

LAMNALCO CORMORANT



General

Vessel type	Multipurpose Anchor Handling FiFi Terminal Tug
Year Built/ Builder	2003, ABG Shipyard Limited
Classification	ABS +A1 Towing vessel – Firefighting Class 1 – Offshore support vessel AH, (E)+AMS
Flag	Cyprus
Call Sign	P3NM9
IMO Number	9291858
GRT/NRT	906/ 271
Deadweight	716 m/t

Dimensions

LOA x Beam x Depth Mld.	47.40m x 12.60m x 5.75m
Design Draft	4.50m

Cargo Deck

Clear Cargo Deck aft	190m ²
Deck Cargo	200 tons

Cargo Capacities

Fuel Oil	416m ³ @ 100% cap.
Fresh Water	286m ³ @ 100% cap.
Ballast	67m ³
Fuel Transfer	70m ³ /hr @ 50m head
Fuel Oil Meter	Fitted
Fresh Water Transfer	70m ³ /hr @ 50m head
Fresh Water Meter	Fitted
Refrigerated Storage	Freezer/ Chiller 2 x 5m ³

Propulsion Machinery

Main Engines	2 x Wartsila 6R 32 each developing an MCR of 2460 KW,
Total Power	6590 BHP
Bollard Pull	82 m/t
Gearbox	Reintjes

Bow Thruster	Diesel driven @ 5 tons thrust
Propellers	Two fixed mild steel nozzles fitted with Lips controllable pitch propellers
Steering Gear	2 Rolls Royce Electro hydraulic rotary vane units
Rudders	2 x Becker high lift flap rudders independently operated
Generators	2 x Volvo heat exchanger cooled, each rated approx. 300 KW 415V, 3 phase, 50 Hz, 0.8P.F. + 1 x 90KW Harbour/ Emergency
Full Service Speed	14.5 knots
Economical Speed	11 knots
Endurance	4800nm @ 12 knots
Fuel Oil Purifier	Alpha Laval, capacity about 1200 ltrs/hr
Lube Oil Purifier	Alpha Laval (c/w electric heater), capacity about 1200 ltrs/hr.

Deck Equipment/ Mooring System

Aft Towing/ AH Winch	Electro hydraulic waterfall double drum 150 m/t brake capacity 100 m/t line pull @ 5m/min, 20m/t line pull @ 20m/min 1000m of FSWR cable commensurate with BP of the vessel
Spooling Gear	Only fitted on upper drum
Fwd Winch	Electro hydraulic 100 m/t brake capacity 10 m/t line pull @ 25 m/min. 200m Nylon double Braided 60mm dia. @ 80t breaking strength
Towing Pins & Sharkjaws	Karmoy 2 vertical hydraulic, retractable type. The closed top towing pins extend about 600mm above main deck level, operable from wheelhouse aft and locally. The stopper to take 2" to 3" dia wire and 1-1/4" to 3" dia chain.
Tugger Winch/ Capstan	Two electro-hydraulic tugger winches, each of 10 tons at 15m/min. Each winch complete 1 rope drum capacity for 150m length wire 1 wrapping head speed @ light loads 30m/min. Two electro-hydraulic capstans each of 5 tons at 15m/min., light load speed 30m/min.
Wire Storage Reels	1 x 10 tons @ 20m/min hydraulic wire storage reels with a drum capacity of 1000m length x 56mm dia.
Stern Roller	200 tons SWL, min. 4.5m length x 2.2m dia.
Fendering	450mm x 450mm with the centre section on flat pusher bow 1.75m long. Longitudinal side rubber D fenders of 300mm x 300mm fitted to the hull starting from abreast of the forward end of the wheelhouse. Both sets held with galvanised steel pins of min. 40mm dia for fwd and 30mm dia for side fenders secured with a welded washer on the bottom side. 20 tractor tyres of min dia. 1.5m fitted forward and 30 aircraft tyres fitted from aft to fwd held by four stainless steel chains and shackles attached to securing lugs welding to the hull.
Crane	One electro-hydraulic stiff-boom on the port side with 3t @ 14m radius (min).
Anchor Windlass	6t @ 10m/min.
Anchors	2 x high holding power, each 970 kg. AC-14, totally recessed
Anchor Chain	550m x 38mm dia, grade 2, high strength steel
Mooring Lines	4 x 140m long mooring ropes.

Navigation/ Communication Equipment

GMDSS	Fitted for area 1, 2 & 3
Radar(s)	2 meeting SOLAS & GMDSS, 1 ARPA with identifying transponders 1 daylight unit
Radio(s)	VHF SSB 2 nos. 25w remote handsets Fitted.

Gyro-Compasses	1 master fitted with 3 gyro repeaters positioned 1 centrally located in wheelhouse forward steering station, 1 aft steering station, 1 outside of wheelhouse.
Autopilot	Compatible and interfaced with gyro and steering compass.
Magnetic compass	7 inch reflector type c/w correction magnet, quadrant balls and reflector tube and compass binnacle, Azimuth device.
Other Navigation Equipment	1 DGPS navigator, 1 Echo sounder, 3 Walkie talkie c/w spare battery and charges, 1 Navtex Receiver, 1 DSC watch keeping receiver, Inmarsat "B" station with voice, fax & email facility, 1 speed log system

Accommodation

Fully air conditioned	Total no. 18 men
2 x 1-berth cabins, 8 x 2-berth cabins	2 men, 16 men
1 x office fitted with computer	

Fire/ Lifesaving Equipment

Off Ship Fire Fighting	2 units seawater pump each 1500m ³ /hr @ 14 kg/cm ²
No. of Monitors	2 units @ 1200m ³ /hr foam/water remote controlled
On Ship Safety	Fire-fighting to meet Solas requirements
Liferafts	4 x 15 men to SOLAS approved.
Lifesaving	To meet SOLAS requirements
EPIRB & Radar Transponder	Fitted
Rescue Boat	1 no. 9 man, 1 no. x 50 HP outboard, 1 spare outboard
Launching davit	Approved davit
Rescue Zones	Port & Stb @ 3m

Anti Pollution Equipment

Dispersant System	Two 70m ³ /hr manually operated, water monitor type with a positive pressure injection system. G.S. & Ballast Pump used to supply salt water to monitors.
Bilge Holding Tank	5m ³
Sewage Holding Tank	6m ³
Dirty Oil Tank	5m ³
Dispersant Tank	20m ³ minimum stainless steel
Foam Tank	20m ³ minimum
Recovered Oil System	128m ³ capacity c/w electric heating system for oil removal. Recovered oil electric motor driven pump 50m ³ /hr at 50m water head.

Additional Features

Pilot Boarding Platforms	Fitted both sides
Navigation Lights Mast	Dual lens, 24V
Sewage Treatment Plant	Fitted, suitable for 20 men to comply with MARPOL
Searchlights	Twin 2000 watts
Watermaker	1 No. of 3 tons p/d capacity
Joystick Control	Lipstick unit fitted on FWD & AFT controls complete with heading hold feature
Hose splitting sump on deck connected to recovered oil tanks	
Air conditioned workshops	
Air conditioned control room	

09/07/03