

PSV for Caribbean maximises cargo space

Following an intensive trials programme, the PSV *Delta Admiral* has been handed over to its owners, Delta Logistics of Trinidad, by the De Hoop Shipyard. Redwise performed the transportation of the new vessel on its own keel from the Netherlands to Trinidad.

This latest PSV has a length of 70m and a beam of 15.77m, resulting in a deadweight of more than 2,132 tonnes. In close consultation with the yard, Delta opted for a diesel-electric propulsion concept, to achieve enhanced flexibility and economic efficiency.

Built for worldwide service to Germanischer Lloyd Classification with DP2 and FiFi1 notation, the vessel is dedicated to the provisioning of oil & gas platforms in the Caribbean Sea.

The design is based on a proven De Hoop concept but evolved to the next generation, with a higher level of comfort and luxury. This vessel is further optimised and developed by combining the technical/design

knowledge of De Hoop with the regional nautical experience from Delta Logistics.

The hull form is enhanced for fuel-efficient operations, during both transit and DP modes. Although the multi-chined hull is wider than previous generations of De Hoop PSVs, by fairing the hull shape considerable reduction in wave resistance is obtained. To further improve the resistance during transit, it is fitted with a specially developed bulbous bow, designed to maintain a service speed of 13 knots. The overall result is a higher transit speed than on previous generations and a reduction in fuel consumption.

Furthermore, the vessel's propulsion configuration is primarily optimised for excellent DP capabilities, enabling a speed of 11 knots astern and more than 3 knots sideways. In addition, the Kongsberg DP2 system is designed to minimise fuel consumption and wear and tear on the propulsion equipment.

The generators, for the diesel-electric propulsion and other consumers, are located on the main deck, in the first superstructure layer. This is similar to the earlier KISS-designs and not only allows much larger cargo volumes, but also easier access for maintenance. The resulting enormous tank capacities make this vessel stand out in its size range.

Following the recent substantial upgrade of the De Hoop Shipyard at Lobith, which now boasts a complete range of state-of-the-art facilities, the yard is now even better equipped to perform new building of sophisticated vessels. The 'grade A' steel hull plating, with slightly increased thickness compared to the previous designs, was cut using De Hoop's latest plasma cutting machine.

To achieve a high comfort level in the accommodation, with low sound and vibration levels, 'floating' interior floors, ceilings and walls were used, while the doors are acoustically dampened with integrated ventilation grilles. The majority of the below deck space is given over to a large number of high-capacity cargo tanks, the only exceptions being the main and bow thruster rooms which take up a very small volume of the available space. This allows four dry bulk tanks, two brine tanks, two cargo fuel oil tanks, two drilling water tanks and four liquid mud tanks to be accommodated.

The double hull and bottom further comprises 14 drilling water tanks, three more fuel oil tanks and a bilge water tank. The remainder of the fresh water, dirty oil, sludge and bilge water tanks are to be found in the fore ship, below the superstructure.

The main deck is provided with container fittings and ample lashing points to accommodate a containerised cargo of 160 TEU to be carried in four tiers.

A full suite of anchoring and mooring equipment is provided as is appropriate for vessels of this type and size. The sheltered foredeck houses an electro-hydraulic anchor winch with two gypsy wheels and two warping heads: one of both on each side. The anchor and mooring winches were supplied by Kraaijeveld.

Elsewhere on deck is a Palfinger FRSQ600 rigid fast rescue craft with a planning deep-V hull and an inboard diesel engine driving a water jet. The FRC is equipped with an automatic offload release hook with which it is deployed and recovered by the hydraulic pivoting A-frame davit, also delivered by Palfinger.

For external fire-fighting purposes, two fire monitors are installed on main deck aft. This installation includes a self-protection deluge (water spray) system, fed with water from the dedicated FiFi pumps in the aft ship.

The propulsion system of the vessel consists of two azimuthing Z-drive thrusters in the stern and two bow thrusters. The stern

