NORMAND PROGRESS

MULTIFUNCTIONAL OFFSHORE VESSEL UT 742

M/V "NORMAND PROGRESS"

Call sign. : **MZXB 5**
IMO No. : 9181510
DNV I.D. No. : 20614
Official No. : 233941000
Radio Licence No. : 260564
GSM phone : +47 97 11 19 77 - +47 91 84 23 40
V-SAT Direct Line 1: 52 85 65 82
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Inmarsat B2L tel. : 00 (871) 323 394 111/21
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1. GENERAL DESCRIPTION

A Multipurpose vessel for unrestricted operation offering the following contingency services:

- Anchor Handling
- Towing
- Trenching
- ROV Operation
- Cable laying
- Ploughing
- Mooring operations
- Flexipipe laying
- Installation of underwater constructions with A-frame
- Helicopter operations

1.1 VESSEL IDENTIFICATION, MAIN PARTICULARS AND FEATURS

Vessel name : M/V "Normand Progress"
Registered Owner : Progress Offshore Limited
Managers : Solstad Shipping AS
Builder : Ulstein Verft A/S, Yard No. 247
Year completed : November 1999
Port of Registration : Douglas
Classification : DnV + 1A1 Tug/Supply Vessel SF, E0, DYN POS AUTR, ICE C, HELIDK
Environmental Regularity : 99, 99, 99.

1.2 PRINCIPAL DIMENSIONS

Length Overall : 95,00 m
Length between P.P. : 84,99 m
Breadth Moulded : 24,00 m
Extreme Breadth over Heli-deck : 26,00 m
Depth Moulded : 9,70 m
Minimum Draft : app. 6,00 m
Maximum Draft (summer) : 8,31 m
Deadweight on Max Draft : 5.292 t
Displacement on Max Draft : 11.200 t
Gross Tonnage : 5.944 t
Net Tonnage : 1.784 t

1.3 POWER

Service Speed : 12 knots
BHP : 25.200 main engines
2.720 azimuth thruster
27.920 total
Bollard Pull : **304 t certified continuos bollard pull**

2 CAPABILITIES

2.1 CAPABILITIES

Deck space (total) : 1.000 m^2 (21,5 m x 46,5 m)
: 10 t / m^2 all over
Overall deck load capacity : 3.700 tons 1 m above main deck
: 3.100 tons 3 m above main deck
Water ballast tanks : 3.928 m^3
Freshwater : 1.038 m^3
Fuel oil and H.F.O. : 2.230 m^3
Chain lockers : 548 m^3 (4 x 137 m^3)
Lub. Oil : 120 m^3
Sludge : 36 m^3
F.W. Generating cap. : 25 m^3 / day
F.O. Discharging cap. : 2 x 150 m^3 / h - 9 bar
F.W. Discharging cap. : 2 x 150 m^3 / h - 9 bar

2.2 FUEL CONSUMPTION

In Port : app. 3 m^3 / day
Transit (economic) : app. 35 m^3 / day
Transit (max speed) : app. 100 m^3 / day
Standby : app. 6 m^3 / day

3 DECK EQUIPMENT

3.1 DECK CRANES

One off : 100 tonnes offshore crane heave compensated.
Model Hydralift offshore Pedestal Crane
One off : Hydralift Electro-Hydraulic Articulated Deck Crane
Model: KMCV 1301-5-12 (8)
SWL: 5 t / 12 m
Useable hoist wire: 100 m
One off : Hydralift Electro-Hydraulic Articulated Deck Crane
Model: KMCV 1400-5,5-15 (10-5)
SWL: 5,5 t / 15 m
Two off : Telescope cranes placed close to cargorail on each side aft for handling of heavy anchorhandling equipment.
Type: PK 3200 ME. SWL: 1,3 t at 16,8 m arm.

3.2 A-FRAME SPECIFICATION

Lifting Capacity (SWL) : 250 tonnes
Working radius, outwards : 13,00 m
, inwards : 9,56 m
Clear width between legs : 14,50 m (Deck level)
Clear hight between top girder/deck : 19,00 m
Pivot (swing) time, outwards : 250 sec.
inwards : 150 sec.
Heel + trim conditions : 5 + 2 dgr.

Forces to deck data
- Static moment, inwards : 3.079 tm
outwards : 3.812 tm
- Dynamic moment, inwards : 3.171 tm
outwards : 4.878 tm

Weight without load (incl. Foundations) : 167 t

Design Factors
Dynamic factor : 1,3
Duty factor : 1,0

3.3 TOWING / ANCHORHANDLING WINCHES

One off : Ulstein Brattvaag towing / anchorhandling winch of water fall type BSL 500 WX / 2 SL 400 WX consisting of:

One Special handling drum. (with socket compartment)
Length of drum - 3.400 mm.
Inner drum dia. - 2.800 mm.
Dia of flanges - 4.050 mm.

