



YANMAR

Information

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Yanmar Holdings Co., Ltd.

Yanmar's Maritime Hydrogen Fuel Cell System Achieves DNV Type Approval



Award Ceremony*

Osaka, Japan (September 4, 2026) – Yanmar Power Solutions Co., Ltd., a subsidiary of Yanmar Holdings, today announced that its Maritime Hydrogen Fuel Cell System has achieved Type Approval from DNV, one of the world's leading classification societies. This certification represents a significant milestone in the commercialization and global deployment of hydrogen fuel cell technology for marine applications.

The approval confirms that the GH-FC series complies with DNV's industry leading rules and guidelines, enabling shipbuilders, system integrators, and vessel operators to adopt the technology with greater confidence and reduced certification burden for future projects.

“Achieving DNV Type Approval represents a major milestone in our journey to bring hydrogen-powered solutions to the marine market,” said Masaru Hirose, President and Representative Director of Yanmar Power Solutions Co., Ltd. “Building on our operational experience in Japan, we aim to support customers around the world in their transition to zero-emission operations and realize sustainable maritime transportation.”

Eric Tigelaar, Department Manager of Commercial Marine Department at Yanmar Europe stated: “This certification strengthens our ability to support customers throughout Europe and beyond who are seeking practical pathways toward decarbonization. The GH-FC series combines easy installation, operational flexibility, modularity and environmental performance, making it an attractive solution for a wide range of vessel applications.”

Olaf Drews, Head of Engines & Pressurized Equipment, DNV Maritime, remarked: “We are very pleased to continue our cooperation with Yanmar and award them this latest Type Approval Award for their GH-FC series. Every step demonstrates the growing maturity of hydrogen fuel cell technology and continues to build confidence in the market and showcase its readiness for broader commercial applications. DNV is pleased to continue supporting innovative solutions that can help accelerate the transition toward zero-emission shipping.”

Building on decades of expertise in marine propulsion and power generation, Yanmar has been developing hydrogen fuel cell technologies since 2015. The company commercialized its maritime fuel cell systems in 2023 and has continued to expand deployment in Japan through collaboration with shipowners, operators, and local governments pursuing decarbonized marine transportation solutions.

The certification marks an important step in moving Yanmar’s maritime hydrogen fuel cell technology from successful domestic deployment toward broader commercial adoption in international markets.

*From left: Eric Tigelaar (Yanmar Europe), Takehiro Maruyama (Yanmar Power Solutions), Oliver Darley (DNV Maritime), Masaru Hirose (Yanmar Power Solutions), Tomoyuki Murase (DNV Maritime), and Olaf Drews (DNV Maritime).

About the GH-FC Series

Yanmar has already established one of the most extensive operational track records for hydrogen fuel cell systems in the Japanese maritime sector. To date, the GH-FC Series has been deployed or selected for multiple vessel projects, including:

- MOL Techno-Trade, Passenger Vessel “HANARIA”: <https://hanaria.jp/en/>
- Tokyo Metropolitan, Government Hydrogen Workboats “Tokyo Mirai Maru” and “Tsukiji ZERO”: <https://www.english.metro.tokyo.lg.jp/w/000-101-009265>
- NYK Line, New Cruise Ship “Amane”: https://www.nyk.com/english/news/2026/20260706_01.html
- Kurose Suisan, Aquaculture Workboat <https://kurosui.jp/blog/staff/staff-1605/> (Japanese)

These projects demonstrate the scalability of Yanmar's hydrogen fuel cell platform, ranging from small workboats to larger passenger vessels, while providing valuable operational experience

under real-world conditions.

The growing adoption of GH-FC Series systems highlights increasing industry confidence in hydrogen as a viable energy source for maritime decarbonization.



The GH-FC Series is a maritime hydrogen fuel cell system developed specifically for vessel applications. It generates electricity through an electrochemical reaction between hydrogen and oxygen and is designed to serve as a next-generation power source that produces zero CO₂ emissions during operation.

Featuring a modular design, the GH-FC Series enables flexible system configurations to meet a wide range of vessel requirements and power demands, with output options of 80, 160, 240, and 320 kW.

About Yanmar

With beginnings in Osaka, Japan, in 1912, Yanmar was the first ever to succeed in making a compact diesel engine of a practical size in 1933. A pioneer in diesel engine technology, Yanmar is a global innovator in a wide range of industrial equipment, from small and large engines, agricultural machinery and facilities, construction equipment, energy systems, marine, to machine tools and components — Yanmar's global business operations span seven domains. Guided by its Brand Statement, "A Sustainable Future – New Value Through Technology," Yanmar provides advanced solutions to the challenges customers face on land, at sea, and in the city, working towards realizing a sustainable future.

<https://www.yanmar.com/global/about/>

Note: Information contained in the news release is valid at the time of publication and may differ from the most recently available information.

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