

EXMAR is proud to announce a major step forward in its drive to advance ammonia as a zero-carbon marine fuel. In January 2026, Type Approval Testing (TAT) and Factory Acceptance Testing (FAT) were successfully completed for the world's first ammonia-fueled two-stroke marine engine, which will power one of EXMAR's next-generation 46,000 m³ LPG/ammonia carriers currently under construction.

The rigorous test programs were conducted at the HD Hyundai Heavy Industries' Engine & Machinery (HHI-EMD) facility in South Korea. The process was witnessed by Lloyd's Register, alongside representatives from all major classification societies, and was supervised by EXMAR.

This significant achievement paves the way for EXMAR's new series of vessels to become the first ammonia-fueled gas carriers in commercial service—reinforcing EXMAR's commitment to supporting the maritime industry's transition to [low- and zero-carbon energy solutions](#).



Kristof Coppé, Director Fleet Operations & Technical Business Development at EXMAR, said:

“These successful tests represent a key milestone in EXMAR’s development of *ammonia as a marine fuel*, a journey that began in 2021. Drawing on more than 40 years of experience in transporting ammonia as cargo, we have been able to bring critical operational insight into both

engine design and the test program, with special focus on the safety considerations unique to using ammonia as a fuel.

We now move forward with preparations for sea trials, where the ammonia dual fuel engine and all onboard systems will be validated in real-world operation. Preparations are well underway, and trials are planned for the coming months.”



Sotiris Topaloglou, Global Head of Testing & Validation at WinGD, said:

“Completing Type Approval Testing and Factory Acceptance Testing with our joint development partner HHI-EMD represents a major technical milestone in the development of ammonia-fueled two-stroke propulsion. As first movers, we are addressing a completely new fuel landscape, where safety, control and system integration are paramount. We have developed an engine that has been well proven to be safe and efficient by tackling, one by one, all the technical challenges we faced.

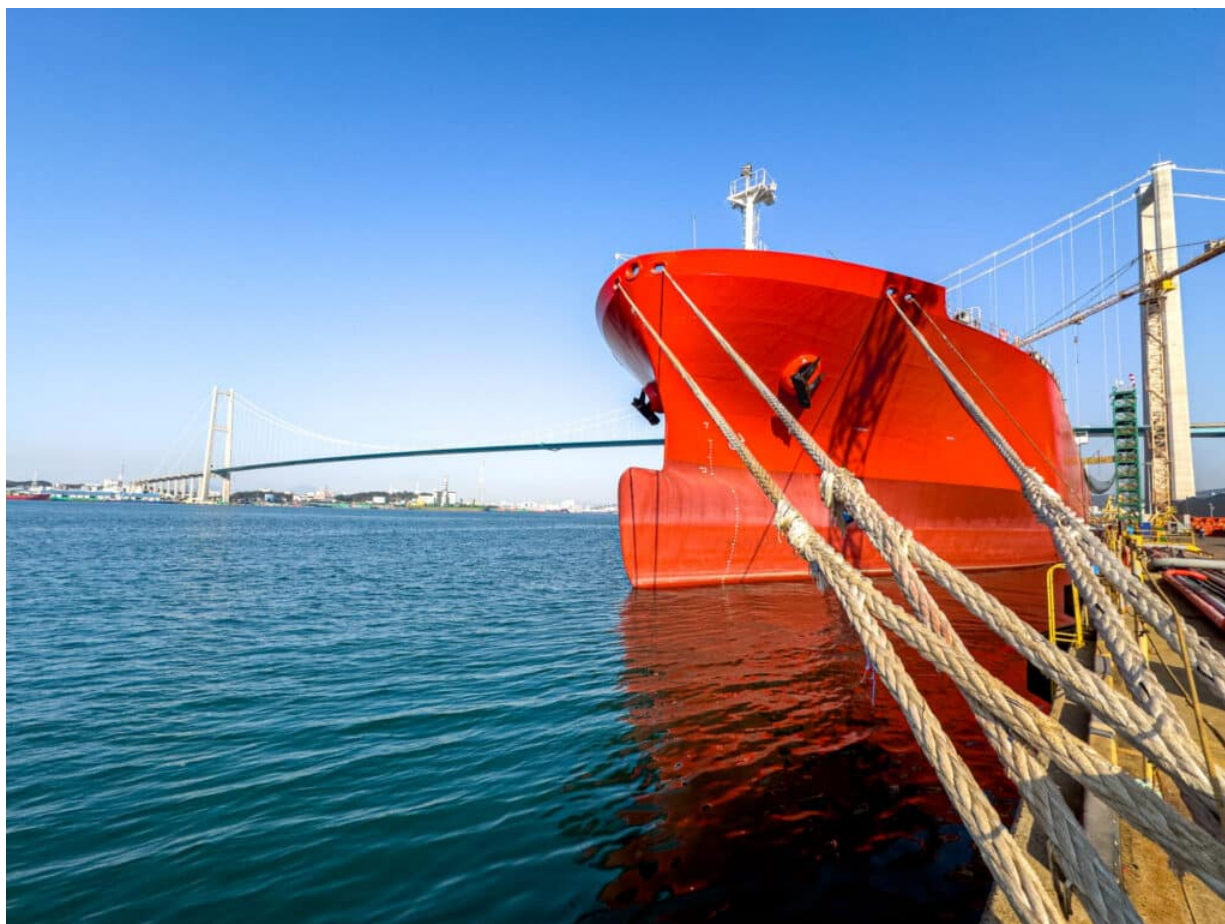
“Demonstrating the world’s first TAT for an ammonia-fueled two-stroke engine with strong results demonstrates that ammonia propulsion can meet the highest standards of reliability, performance and safety expected by the industry for commercial marine application.”

Minho Kang, Head of Marine Engine & Machinery Technical Section at HHI-EMD, continues :

“By successfully completing the world’s first Type Approval Testing (TAT) and Factory Acceptance Testing (FAT)—processes that require a high level of precision throughout both manufacturing and testing—HD Hyundai Heavy Industries has demonstrated its technological leadership in the next-generation eco-friendly marine engine market. We will continue to lead the decarbonisation of maritime transport by delivering high-quality, environmentally friendly marine engines.”

As a recognized pioneer in ammonia transportation and handling, EXMAR's expertise has been instrumental throughout the development, ensuring the highest safety and performance standards. EXMAR's upcoming ammonia-fueled vessels reflect the company's dedication to integrating innovative, sustainable technologies for the maritime energy sector.

EXMAR looks forward to the sea trial phase and to supporting the future of sustainable shipping with this breakthrough in ammonia-fueled propulsion.



About EXMAR

EXMAR is a provider of floating solutions for the operation, transportation and transformation of gas. EXMAR designs, builds, owns, leases and operates specialized floating maritime infrastructure, leveraging generations of shipowning and project execution expertise for an improved energy future. The company is committed to the highest standards for commercial, technical, quality assurance, and administrative management in the maritime energy industry.



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