

Wärtsilä power for two ice-class product tankers

Two 51,800 dwt ice-class product tankers recently contracted by the Swedish shipowner Rederi AB Gotland at Guangzhou Shipyard International in China are to be equipped with Wärtsilä ship power plants.

Each ship will be propelled by a Sulzer 7RT-flex50 common-rail diesel engine directly coupled to a Lips CPS145 controllable-pitch propeller. The main engine has a maximum continuous power of 11,340 kW at 124 rpm. Electrical power will be supplied by four 875 kW_e Wärtsilä Auxpac generating sets, each based on a Wärtsilä 6L20 engine. The ship will also be equipped with a Lips CT200M bow thruster, of 1200 kW capacity. The Sulzer main engines will be built and supplied by Dalian Marine Diesel Works under licence from Wärtsilä Corporation.

When delivered in 2006 and 2007, the ships will be managed by A/S Dampskibsselskabet Torm, Denmark. Although designed for world-wide

trading, the ships are being built to Finnish-Swedish Ice Class 1A Super to allow year-round operation in the Baltic.

The ships are designed by Guangzhou Shipyard International which is well experienced in the building of product and chemical tankers. However, Wärtsilä as the Ship Power Supplier is able to contribute its experience in propulsion systems for ice-class vessels to provide a well-engineered solution for these product tankers.

The choice of propulsion system is important for ice-class vessels. Not only must it be correctly dimensioned to withstand the high loads during heavy ice operation, but appropriate materials are also needed.

The power plants also enable the product tankers to operate in both open-water and ice with the lowest possible operating costs. The Sulzer 7RT-flex50 engine offers a low fuel consumption over its entire load range while the propeller is optimized at the

operating point to give a higher efficiency and thus further improve the fuel consumption.

The RT-flex common-rail technology also allows the fuel consumption pattern to be tailored to the ships' operating profiles.

The Sulzer 7RT-flex50 main engines, with their modern, fully electronically-controlled common-rail technology, were also selected as they benefit from environmentally friendly smokeless operation and can operate at very low minimum speeds.

The ships' generating sets are from Wärtsilä's recently-introduced Auxpac range of standardized marine diesel generating sets. Powered by Wärtsilä 6L20 medium-speed engines, these 875 kW_e sets will be able to burn the same grades of heavy fuel oil as the ships' main engines. Standardization enables Auxpac sets to be supplied with a high, comprehensive specification for a market competitive price. ■

Crude-oil-burning Wärtsilä engines for offshore China

Wärtsilä Corporation has been awarded a contract by China National Offshore Oil Corporation, CNOOC China Limited to supply a 21 MW power plant for an offshore oil production platform being built for the Nanbao 35-2 oil field in Bohai Bay, North China.

The power plant, which will generate electricity for the platform, will consist of three Wärtsilä 16V32 diesel generating sets, each with a maximum continuous electrical output of 7 MW_e. The engines will run on crude petroleum from the oilfield production.

Wärtsilä is responsible for the complete power plant on the platform, including the entire fuel treatment and handling system, the control and alarm monitoring system, the main switchboard and all necessary ancillary equipment for the engines. Wärtsilä will also provide site training onboard the platform. Wärtsilä will deliver the equipment to arrive in China in October this year.

The crude oil on which the engines will run has a high viscosity. This presents no difficulty for the engines as they are designed to operate on

high-viscosity fuel oil as standard. Wärtsilä's experience in designing and building engines able to operate on high-viscosity fuel, and its experience in the offshore industry with its demanding conditions and crude oil operation was of importance in this project. The contract also includes delivery of complete, pre-engineered units along with fast and easy installation of the power plant on the platform. ■