



90 TON Bollard Pull

Seagoing FiFi-1 ASD Tug

State-of-the-art, reliable, optimised performance

Since the foundation in 1918, MULLER Dordrecht has been building on expertise, reliability and inventiveness in the maritime business. With specialised marine equipment, we can offer you a tailored fit competitive towage service for your specific needs. MULLER performs core activities such as Harbour assistance, Coastal & Deep-sea towage, salvage and Heavy-lift & Transport. MULLER is owner & operator of inland & seagoing tugs up to 119 tons BP, seagoing ballastable heavy-lift pontoons up to 16.500 tons DWT, it's own harbour and yard in Dordrecht.



EN AVANT 25

Harbour, Seagoing, Terminal, Escort & ASD

GENERAL INFORMATION

Year built	May 2023
Builder	DAMEN Shipyards, Song Cam, Vietnam
Build type	Damen ASD 3212, Seagoing Escorting Tugboat
Class	Bureau Veritas (BV Nr: 41414S)
Classification	1 * HULL • MACH Escort Tug (Bollard pull = 85 t) (maximum steering force = 75 t, maximum breaking force = 90 t, maximum escort speed = 10 kn) Unrestricted Service, AUT UMS INWATER SURVEY, Green Passport EU, Clean ship, FiFi-1
Port of registry & Flag	Dordrecht, The Netherlands
Callsign / MMSI	PGHE / 244890000
IMO	9949443

MAIN PARTICULARS

Length o.a.	32.70 m
Beam o.a.	12.82 m
Depth at sides	5.35 m
Draught min/max	5.60 / 6.20 m
Gross/Nett tonnage	449 GT / 134 NT
Displacement (98% cons.)	800 T

PERFORMANCE

Bollard Pull max.	88.7 T ahead / 78 T astern
Escorting	75 T max steering force 90 T max breaking force
Speed	13.6 knots

PROPULSION

Main engines	2 x Caterpillar 3516C TA HD/D (IMO Tier 3)
Total power	6.772 hp (5.050 kW) at 1800 rpm
Azimuth Thrusters	2 x Kongsberg Maritime US 255S P30 FP
Propeller diameter	2 x 3000 mm fixed pitch
Clutch	A slipping clutch is integrated in the thrusters for manoeuvring very slowly & precisely
Fuel oil system	Main and auxiliary engines running on fuel acc. ISO 8217 : 2012 or ISO 8217 : 2017 – DMA.

AUXILIARY EQUIPMENT

Auxiliary Engine sets	2 x Caterpillar C4.4 TA
Generator sets	2 x Leroy Somer LSAM 44.3 L10, cap. 107VA each
Electrical system	230 V 1-phase, 50/60Hz / 400 V 3-phase 50Hz
FW maker	4m ³ /day basis Rev. Osmosis system
General service pumps	2 x Azcue CA-50/3A, cap. 27m ³ /h
Stripping pump	1 x Azcue CA-32/05, cap. 10m ³ /h
Fuel transfer pump	1 x Azcue CA40-1B, cap. 12m ³ /h
Shore power supply	One socket fitted on main deck aft side 400V - 3p - 50Hz - 80 A (female socket)

DECK LAY-OUT

Free Deck Space	65m ² - well suited for towing & material storage
Deck crane	1 x Heila HLM 20-3S-D, SWL 1700kg @ 10,58 m
MOB/Workboat	1 x Work Boat type Whally 400
Towing aft-winch	DMC - TW-H-30-200 SID - hydraulic driven
Capacity aft-winch	850m lenght - 52mm ø - RHOL 1960N/mm ²
High pull / Low speed	30T up to 11.4m/min on 2nd layer
Slack rope speed	8T up to 38.5 m/min on 2nd layer
Brake holding force	200T on 2nd layer
Measurement system	Line pull / line length sensors on aft winch
Spare tow wire winch	DMC winch (underdeck), wire 825m - 52mm ø
Towing hook aft	1 x MAMPAEY hydraulic disc type - SWL 86T
Towing/Escort winch bow	DMC - RRRW-H-30-200-DD (Hägglunds) hydraulic driven escort winch with double drum
Capacity bow-winch	2 x 250m lenght - 60mm ø - dyneema/strongline
High pull / Low speed	30T up to 27m/min on 2nd layer
Maximum speed	44 m/min on 2nd layer
Towing pin	Tug Pins - 100T SWL Guide pins & ø78mm Fork
Navigation mast	Foldable by hydraulic system

FIRE FIGHTING EQUIPMENT

The tug is classed & outfitted for Fire Fighting 1 (FiFi-1) system 2400 m³/h. 2 x FiFi pumps type FFS, 1200-1400m³/h cap. each, connected to each step-up gearbox and driven by each main engine, 2 x FFS elec. remote contr.monitors for water/foam with Fog/ Spray/ Jet fully compliant with FiFi-1. The monitors are fitted forward of the wheelhouse. Capacity each monitor: 9.5 bar working pressure
1200m³/hr water at 120m jet lenght
300 m³/h foam

TANK CAPACITIES

Fuel Oil (MGO)	168.9 m ³
Fresh Water	15.4 m ³
Clean lubrication oil	5.79 m ³
Dirty lubrication oil	7.80 m ³
Foam	12.30 m ³
Bilge water	6.50 m ³
Sewage	5.1 m ³
Urea	3.00 m ³

ACCOMODATION

1-man cabin	2 (two)
2-man cabin	4 (four)
Messroom	1 (one)
Galley	1 (one)

NAUTICAL & COMMUNICATION

GMDSS area	A3 equipped
Wheelhouse control station	Kongsberg Maritime
Compass	Cassens & Plath Reflecta 11 magnetic Satellite Compass Simrad GN70/HS80A
Radar system	2 x Furuno FAR 1518-BB
(D)GPS	Simrad GN70/HS80A
Autopilot	SIMRAD AP-70
Echo sounder	Furuno FE-800
Speedlog	Furuno DS-80
VHF Radio Telephone	2 x Cobham Sailor 6222 DSC 1x Cobham Sailor 6210 Sailor SP3540 GMDSS ATEX
VHF Handheld	Furuno NX-700B
Navtex	Furuno FA-170
AIS	Cobham Sailor 6310
MF/HF SSB radiotelephone	2 x Norselight SH470 2000W (FiFi-1)
Searchlight	Jotron TRON 60S
EPIRB	Jotron TRON SART20
SART	Orlaco - 4 camera's deck/gangway view
CCTV system	VSAT - Iridium - SSB - Phones - Wi-Fi
Communication	2 x Transas Navi-Sailor 4000 system
ECDIS system	Meteogroup Offshore SPOS onboard
Weather system	Gill Instruments GMX500 anemometer
Weather station	2 x Furuno Felcom 18 LRIT
Inmarsat C system	2 x Data / TV, Intellian system
VSAT system	MARAD system onboard & tech office
Maintenance system	