

Dutch ferries are an international effort

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Dutch ferries get German ePack systems

German energy efficiency company Orcan Energy is supplying ePack waste heat recovery systems for two 70m LNG powered RoPax catamaran ferries being built in Vietnam by Singapore-based Strategic Marine for Rederij Doeksen in the Netherlands.

The waste heat systems are being added to MTU gas engines and Sanfirden gas gensets on the two aluminium newbuildings, each for 66 vehicles and nearly 600 passengers. They are being built at Strategic Marine's Vung Tau facility for delivery to Doeksen in early 2018 and will serve between the Dutch mainland and Dutch North Sea islands.

The newbuildings will each have two MTU 16-cylinder pre-production Series 4000 LNG gas engines as their main propulsion systems, each delivering around 1,500kw. The engines will be Tier 111 compliant and drive fixed-pitch, contra-rotating azimuth propellers from Veth Propulsion providing an operational speed of 14 knots. Power is delivered by a hybrid LNG/electric plant where it is generated by two single fuel LNG generators and additional electricity is stored in battery banks for use with the electrically driven bow thrusters as well as providing main grid support. The gas gensets are Scania-based units developed and manufactured by Scania distributor Sanfirden.

Marcel Flipse, Head of Orcan's Marine and Power Generation Business, told Maritime Journal the ePack order is the first Dutch contract of its kind for the firm but added "the pipeline is filling up with potential new contracts" in Holland and the situation was "promising". As well as the ferries, the firm said it had further marine projects under contract for operation this year.

The ePack waste heat recovery system can be used for existing and new internal combustion engines in ships with all types of fuel including biofuels, LNG, CNG, GTL, methanol, MGO, dual fuel and HFO, said Orcan Energy. It converts waste engine heat to electricity or mechanically feeds it in. The firm said the technology had hitherto only been used in large oil tankers but was now being made available for small vessels in the 0.5 to 5MW sector. "Benefits include double-digit percentage fuel saving as well as proven green efficiency", it said. It added that the marine market was now opening up to these types of energy efficient opportunities, not least because of the financial crisis and said "opportunities to increase economic efficiency are needed".

Mark Dummett, Senior Project Manager at Strategic Marine, described the ferry contract as "a milestone project" for the company and noted an ever-increasing focus on the environmental aspects of marine transportation. He joined Doeksen Managing Director Mark Melles in saying the Orcan ePacks were the right choice for the new ferries, not only because they significantly reduce fuel consumption but also because they make vessels more economic to operate.

By Tom Todd

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