
Press release

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First Order for G80 Dual-Fuel Methanol Engine

HMM orders 9 × G80ME-LGIM Mk10.5 engines for containership series

Hyundai Samho Heavy Industries Co. and HJ Shipbuilding & Construction Co. (HJSC) have respectively ordered seven and two MAN B&W G80ME-LGIM dual-fuel engines in connection with the construction of 9 × 9,000 teu container vessels for HMM Co., the major South Korean integrated-logistics company.

The engines, which are capable of operation on green methanol and conventional fuel-oil, represent the first order for the G80 bore size; they will also feature MAN Energy Solutions' proprietary EGR (Exhaust Gas Recirculation) systems. The newbuildings will be delivered to HMM from 2025 and will operate on routes to North and South America as well as India. The G80 engines will, upon delivery, be connectivity-ready and prepared for digital services such as PrimeServ Assist.

Bjarne Foldager, Senior Vice President and Head of Low-Speed, MAN Energy Solutions, said: "This world-first order for a G80 methanol engine is just a continuation of the general market trend toward methanol where the ME-LGIM engine has become the *de facto* industry standard for large, methanol-fuelled, merchant marine vessels. At MAN Energy Solutions, we expect further projects for this size of container vessel to be specified with our G80 methanol engine within the near future. As such, methanol is quickly becoming the most prominent alternative fuel in the container vessel segment."

Thomas S. Hansen, Head of Promotion and Customer Support, MAN Energy Solutions, said: "Our thanks for this significant order go to HMM, whose commitment and partnership we value greatly. This new order means that we now have over one-hundred ME-LGIM engines on order or in service. In our open project pipeline, container vessels make up around 61%, followed by both tankers and bulk carriers with 17%, and general cargo making up the remaining 5%. MAN Energy Solutions' methanol engines are a proven concept that combine well with methanol's unique selling points as a fuel that include its easy storage, simple auxiliary systems, and not to forget that green methanol is entirely carbon-neutral."

Increasing methanol production

Along with the new order, HMM has also signed MoUs with multiple fuel suppliers to ensure the methanol supply for the vessels. In this regard, according to the Methanol Institute (MI), more than 80 renewable methanol projects globally are projected to produce more than 8m metric tons of e-methanol and bio-methanol annually by 2027.

Renewable methanol is a low carbon and net carbon-neutral liquid chemical and fuel produced from sustainable biomass, often called bio-methanol, or from

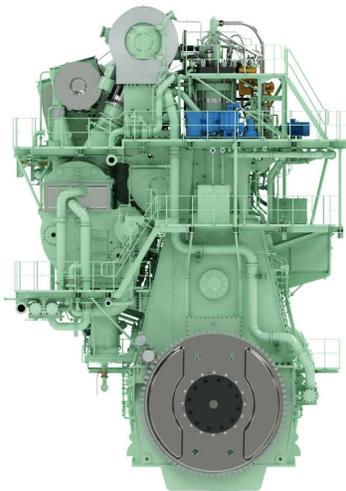
captured carbon dioxide and hydrogen produced from renewable electricity, referred to as e-methanol.

In addition to the growing number of projects, MI reports clear evidence that bio-methanol and e-methanol facilities are ramping up production. With ongoing advancements in technology and increased government support, it expects the capacity of individual renewable plants to rise from 5 - 10,000 metric tons of methanol to 50 - 250,000 metric tons or more annually over the next five years.

About the MAN B&W ME-LGIM engine

MAN Energy Solutions developed the ME-LGIM dual-fuel engine for operation on methanol, as well as conventional fuel. The engine is based on the company's proven ME-series, with its approximately 8,500 engines in service, and works according to the Diesel principle. When operating on green methanol, the engine offers carbon-neutral propulsion for large merchant-marine vessels.

MAN Energy Solutions developed the ME-LGI engine in response to interest from the shipping world in operating on alternatives to fuel oil in order to reach decarbonisation targets. Methanol carriers have already operated at sea for many years using the engine, and, as such, the ME-LGIM has a proven track record offering great reliability and high fuel-efficiency.



9 × G80ME-LGIM Mk10.5 engines are bound for a containership series for South Korean HMM Co., the first such order for MAN B&W methanol engines of this bore size



MAN Energy Solutions enables its customers to achieve sustainable value creation in the transition towards a carbon neutral future. Addressing tomorrow's challenges within the marine, energy and industrial sectors, we improve efficiency and performance at a systemic level. Leading the way in advanced engineering for more than 250 years, we provide a unique portfolio of technologies. Headquartered in Germany, MAN Energy Solutions employs some 14,000 people at over 120 sites globally. Our after-sales brand, MAN PrimeServ, offers a vast network of service centres to our customers all over the world.