Wire Capacity	76 mm - 3990 m	100 mm - 2033 m
	80 mm - 3349 m	110 mm - 1923 m
	85 mm - 3115 m	120 mm - 1692 m
	90 mm - 2568 m	130 mm - 1294 m
	95 mm - 2478 m	140 mm - 1199 m
Drive hoist	First layer: 500 t at 0 - 11 m/min	
	165 t at 0 - 34 m/min	
	Top layer: 390 t at 0 - 14,5 m/min	
	135 t at 0 - 43 m/min	
Dynamic bracking	First layer: 155 - 650 t at 0 - 24 m/min	
	50 - 220 t at 0 - 74 m/min	
Lower	First layer: 0 - 34 m/min	
	Top layer: 0 - 43 m/min	
Brake holding load	First layer: 650 t	
	Top layer: 520 t	
Cable lifters	For 76, 81, 86, 90, 95, 123 and 137 mm chain.	
	Drive hoist with 86 mm gypsy. 370 t at 0 - 14 m/min.	

Two usual handling / towing drums:
Length of drum : 1.600 mm
Inner drum dia. : 1.300 mm
Dia. of flanges : 3.600 mm

Wire capacity:	76 mm - 2460 m	90 mm - 1790 m
	80 mm - 2120 m	100 mm - 1350 m
	85 mm - 2050 m	110 mm - 1120 m
Drive hoist:	First layer: 400 t at 0 - 14 m/min	
	200 t at 0 - 37 m/min	
	Top layer: 170 t at 0 - 32 m/min	
	65 t at 0 - 68 m/min	
Dynamic braking:	First layer: 120 - 500 t at 0 - 30 m/min	
	45 - 190 t at 0 - 80 m/min	
Brake holding load:	First layer: 550 t	

Two secondary winches: (with socket compartment)
Length of drum - 4.500 mm
Inner drum dia. - 1.500 mm
Dia of flanges - 4.500 mm
134 t pull at 0 - 21 m/min
170 t dynamic braking

Wire Capacity	76 mm - 12.000 m	165 mm - 2500 m
	90 mm - 8.900 m	203 mm - 1600 m

3.4 RIG CHAIN LOCKERS

4 off Rig chain lockers, 137 m^3 each.

Chain Capacity	Studded chain	Studless chain
	76 mm - 8.179 m	8.800 m
	81 mm - 7.718 m	7.942 m
	86 mm - 6.850 m	7.116 m
	95 mm - 5.480 m	5.708 m
	110 mm - 4.152 m	4.281 m
	120 mm - 3.425 m	3.605 m

3.5 ANCHOR HANDLING EQUIPMENT

Shark jaw : 2 x Giant Jaws for handling of chain/wire up to 165 mm. SWL 750 t

Towing pins : 4 off towing pins. Operated from bridge and locally.

Lifting pins : 2 x 10 tons in front shark jaws.

Smit bracket : Installed on Forecastle deck MBL 450 t.

Stern roller : Dia. 4.000 mm. Breadth 7.000 mm. SWL 500 t.

Towing bracket : Smit Bracket on forecastle deck. MBL 450 tonnes.

3.6 MOORING CAPSTANS

2 x 15 t capstans aft.
2 x 20 t drums on windlass forward.
2 x 15 t tugger winches (remote controlled).

3.7 ROLL DAMPING SYSTEM

Passive stabilising system.

3.8 FAST WORKBOATS

One inflatable pick-up boat operated by starboard deck crane.
One MOB - boat, 30 knots, with constant tension davit.

3.9 AVAILABLE DECK SUPPLY

Air : 5 outlets for working air on deck.

Capacity : 150 m^3/h at max 10 bar

El. power : 450 V: 1 outlet x 1000 A
2 outlets x 400 A
4 outlets x 275 A
4 outlets x 125 A
4 outlets x 63 A
240 V: 2 outlets x 32 A
8 outlets x 16 A

4. DYNAMIC POSITIONING SYSTEM

The vessel is equipped with a Kongsberg Simrad SDP 21 dual redundant dynamic positioning system which has the capability to control the vessel positioning in the following modes:

- Auto heading
- Autopilot mode
- Auto positioning
- Auto track (both low and high speed)
- Follow Sub mode
- Alongship Force mode

The DP system is equipped with the following reference system:

- One Simrad HIPAP Hydro-acoustic system
- Two off DGPS with 3 demodulation, 2 for Spot Beam Sat - 1 for Inmarsat reception of Differential signals.
- One Fanbeam Laser
- One Tautwire
- The towing whinch tension is interfaced to DP system

