## MT ST. ELMO

## AZIMUTH STERN DRIVE TUG DESIGNED BY ROBERT ALLAN LTD. AND BUILT BY ASTILLEROS ZAMAKONA

BUILT: 2011

### **DIMENSIONS:**

Length O.A30.60 mBreadth Moulded11.20 mMaximum Draft5.85 mGross Tonnage455 tonsNet Tonnage137 tons

## **CLASSIFICATION:**

RINA C-Hull, Mach, Escort Tug, Fire-Fighting Ship 1, Unrestricted Navigation, AUT-UMS, AUT-PORT

## **TANK CAPACITIES:**

 Fuel Oil
 175.0 m3

 Fresh Water
 75.0 m3

 Fire Fighting Foam
 12.0 m3

Deck Area Space for six off. 8' x 8' containers

#### PROPULSION:

Two x Caterpillar 3516B TA HD/D series, air started and box cooled, each developing 2090 bkW (2800 bhp) at 1600 rpm.

## **Propulsion units**

Two x Rolls Royce Aquamaster US 255P30 FP steerable rudder propeller units with fixed pitch propellers of 2800mm diameter and Rolls Royce Aquamaster 19-A nozzles.

### PERFORMANCE:

## **Bollard Pull**

Ahead 75.0 tonnes
Astern 71.0 tonnes

## **DECK EQUIPMENT:**

## Forward Escort Towing Winch

Double drum hydraulic driven Escort Towing Winch manufactured by Ibercisa. The winch is specially designed and equipped with brake quick release, load limiting device, controlled brake slip feature and a load indicating display unit fitted in the wheelhouse. The winch is equipped with a constant tensioning system in compliance with DNV rules. The degree of constant tensioning can be adjusted by the operator by means of potentiometers installed in the remote control stand. The winch has a low speed pull of 80.1 tons @ 13.6 m/min on first layer and a high speed pull of 12.3 tons @ 77.8 m/min on the 7<sup>th</sup> layer. Each drum has a brake holding force of 150 tons and a rope capacity of 150 m x 68 mm diameter synthetic rope.

The winch is equipped with two declutchable cable lifters to accommodate that anchor chains and one 430 mm diameter warping head.

## **AFT Towing Winch**

Single drum hydraulic driven towing winch manufactured by Ibercisa. The winch has a low speed pull of 52.0 tons @ 9.0 m/min on first layer and a high speed pull of 7.3 tons @ 66.0 m/min on the last layer. The winch drum has a brake holding force of 175 tons and a wire Winch. Capacity 800 m x 56 mm diameter steel wire rope. The winch is equipped with automatic spooling gear with torque limiter specially reinforced to allow wire angles up to 25° and one 530 mm diameter warping head.

## Spare Towing Wire Storage Reel

Hydraulic driven spare towing wire reel installed in the aft hold. The spare wire reel has a wire capacity of  $800 \text{ m} \times 56 \text{ mm}$  diameter steel wire rope. A removable hatch is provided in the main deck above the aft hold to facilitate replacement of the towing wire.

## Capstar

Hydraulic driven vertical shaft capstan with maximum speed 12 m/min and maximum capacity of 4 tons.

#### Towing Hook

Rotary type towing hook having a Safe Working load 75 tons equipped with quick release mechanism that can also be operated from the wheelhouse.

#### Deck Crane

Knuckle boom type deck crane manufactured by Industrias Guerra SA. The crane has a capacity of 2.1 tonne at 12 metre outreach capable of reaching the stern roller and aft fendering and a winch capacity of 2.5 tonnes SWL.

## **NAVIGATION AND ELECTRONIC EQUIPMENT:**

Optical and acoustical signalling equipment

- 1 x Furuno X band Radar type FAR-2117 BB
- 1 x Furuno S band Radar type FAR-2137S BB
- 1 x Furuno DGPS type GP-150
- 1 x Furuno satellite compass type SC50
- 1 x Navitron autopilot type NT-888G complete with Navitron heading repeater type NT-920-DHR/2
- 1 x Furuno echo sounder type FE-700
- 1 x Furuno speed log type DS 80
- 1 x Furuno AIS type FA-150
- 1 x Furuno Anemometer type CV-3F
- 1 x Sailor MF/HF radio type 5000
- 2 x Sailor VHF sets type RT-6222
- 2 x Inmarsat C Mobile Earth Stations type TT-3000EB
- 1 x Furuno Navtex type NX-700B

#### ACCOMODATION:

Captain and Chief engineer's cabins with shared ensuite facilities and situated above main deck together with a Mess/Day room and galley. Two cabins x 4 berths each are located forward below main deck level and each cabin is provided with separate Washplace and toilet.

## FIRE FIGHTING PUMPS, MONITORS & FIRE FIGHTING EQUIPMENT:

The engineroom is protected by means of an FE 13 fixed fire extinguishing system.

2~x main engine driven fire fighting pumps supplied by Fire Fighting Systems Ltd type FFS SFP 250 x 350 each pump has a capacity of 1338 m³/hr. One water only and one foam/water fire fighting monitor type FFS 1200 and FFS 1200/300 respectively supplied by Fire Fighting Systems Ltd each with a capacity of 1200 m³/hr (300 m³/hr foam).

# STARTING AIR COMPRESSORS:

Two electric driven main air compressors each having a capacity  $24 \text{ m}^3/\text{hr}$  with a maximum pressure of 30 bar.

## LIVE SAVING EQUIPMENT ON BOARD:

- 1 x EPIRB unit Jotron type Tron-40S on 121,5/406 MHz
- 1 x SART unit Jotron Tron Sart 9Ghz
- 2 x ICOM portable VHFs type ICM 1600E
- 1 x 4m rigid bottom inflatable rescue boat complete with 25 HP Outboard motor and launching davit.

## SEWAGE TREATMENT PLANT:

Orca II-24 Macerator/chlorinator type sewage treatment system. In addition a Black Water and Grey Water tank each with a capacity of 3.9m³ complete with Black Water pump having a capacity of 6.0 m³/hr and a Grey Water pump having a capacity of 1.5 m³/hr fitted with discharge connections to the deck via an international shore connection.

## **BILGE & GENERAL SERVICE PUMPS:**

1 x electrical driven gear type pump having a capacity of 5.0 m<sup>3</sup>/hr.

2 x electrical driven vertical centrifugal type pumps having a capacity of 30.0  $\mbox{m}^{3}/\mbox{hr}$