality Culture.

If testing confirms the platform's durability, full-scale OTEC units could be deployed across tropical regions by the late 2020s, providing stable baseload renewable energy and reducing reliance on diesel generation.

PETRONAS AND UMT ESTABLISH OFFSHORE RENEWABLE ENERGY CENTRE IN MALAYSIA

Malaysia's energy sector has taken a significant step toward integrated clean power innovation with the launch of the Centre for Offshore Renewable Energy (CEFORE), a joint initiative between PETRONAS and Universiti Malaysia Terengganu (UMT).

Designed as a proof-of-concept (PoC) facility, CEFORE aims to demonstrate how multiple renewable energy sources can operate within a single offshore platform. The pilot integrates floating solar photovoltaic systems, offshore wind turbines,

wave energy converters, battery storage, and a smart energy management system (EMS).

Located nearshore off Terengganu, the initiative tackles two major challenges in renewable deployment — the intermittent nature of power generation and the limited land availability for onshore installations.

PETRONAS emphasized that CEFORE aligns with its long-term decarbonization and technology development strategy, combining academic collaboration with industrial expertise to accelerate Malaysia's clean energy transition.

According to the Group Technology & Commercialisation division, CEFORE will act as a living laboratory for innovation, performance testing, and workforce training. It will serve as both a research hub and a model for scalable offshore renewable integration in Southeast Asia.

By merging technical progress with sustainable practice, CEFORE strengthens Malaysia's position as a regional leader in hybrid offshore energy systems, showcasing how cross-sector partnerships can drive a balanced and resilient low-carbon future.





DEMOATOMS PLATFORM LAUNCHED, MARKING A NEW ERA IN OFFSHORE WIND MAINTENANCE TECHNOLOGY

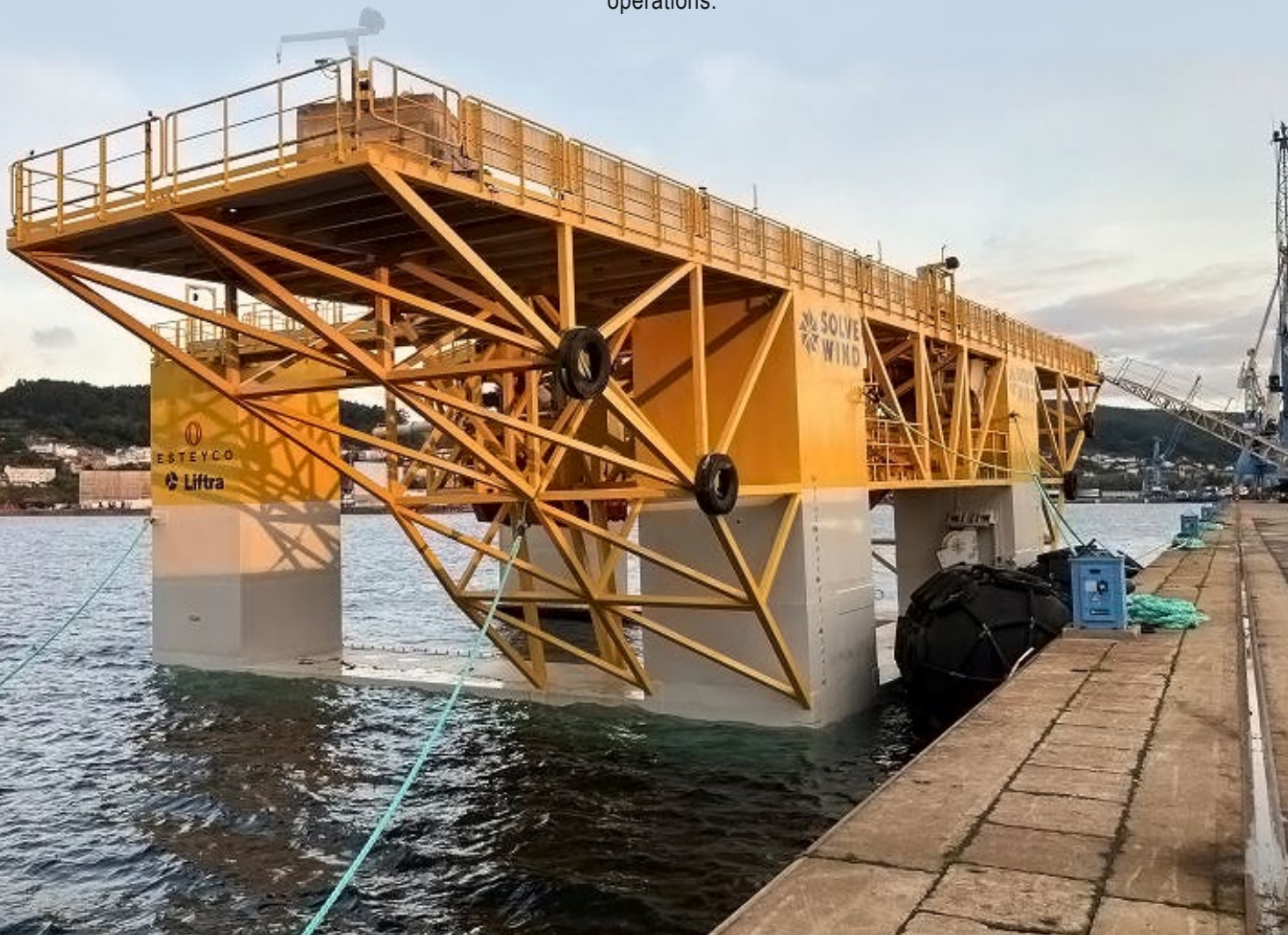
The DemoATOMS platform has officially been launched, marking a major milestone in the advancement of next-generation offshore wind maintenance systems.

