

The Finnish Border Guard's new offshore patrol vessel runs with PMC solutions

STX Finland Oy's Rauma Shipyard is set to deliver on October 2013 a new-generation offshore patrol vessel to the Finnish Border Guard. PMC Group is responsible for supplying the necessary hydraulic solutions on a turnkey agreement.

Ari Puolakka, head of deck fittings at STX Finland Oy's Rauma Shipyard, says that the shipbuilding group has been very pleased with the collaboration with PMC Polarteknik.

– We selected PMC Group as our partner thanks to its strong references in Marine solutions. Moreover, other equipment suppliers recommended PMC Polarteknik, Puolakka describes the selection process, which included an extensive competitive bidding.

The criteria for hydraulic solution providers are strict, since the equipment used in the vessels must endure extreme strain. Conditions are challenging at sea, the air humidity is high and the water salt-content high. Operation under water is another challenge. In Puolakka's view, selecting the supplier was made easier because PMC Polarteknik was ready to take total responsibility for the solution.

– PMC Polarteknik convinced us in the negotiations. The company had a profound understanding of our solution need, Puolakka says.

Many demanding tasks

The vessel's production was launched in October 2012 at the STX Finland Rauma Shipyard. Once completed, the vessel can be used, in addition to border safety and frontier supervision missions, in maritime search and rescue, military national defence and various underwater assignments. The vessel will also feature substantial oil destruction capacity.

In technical terms, the vessel is 96 metres long and 17 metres wide. It uses the latest technologies and environmentally friendly

innovations. The vessel is equipped with machinery using liquefied natural gas (LNG) and diesel as fuel.

When the hull is completed at the Rauma Shipyard, PMC Polarteknik will deliver the vessel's central hydraulic power unit, valve groups, auxiliary operating unit and a starter unit. The pumping capacity of the central hydraulic power unit is as much as 820 litres per minute and its total power installed is 450 kilowatts, which illustrate the solution's performance. The oil tank's cubic capacity is 2,200 litres.

Solid experience and smooth contacts

PMC Group supplies 15 valve groups that will be installed on various positions in the vessel. The auxiliary operating unit ensures the generation of hydraulic power in case the central unit is out of use. The 800-ampere starter unit enables, among other things, remote start-up of the central hydraulics from different locations on the ship.

Risto Lehkoinen, Hydraulics Engineer at PMC Polarteknik divides the delivery into stages, which after the assembly consist of pre-testing, test drive and classifications. After this, the whole assembly is delivered to the vessel, and the next steps involve the installation of piping systems, start-up and training for the use of the finished solution.

Lehkoinen says that the main factors of the collaboration are PMC Polarteknik's solid experience in hydraulic systems, which the company supplies on a turn-key basis. Communication is easy, since PMC Polarteknik has regional offices close to STX Finland's shipyard areas in both Rauma and Turku.



Technical data

Length 95,9 metres
 Width 17,4 metres
 Top speed 18 knots
 An oil tank for 1,000 cubic metres of collected oil
 A chemicals container of 200 cubic metres

