

# International **Tug & OSV**



## **Annual Review 2012**

Featuring 38 tugs and OSVs with GA drawings





## Anchor handler for Malaysia

Sealink Shipyard Sdn Bhd based in Miri, Malaysia, completed a 48m x 13.2m anchor-handling tug named *Jason Dua* with a design draft of 4.2m. The vessel is equipped with an external fire-fighting system to ABS FiFi1 classification and has dispersant deployment equipment. It was designed by Singapore-based Khiam Chuan Marine and delivered in April 2012.

The conventional twin-screw layout of the propulsion system comprises a pair of Caterpillar 3516 BTA diesels, each developing 2,575hp at 1,800 rev/min. These turn ZF CP propeller systems via Twin Disc gearboxes with a reduction ratio of 7.455:1. The fixed nozzles and twin rudders were manufactured by the yard, and steering is activated by a Kobelt hydraulic system. A 370kW ZF-HRP electrically-driven transverse thruster is fitted at the bow to enhance manoeuvrability. Electrical power for the vessel is provided by a trio of 245kW Caterpillar 3406 powered generator sets located forward of the main engines. A 80kW Cummins emergency set is located in a dedicated room on main deck to starboard of the main winch. The fire-fighting and water spray pumps are driven off the front end of the main engines via a Kumera gearbox.

Sea trials determined that the vessel has a bollard pull of 65 tonnes and could attain a maximum free-running speed of 13.5 knots.

Access to the accommodation is by two doors on main deck located forward of the main winch. One leads directly into the

hospital, the other to a lobby with staircases both up and down, a changing room with shower/WC compartment, the mess room with adjoining recreation room, galley, numerous stores and a two-berth cabin with en suite facilities.

A raised deck has three four-berth cabins, all en suite, and a two-berth cabin which shares bathroom facilities with one of the four-berth units. There is also a ship's office on this level.

The captain and chief engineer have generous en suite cabins on the fore-castle deck along with three two-berth and one four-berth cabin. The total complement that can be accommodated is 28 persons.

The bridge is relatively standard in layout for an AHTS vessel, with consoles fore and aft with additional desks and chairs for the communications centre, charts and the charterers' representative. There is also a WC compartment. Visibility is assured by several sets of Hepworth/Wynn D-type straight line windscreen wipers plus two 300mm diameter Clear View Screens.

The bulk of the bridge electronic items have been manufactured by Furuno, including Inmarsat C, MF/HF radio telephone, GPS, Navtex, speed log, echosounder and two radars (one ARPA). Exceptions include the gyrocompass from Tokyo Keiki and the AP-50 autopilot from Simrad. The pilot chairs are by Cleeman.

Supply of the deck machinery items is shared between two leading Singapore-based

### OWNER

Sealink Shipyard Sdn Bhd, Malaysia

### BUILDER

Sealink Shipyard Sdn Bhd, Malaysia

### DESIGNER

Khiam Chuan Marine, Singapore

### DIMENSIONS

Length overall	48.00m
Moulded breadth	13.20m

### PERFORMANCE

Bollard pull	65 tonnes
Free-running speed	13.5 knots

### MAIN ENGINES

Two Caterpillar 3516 BTA diesels, each developing 2,575hp at 1,800 rev/min

### PROPULSION

ZF CP propeller systems via Twin Disc gearboxes with a reduction ratio of 7.455:1

### EQUIPMENT

Caterpillar gen sets, Kumera gearbox, Furuno electronics, Cleeman pilot chairs

companies, Zicom and Plimsoll. On the aft deck is the main double-drum anchor-handling and towing winch by Zicom, which also provided two 15 ton tuggers, a pair of 5-ton capstans and the stern roller. Plimsoll were responsible for the anchor windlass/mooring winch at the bow and the shark jaw and tow pin arrangement. Other outside items include a launch davit for the 4.50m-long Zodiac semi rigid rescue boat with 25hp outboard motor.