Following the successful completion of extensive electrical and hydraulic testing, along with initial subsystem validation, the final assembly of the ATOMS platform was completed in recent weeks. The unit has now entered the water and is moving into the next stage of open-sea testing to evaluate its performance under real-world marine conditions.

The project brings together the expertise of ESTEYCO, Liftra, Pine, and Montajes y Estructuras Lago SL, whose collaboration

has been essential to achieving this technical milestone. The initiative is part of SOLVE WIND, a broader European effort to modernize offshore wind installation and maintenance practices, focusing on efficiency, modularity, and sustainability.

The DemoATOMS concept aims to revolutionize offshore maintenance for wind turbines up to 5 MW using Liftra's LT1200 Self-Hoisting Crane, which allows lifting operations without requiring large jack-up vessels. Insights gained from this demonstration phase will inform the development of future ATOMS platforms capable of servicing larger turbines, helping reduce both costs and environmental impact in offshore wind operations.





GRS OFFSHORE RENEWABLES

BW *ideol*

BW IDEOL SECURES EU FUNDING FOR FLOATING FOUNDATIONS FACTORY IN SOUTHERN FRANCE

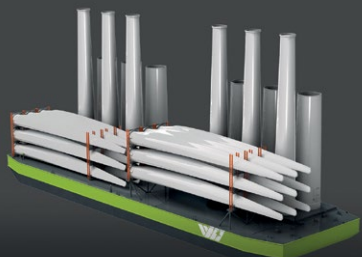
BW Ideol has received funding approval from the European Commission's Innovation Fund for its Fos3F project — a pioneering floating foundation production facility to be built in Fos-sur-Mer, on France's Mediterranean coast.

The Fos3F plant will be the first large-scale industrial facility in Europe dedicated to serial production of floating wind substructures based on BW Ideol's patented Damping Pool® technology. This proven concrete design has already demonstrated performance at sea on two continents and is compatible with the latest generation of floating wind turbines ranging from 15 MW to 20 MW.

Using advanced construction techniques such as gantry slip-forming, skidding systems, and automated prefabrication — methods widely used in civil infrastructure — the facility will enable rapid and cost-efficient production of floating foundations. Strategically located in southern France, it will serve floating wind developments in France, Spain, Italy, and Greece, targeting a regional market potential of around 8 GW by 2043.

The project aligns with the EU's energy transition objectives, strengthening Europe's renewable energy supply chain, boosting industrial competitiveness, and supporting local employment in the Mediterranean basin. Once operational, the Fos3F factory will play a central role in scaling up Europe's floating wind capacity and accelerating the path to net-zero energy production.

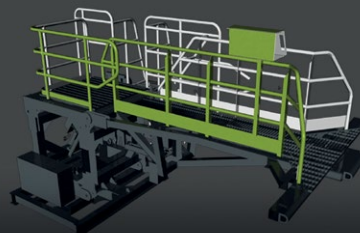
OFFSHORE EQUIPMENT



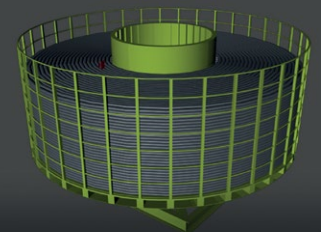
BARGE / PONTOON



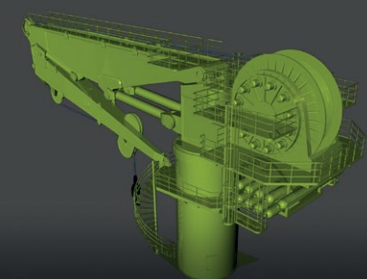
ACCOMMODATION MODULE



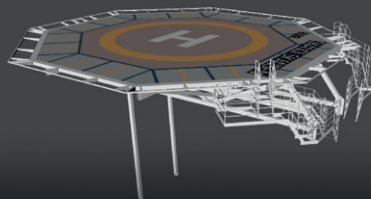
TRANSFER SYSTEM / GANGWAY



CABLE CAROUSEL / TURNTABLE



CRANE



HELICOPTER DECK



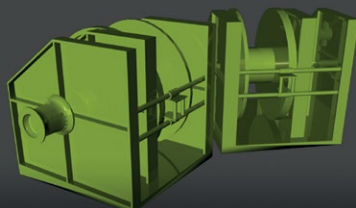
OFFSHORE CONTAINER



CABLE INSTALLATION EQUIPMENT



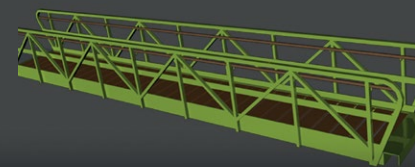
REMOTE OPERATING VEHICLE (ROV)



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