AZIMUTH STERN DRIVE TUG 2312

**GENERAL**

Basic functions: Towing, mooring, Ø oil pollution control and Ø fire-fighting operations

Classification: Bureau Veritas

Ø Hull ● MACH Tug (Bollard pull = 70 t)

Unrestricted Service AUT UMS Inwater Survey COMF NOISE 3, COMF VIB 3

**DIMENSIONS**

- Length overall: 22.80 m
- Beam overall: 12.03 m
- Depth at sites: 4.40 m
- Draught aft: 5.50 m
- Displacement: 485 t

**SCANTLINGS**

- Hull: 10 mm, sheerstrake: 15 mm

**TANK CAPACITIES**

- Fuel oil (incl. long range tanks): 78.4 m³
- Fresh water: 7.8 m³
- Sewage: 5.1 m³
- Dirty oil: 1.5 m³
- Lubrication oil: 3.0 m³
- Bilge water: 6.1 m³
- Ø Foam: 3.0 m³
- Ø Dispersant: 3.0 m³
- Ø Urea: 3.0 m³

**PERFORMANCES**

- Bollard pull ahead: 70.0 t
- Bollard pull astern: 65.0 t
- Speed: 12.2 kn

**PROPELLION SYSTEM**

Main engines: 2x Caterpillar 3512C TA HD/D

- Total power: 3804 kW (5102 hp) at 1800 rpm

Azimuth thrusters: Rolls Royce US 205S or equal

Clutches (on-off type): Rolls Royce ‘built in’ type or equal

Propeller diameter: 2800 mm

Forced ventilation: 60.000 m³/h

Ø Exhaust emission: IMO Tier III compliant

**EXHAUST EMISSION**

- Forced ventilation
- Propeller diameter
- Clutches (on-off type)
- Azimuth thrusters
- Total power

**MAIN ENGINES**

2x Caterpillar C4.4 TA, 440 V, 116 kVA, 60 Hz

**PERFORMANCES**

- Speed
- Bollard pull astern
- Bollard pull ahead

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**DECK LAY-OUT**

- Anchor
- Anchor winch
- Towing winch

Hydraulically driven double drum, pull up to 31 ton and speed up to 32 m/min on second layer, 175 ton brake

- Ø Capstan
- Ø Towing hook aft
- Ø Crane

Mampaey SWL 650 kN / 65 ton

- Fendering

Cylindrical rubber bow fender above fender, rubber fender at sides, cylindrical fender aft and Ø tyre fendering

**ACCOMMODATION**

For 6 persons (MLC 2006 compliant), completely insulated and finished with durable modern linings, acoustical ceiling in the wheelhouse and floating floors. Air-conditioned accommodation with four crew cabins and galley/mess at accommodation deck. Switchboard room and sanitary facilities at lower deck.

**NAUTICAL AND COMMUNICATION EQUIPMENT**

- Searchlight
- Radar system
- Compass
- Satellite compass/GPS
- Ø Gyro compass
- Autopilot
- Echocouder
- VHF radio telephone
- VHF hand-held
- Ø UHF transceiver
- Navtex
- Ø SSB
- Ø Inmarsat + Ø spare
- Ø ECDIS
- AIS
- Anemometer
- EPIRB
- SART

2x Caterpillar C4.4 TA, 440 V, 116 kVA, 60 Hz

**classification**

- IMO Tier III

**EQUIPMENT**

- Generator sets
- Ø Generator sets
- Bilge pump
- Fuel oil filters
- Fuel oil purifiers
- Fuel oil pumps
- Fuel oil pressure set
- Ø Sewage treatment plant
- Hydraulic system
- Cooling system
- Dispersant pumpset with 2 spraybooms
- Hydrocarbon system
- Auxiliary pumps
- Generator sets
- General service pumps

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