









TECHNICAL SPECIFICATIONS REFERENCES CONTACT PARTICULARS

CHARACTERISTICS

Main dimensions:

Speed astern

Length over all	24.47	m
Breadth over all	11.13	m
Depth at side	4.60	m
Draught aft	5.35	m
Full displacement	490	ton
Power	4200	kW
Bollard pull ahead	65.4	ton
Bollard pull astern	61.5	ton
Speed ahead	12.7	knots



Class LR № 100 A1 Tug [№] LMC UMS IWS

knots

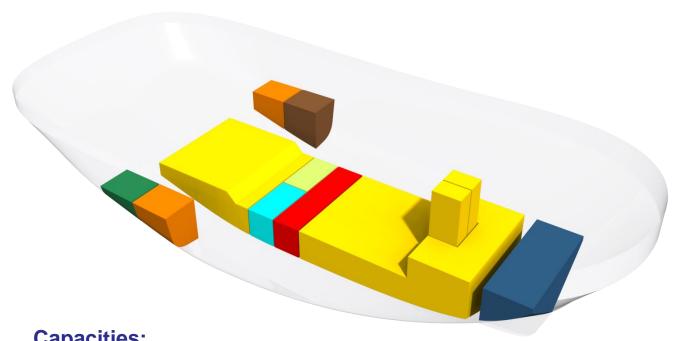
12.2



REFERENCES

CONTACT PARTICULARS

TANK CONFIGURATION



Fuel oil	68.2 m³	Dirty oil	2.9 m ³
Fresh water	8.8 m³	Lubrication oil	4.8 m³
Sewage	3.1 m^3	ø Foam	6.3 m ³
Bilge water	1.9 m³	ø Dispersant	3.1 m ³



PROPULSION SYSTEM

CATERPILLAR 3516C HD/D



- 16 cylinder V-type
- Electronically controlled injectors
- Emissions compliant with EPA Tier 2 and IMO
- Maximum power 2100 kW at 1600 rpm
- Resiliently mounted main engines

ROLLS ROYCE US 255 FP



- Straight shaft line with bow tooth coupling
- Built-in slipping clutch
- CuNiAl five bladed fixed pitch 2600 mm propeller
- TK nozzle with stainless steel inner plate

TECHNICAL SPECIFICATIONS

ENGINE ROOM LAYOUT





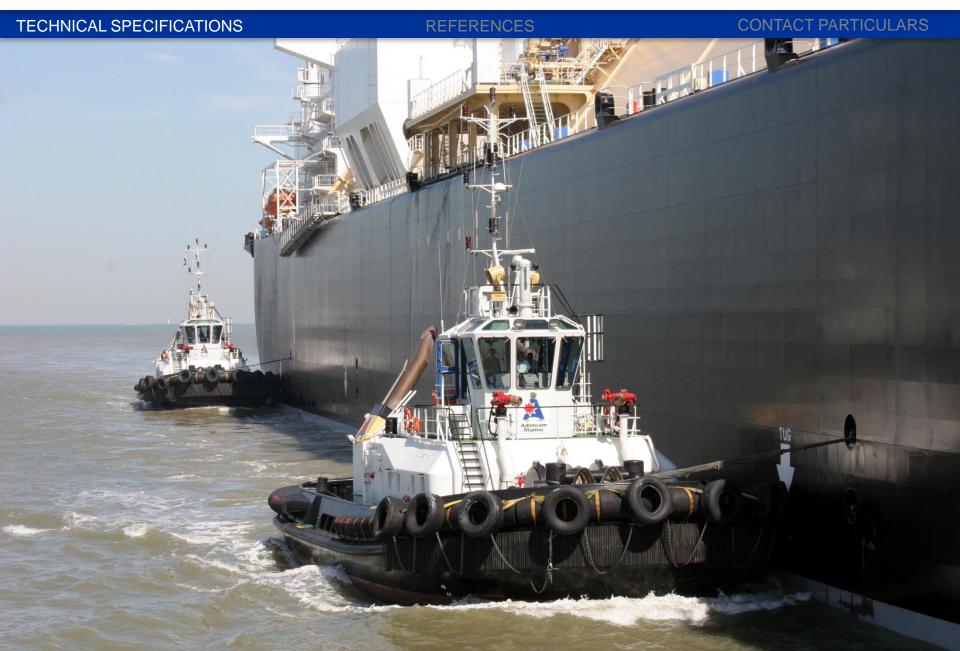
ENGINE ROOM

- Standard bilge/fire fighting module
- Closed cooling water systems with box coolers
- Forced engine room ventilation
- 45 dB(A) exhaust dampers
- 2 generator sets 86 kVA each

Optional equipment

- Fuel oil purifiers
- Sewage treatment plant
- Air intake filter engine room ventilation
- Dispersant system
- External FiFi; 600 m³/hr, 1200 m³/hr or 2400 m³/hr
- Internal fire fighting engine room





DUMEN

TECHNICAL SPECIFICATIONS

MAIN DECK LAYOUT



FORE DECK

Spacious unobstructed fore deck with:

- Towing bitt
- Stainless steel fairleads
- Heavy duty rubber fendering system, bow fender + seawater spray
- Hydraulic split drum anchor/towing winch Pull 33 ton up to 11 m/min Slack rope speed up to 51 m/min Brake holding force 150 ton
 Rope 150 meter Ø 80 mm Euroflex

DUMEN

TECHNICAL SPECIFICATIONS

MAIN DECK LAYOUT



AFT DECK

- Heavy duty rubber fendering
- Flush engine room hatch
- Central filling station
- Towing bitt

Optional equipment:

- Foldable navigation mast
- Electric capstan, 5 ton at 15 m/min
- Towing hook 100 ton
- Hydraulic deck crane max. lifting capacity 0.8 ton at 10.36 m

WHEELHOUSE LAYOUT

ERGONOMICS



- Modern and efficient standard layout
- Excellent all round view
- Ergonomic designed consoles
- Chart table with drawers

COMFORT





- Helmsman's seat at center line
- Second helmsman's seat at PS
- Noise level in the wheelhouse <65 dBA
- UMS alarm panels
- Navigation equipment conform GMDSS area 1 (2 or 3)
- Towing winch foot control



COMFORT



- Modern linings
- Floating floor
- Complete insulated
- Air-conditioning

STANDARD OUTFITTING



- Accommodation for 4 persons
- Galley with modern equipment
- Mess room
- Toilet space
- Shower
- Store with wooden shelving
- Washing machine and tumble dryer

Optional equipment:

- Additional heating in cabins
- Additional freezer

BUILDING YARD

Hull construction and complete outfitting:

Damen Shipyards Changde, China Damen Shipyards Sharjah, U.A.E.











REFERENCES

CONTACT PARTICULARS























DAMEN

SERVICES

AFTER SALES DEPARTMENT



- Short delivery time for components
- Complete package of components
- Maintenance Management Solutions
- Registration of components

DAMEN FIELD SERVICE



- Post delivery support
- Warrantee and after sales services
- Training courses (in house and on site)
- Technical check-ups





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