

# Four vessels developed for specific project

Ulstein has sold design and equipment packages for the four ocean-going tugs to be built by Niigata Shipbuilding & Repair in Japan for the Dutch company ALP Maritime Services, a subsidiary of Teekay Offshore Partners LP (see *IT&O* page 16, March/April 2014).

The vessels are primarily designed for towing large structures over long distances, in worldwide operations. Delivery is slated for the end of 2015 and the first quarter of 2016.

The equipment packages include engines, thrusters and propellers, winch, power distribution and thruster drives, control system and communication system. This not only marks a new market for the company, but is the highest-value single contract for Ulstein Design & Solutions.

The 4,250dwt vessels, of the SX157 ALP Future design, feature the distinctive Ulstein X-Bow®. They have been developed especially for this project, in close collaboration with ALP. They will be 88.9m long and 21m wide,

with a cargo deck area of 550m<sup>2</sup>, and, with four engines offering a capacity of 18,000kW at 600 rev/min, are expected to deliver a bollard pull in the range of 300 tonnes.

Deputy CEO Tore Ulstein of Ulstein Group said: "This is a very important contract, involving activities in a new market for us and with a new customer involved. The contract is a result of close co-operation with the shipyard, the ship owner and our partners in the Norwegian maritime cluster, a co-operation we will work to develop further in the years to come."

Sigurd Viseth, managing director of Ulstein Design & Solutions, added: "An ocean-going tug typically tows oil rigs, or FPSOs, from the building yards to the installation site at the oil field. In addition, these vessels are outfitted with DP2 and anchor-handling capacity in order to assist during the installation/hook-up phase for the towed objects. The SX157 has fuel capacity to tow over long distances, with the ability of towing at full power for 45 days. This is a niche market where we see that our solutions can be a positive contribution.

"Within each project we work strategically in order to come up with safer, smarter and greener solutions. ALP refers to

these four ships as the 'ALP Future Class'. When developing the design we had to ensure that each vessel has the sufficient bollard pull and operational reliability to handle even the heaviest tows by only two vessels.

"Environment and fuel efficiency have also been important criteria. The vessels are classed with DNV's Clean Design and Ice Class 1B notations, which allow operation also in restricted zones."

The tugs will have comfortable, spacious accommodation for 35 people, reflecting long periods at sea. They are equipped as anchor-handling vessels, the deck machinery being provided by Rolls-Royce.

This will include a complete low pressure winch solution and a stern roller. The towing/anchor-handling winches have been specially developed in co-operation with the ship designer and owner. The supply of rudder and steering gear is also included in the Rolls-Royce package.

John Knudsen, Rolls-Royce, president Offshore, said: "This project is a good example of how our solid industry know-how makes us a partner of choice for innovative ship owners and design teams. The new vessels will place ALP Maritime Services in the elite division for large offshore towing operations across the world."

• More on the ALP Future's duties: Page 69.

## Easy to manoeuvre

The Singapore unit of Norway-based Vard Holdings has entered into a deal with Mermaid Marine Australia to design and construct two PSVs.

Both vessels will feature the Vard 108 design, have a total length of 81.7m, beam of 18m and cargo deck area of 810m<sup>2</sup>. The vessels are being built at Vard Vung Tau shipyard in Vietnam.

The PSVs are designed to not only handle large cargo capacity, but also manoeuvre easily with low fuel consumption. The 4,000dwt vessel will be used for standby, rescue, fire-fighting services and remotely-operated underwater vehicle operations.

Vard Holdings CEO and executive director Roy Reite said: "We are honoured to receive these contracts from Mermaid Marine, and proud to see a new client from the Asia Pacific region entrust this important project to our Vietnam shipyard. We look forward to working closely with Mermaid and welcome their team to Vard."

The vessels are scheduled for delivery in the fourth quarter of 2015 and first quarter of 2016, respectively.

Mermaid Marine Australia is based in Fremantle, Western Australia, with national operation centres in Dampier and Broome, and international centres in Singapore. It offers marine logistics services for all phases of the offshore oil & gas development cycle.



◀ Niigata Shipbuilding & Repair in Japan is building four vessels to this ocean-going tug design for ALP Maritime Services.

## Tight deadline for building of OSV

Shipyard De Hoop, which this year is celebrating its 125<sup>th</sup> anniversary, and which now has shipyards in Lobith and Foxhol in the Netherlands, has won an order to design and construct a 68.23m x 15.77m offshore service/support vessel for ANL (Awaritse Nigeria Ltd).

Designed to operate in the Royal Dutch Shell (Shell Nigeria) and Chevron oil fields offshore Nigeria, the OSV will be deployed for the discharge of transmix liquids, a by-product of oil-production and oil-transport through pipelines. Its delivery is scheduled for the last quarter of this year. De Hoop says it will be able to meet this deadline thanks to its experience with this type of work vessel. It says that customising proven concepts and keeping things simple is the secret behind the straightforward design, which is competitive in terms of both investment and running costs, and for operational reliability.

ANL chose a diesel-electric propulsion concept for the vessel to achieve enhanced flexibility and economical superiority. The hull shape is based on a proven De Hoop

design with excellent DP capabilities. The generators are located on the main deck, which not only allows much larger cargo volumes, but also easier access for maintenance.

Providing accommodation for a total of 30 people, the DP2 class vessel has a cargo tank capacity of 800m<sup>3</sup> and 500m<sup>2</sup> of deck cargo space. Deadweight capacity is 2,600 tons.

To provide ample cargo pump capacity, there are two pump rooms: one in the aft ship (forward of the thruster room) and one in the forward area, just aft of the bow thrusters. The combination of pumps provides a transmix transfer capacity of 1,000bbls/hr. For hose-handling and loading or unloading deck cargo, two knuckleboom cranes are fitted: one on starboard side aft and one on portside amidships, both with a capacity of 10 tons at a maximum outreach of 15m.

While its primary role will be the transportation of intermix/transmix liquids, the vessel will also be suitable for oil recovery and a vast range of offshore inspection, maintenance and repair work, taking advantage of its cranes and large work deck area.