AZIMUTH STERN DRIVE TUG 3413 ICE

GENERAL

Basic functions
Push pull, escorting, coastal and offshore towing, icebreaking, fire-fighting, oil pollution control, salvage operations

Classification
Russian Maritime Register of Shipping (RMRS) KM ⚓ Arc 4/6 IWS R1 AUT1 FF3/WS Escort Tug (Ice strengthening hull structure: Arc4)

Painting
Epoxy paint system

DIMENSIONS

Length overall
33.70 m

Beam overall
12.69 m

Depth at sides
5.20 m

Freeboard main deck midship in 98% loading condition (approx.)
1.00 m

TANK CAPACITIES

Fuel oil (approx.)
128.7 m³

Fresh water
16.4 m³

Bilge water
6.5 m³

Sewage
6.5 m³

Dirty lubrication oil
3.2 m³

Clean lubrication oil
3.2 m³

Ø Foam
14.9 m³

Ø Dispensar
6.8 m³

PERFORMANCES (APPROX.)

ARC 4 ARC 6
Bollard pull ahead
70 t
80 t

Bollard pull astern
66 t
76 t

Speed ahead
12.5 kn
12.5 kn

PROPELLER SYSTEM ARC 4

Main diesel engines
2x Caterpillar 3516C TA HD

Auxiliary engines
2x Rolls Royce US 285 FP

Generator sets
2x 280 mm fixed pitch with nozzle

Forced ventilation
80,000 m³/h

PROPELLER SYSTEM ARC 6

Main diesel engines
2x MAN 20V175D

Total power
42000 kW (5632 bhp) at 1600 rpm

Auxiliary engines
2x Rolls Royce US 285 FP

Generator sets
2800 mm fixed pitch

Forced ventilation
100,000 m³/h

AUXILIARY EQUIPMENT

Generator sets (suitable for parallel operation)
2x Caterpillar C7.1 TA, 230/400 V, 125 kVA, 50 Hz

Bilge pump
Azcue CA-22/05 3.6 m³/h

General service pumps
2x Azcue CA-50/5A 30.0 m³/h

Bilge water separator
1x Facet CPS 2.5 B MK III + EBM14X1 0.5 m³/h

Fuel pump
Azcue CA-46/18 12.0 m³/h

Cooling system
Keeling cooling channels main engines, radiator
cooled generator sets

Fresh water pressure set
Azcue MO-19/10

Fuel oil purifier (static)
CJC PTU 27/81 MZ-E2PWZ

Sewage treatment plant
Terricormar ECOmar 20

Hydraulic system
Main engine driven hydraulic pumps

Ø Oil pollution control
Dispersant pumpset with 2 spraybooms

Ø Fill pump
Driven by Caterpillar C12 or C32, FIFI pump 1000 or 2800 m³/h incl. water spray

Ø Filt monitors
2x 300 or 2x 1200 m³/h

DECK LAY-OUT

Anchor
2x 585 kg Pool

Anchor winch
2x DMC hauling speed anchor part minimal 10 m/min

Towing winch
1x DMC hydraulically driven single drum aft winch with spooling device. low speed 31 ton up to 12 m/min, high speed up to 39 m/min.

Ø Capstan fore & aft deck
Electrically driven, 5 ton at 15 m/min

Ø Crane
Heila HLM 25-35 2.0 ton at 10.56 m

Ø Stern roller
3 Ø 350 mm forklifts (SWL 300 ton), 2 Ø 350 mm towing pins with flaps for vertical locking (SWL 150 ton)

Ø Anti slip
Wooden aft deck (larch)

Ø Anti-slip bars fore deck
1x DMC hydraulically driven, pull 10 ton up to 25 m/min, brake 20 ton, 50 m steel wire 26 mm

Ø Towing hook aft
Mampaey SWL 100 ton

Ø Rescue boat + davit
1x SOLAS approved 4-meter inflatable rescue boat with 25 hp outboard engine, operated by rescue boat davit

Fendering
D-fender at sides, cylinder fender at transom corners, triple cylinder bow fender 900 mm with water spray

ACCOMMODATION

For 9 or 10 persons (MLC compliant), insulated and finished with durable modern linings, acoustical ceiling in the wheelhouse, floating floors and air-conditioned. Captain’s cabin, chief engineer’s cabin, officer or double crew cabin, three double crew cabins, galley, mess/lounge, dry store, sanitary facilities, Ø sauna, changing room and drying locker.

NAUTICAL AND COMMUNICATION EQUIPMENT

Searchlights
2x Norlights 2000 W

Radar system (X-band)
2x Furuno DS 1200

Ø Radar system (S-band)
Furuno FMD 3000, incl. maps of navigational area

Ø ECDIS
Cassens & Plath Reflexta 11

Ø Gyro compass
Navigat 105

Autopilot
Simrad AP-70

Speedlog
Furuno DS-90

GPS
Saimung SGN-500

Echosounder
Furuno FE-800

Intercom
15” monitor with camera’s covering ER, accommodation, deck and winch

CCTV

VHF

VHF hand-held

UHF

Navyx

AIS

SSB

EPIRB

SART

Anemometer

Ø Weather fax

1x Furuno Falcon 18
1x Jotron Tron 60S
Jotron Tron SART 20
Gili Instruments GMI-600
Saimung SFA-500R

*Item marked with Ø are optional equipment
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