

Built in China for the Arabian Gulf

Cheoy Lee's 58m AHTS vessel is a model in high demand, with five units currently under construction, all destined for operation in the Middle East. Recently delivered from the Hong Kong shipyard's Hin Lee facility on mainland China, *Shark 30* is the first of a two-ship order for a long standing customer, Arabian Gulf Mechanical Services & Contracting Co Ltd, (AGMS) based in Kuwait and Saudi Arabia.

Kuwaiti flagged, the vessel was handed over to the owner in February, following a 5,300nm delivery trip from Hong Kong to Ras al Khafji, Saudi Arabia, in the hands of a Redwise crew. It will shortly be entering into service supplying, supporting and acting in the capacity of a safety vessel, for offshore drilling and work-over rigs on a 24-hour per day basis in the Arabian Gulf.

Specific duties will include the transport of fresh water, diesel oil, bulk cement, liquid mud, stores, materials and equipment, towing and moving rigs, anchor-handling, casualty evacuation and ferrying men and materials between platforms and shore.

Measuring 58.00m x 13.80m with a draft of 4.75m this is now a well proven vessel originating from Singapore-based naval architects Conan Wu & Associates and incorporates an all steel hull and superstructure. It has been constructed to ABS class with the notation ABS+A1(E) + AMS FIFI 1 Towing and Anchor Handling Services.

Propulsion power comes from a pair of Caterpillar 3516B diesel engines each developing 2,575hp. These drive Nakashima controllable pitch propellers in nozzles via Twin Disc MGR 1727VC gearboxes having a reduction ratio of 7:1. Manoeuvring is enhanced by a 12-tonne Schottel bow thruster directly driven by a 1,130hp Caterpillar diesel. Electrical power is developed by three Caterpillar 320kW diesel generating sets, each independently capable



of supporting the ship's loads. In addition, there is a 72kW emergency set that also serves as a harbour generator.

The vessel has a bollard pull of 67 tonnes, a maximum free-running speed of 13.5 knots lightship and a full load cruising speed of 12 knots. With a fuel capacity of 400 tonnes, the vessel has a range of 6,500nm at 12 knots.

Shark 30 can accommodate a complement of 22 men – all housed in the forward part of the vessel. On the main deck level, there is one four man cabin, although this deck predominantly contains the service and recreational areas, the galley, mess rooms, sick bay and cold stores. A recreation room on this level doubles as a survivor recovery area.

The accommodation on the forecastle deck level includes

individual cabins for the captain and chief engineer, along with three double and two four berth cabins – all en-suite.

The wheelhouse has control consoles fore and aft with a comprehensive set of electronic navigation and communication systems supplied by Radio Holland. This includes a Furuno package comprising two radars, a depth sounder, sonar, satcom, two GPSs, AIS, weatherfax, and several radios. The GMDSS system is from Thrane and Thrane whilst the autopilot and digital gyrocompass are from Anshutz.

The working deck aft is over 30m long, with an area of approximately 350m². It is sheathed in wood to protect the steel deck plating during anchor-handling and towing operations. Deck plating in way of the towing gear is 20mm thick.

Deck winches are from MacGregor Plimsoll, and include a 200-tonne towing/anchor-handling winch, a 10-tonne anchor windlass, two 10-tonne tugger winches, and two 5-tonne capstans. Towing equipment also includes Triplex towing pins and a shark jaw. In addition, there is a 5-tonne at 6m Palfinger crane to handle the rescue boat and for loading provisions.

Fuel is cleaned by an Alfa Laval purification system, as is the lube oil. The vessel is also able to carry 485 tonnes of fresh water, 10m³ for fire-fighting foam, 10m³ of dispersant for tackling oil spills, 210m³ of liquid mud and 113m³ tonnes of dry bulk in four silos.

Cheoy Lee currently has around 50 vessels on order. These include 13 Z-Tech tugs for Panama and six 45.72m long, powerful Paraguay Class pushboats for Rio Tinto Brazil.

All the five 58m AHTS vessels, of which *Shark 30* is the first, are for valued repeat customers in the Middle East. The forerunner has Caterpillar main engines, but vessels two and three, nearing completion, will have twin Niigata diesels of 2,500hp.

