MAN Wins Propulsion System Order for Impressive Trawlers

Order for largest factory vessels in a generation includes main and auxiliary engines, and propellers

MAN Energy Solutions has won the contract to supply the propulsion system for 7 × 109-metre Russian factory trawlers. Tersan shipyard will build the first vessel in Yalova, Turkey for Russian Fishery Company (RFC) with a scheduled delivery date of July 2020. The following six identical vessels will be constructed in Russia.

Lex Nijsen – Vice President, Head of Four-Stroke Marine at MAN Energy Solutions – said: “Our track record within the fishing segment is very good but we are especially pleased to have won this noteworthy order as the trawlers will be the largest such vessels constructed in the past 25 years. That the customer has chosen an MAN propulsion set-up to accompany its choice of main engine is particularly satisfying and fits well with our strategy of providing system solutions.”

Technical set-up

The configuration of the newbuilding’s propulsion system features an MAN 14V32/44CR main engine (delivering 8,120 kW), an MAN Alpha VBS 1260 propeller, a gearbox including power take-off/power take-home with startup converter, and 1× MAN 9L21/31 + 1 × MAN 7L21/31 GenSets. System delivery for the first vessel is scheduled for June 2019.

Additionally, the propulsion system features many other innovations, including:

- an advanced common-rail technology to achieve the highest possible flexibility and efficiency with the main-engine power of 8,120 kW. This doesn’t compromise the extremely low fuel-oil consumption and maintains an outstanding green footprint
- a high-torque workhorse with floating frequency onboard
- operation using IFO (380 cSt) fuel for both main propulsion and auxiliary power generation
- a four-bladed, 4.3-metre-diameter MAN Alpha VBS1260 propeller with Alpha High Thrust propeller nozzle class ICE 1A Super.
- an Alphatronic 3000 propulsion-control system with unique features such as customised multiple combinator curves for both speed 1 and speed 2 including floating frequency for outstanding performance
- an 850 kW PTI reverse-power mode for winch energy recovery that via PMS interfaces with the SaCoS engine system and Alphatronic 3000 system.

The complete package supply is specified to include MAN PrimeServ online service and crew training.
MAN Energy Solutions reports that its equipment was chosen on account of its robustness and reliability, and that the power rating and performance of the 14V32/44CR main engine suited the vessels’ operation profile well. Similarly, MAN’s ability to tailor its MAN Alpha propeller to suit the vessels’ operating profile was a huge plus.

Norwegian naval architect, Skipsteknisk, were selected to design the high-tech factory trawlers. RFC’s requirements were for a vessel with capacity for operation in ice, accommodation for a crew of 139 and a high capacity for high-level processing on board, including surimi production.

The new trawlers are designed to have catching and processing capacity for more than 400 tonnes of pollock or 350 tonnes of herring per day, with a 300 tonne per day freezing capacity, plus a 250 tonne-per-day meal and oil plant. Fishroom capacity is 4,000 cubic metres, and there will be a 1,000 cubic-metre meal hold.

About Russian Fishery Company

RFC is one of the largest Russian producers of wild whitefish and holds Russia’s largest quota for pollock. The company’s large fishing vessels are well suited for operation in all fishing areas and climates. They are equipped with modern fishing and processing equipment from leading international suppliers that enables the vessels to harvest different types of seafood. RFC’s strategic goals involve increasing the output of high value-added products through fleet modernisation, and coastal processing plants. Primary fishing species are pollock and pacific herring.
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.