5. NAVIGATION EQUIPMENT

- Ecdis, electronic chart system with slave screen and printer
- 1 off S-band Radar, type Furuno FAR 2835s
- 1 off X-band Radar, type Furuno FR 2110
- 1 off slave screen for both S- and X-band Radars, type Furuno FR 1505 MK2
- 2 off Differential GPS, type Sercel
- 1 off GPS, type Furuno GP-30135
- 3 off Gyro Compass, type Robertson RGC 12 with four repeaters
- 1 off Autopilot, type Robertson AP 9 MK 2 with off course alarm
- 1 off Magnetic Compass, type J. G. Krohn
- 1 off Echo-Sounder, type Simrad EQ 50
- 1 off VHF automatic direction finde, type Taiyo TD-L1550A
- 1 off Helicopter beacon, type SKANTI TU-8250 B
- 1 off Doppler log, type Anthea DS 700 with 3 repeaters

6. COMMUNICATION EQUIPMENT

The Radio installation are according to GMDSS - A3

- MW/SW Tranceiver control unit, type Sailor RE 2100
- MW/SW SSB Message handling Proc. type Sailor H2098
- MW/SW SSB Monitor, type Sailor H1253B
- MW/SW SSB Transmitter, type Sailor T 2130
- MW/SW Telex ARQ and DSC, type Sailor RM 2151
- Watchkeeping reciever 2182 kHz, type Sailor R501
- MW/SW DSC 2187, 5 kHz, type Sailor RM 2150
- Radiostation loadspeaker, type Sailor H 2074
- MW/SW Duplex reciever, type Sailor R 2120
- 2 off VHF Duplex DSC, type Sailor RT 2047
- 3 off VHF Simplex DSC, type Sailor RT 2048
- VHF DSC type RM 2042
- 2 off Inmarsat B, type Furuno Felcom 81 with telephone and fax
- Fast data port for installation of Marinet / e-mail
- Pabx system to route external calls internally
- Auto billing via Pabx
- Card/pin codes operated phones
- INMARSAT M, type Nera Mini M with telephone and fax
- INMARSAT C, type Sailor H 2095
- Navtex, type Furuno NX-500
- Weather faximile, type Furuno Fax-208A
- VHF Cospas/SARSAT Freefloat, type Jotron Tron 30 S
- Search and Rescue transponders, type Jotron Tron Sart
- Portable VHF's, type Jotron
- Aeronautical VHF, type Walter Dittel FSG 71M
- 4 off UHF portable, type Motorola MX 1000

7. PROPULSION

Main engines : 4 x Stork Wartsila
2 x 6L38 - 3.960 kW each.
2 x 8L38 - 5.580 kW each.
Total 25.500 Bhp
Fuel. IF 40 (Light heavy fuel) or MGO

Propellers : Variable pitch propellers in fixed nozzels.

Rudders : Ulstein High Lift Flap rudders.

7.1 BOW THRUSTERS

2 x 1.360 Bph, Ulstein 800 TV
1 x 2.700 Bhp, Ulstein Azimuth Thruster

7.2 STERN THRUSTERS

2 x 2.000 Bhp, Ulstein 800 TV

8. ENGINE ROOM

8.1 ELECTRICAL POWER AND DISTRIBUTION

- Main Electrical power generation is by four turbocharged diesel engines, type Wartsila, two of them driving a 3.500 kW Shaft generator.
- Four diesel alternators, each 1.200 kW - 690 V – 60 Hz.

8.2 EMERGENCY POWER SUPPLY

- Emergency power is supplied by one diese generator, Caterpillar 400 kW - 690 V – 60 Hz.

9. LIFESAVING EQUIPMENT

In accordance with the latest Solas amendments.

Rescue and Lifesaving equipment

The following Rescue / Lifesaving equipment are omboard:

- 1 off FRC, 30 knots speed. - Cap. 10 persons.
- 10 off Liferafts, 6 x 20 men, 4 x 25 men
- Hospital with treatment, stretchers, medicine and controlled drugs lockers, intercom and direct ship to shore communication.
- Medical equipment/medicines in accordance with NMD-rules.
- Swim and Survival suits together with life-vests in full compliance with NMD-regulations.

10. ACCOMODATION

All cabins are equipped with WC and Shower. The vessel has safety equipment acc. to Solas for 73 persons.

1 man cabins : 17 x 1	=	17
2 men cabins : 27 x 2	=	54
		71
+ 4 pullman bed in 1 man cabins	=	4
Total number of bunks	=	75

11. HELIDECK

The helicopter deck is desgned to serve Super Puma / Sikorsky S61.

All details believed to be correct

SOLSTAD SHIPPING AS

ESTABLISHED 1964

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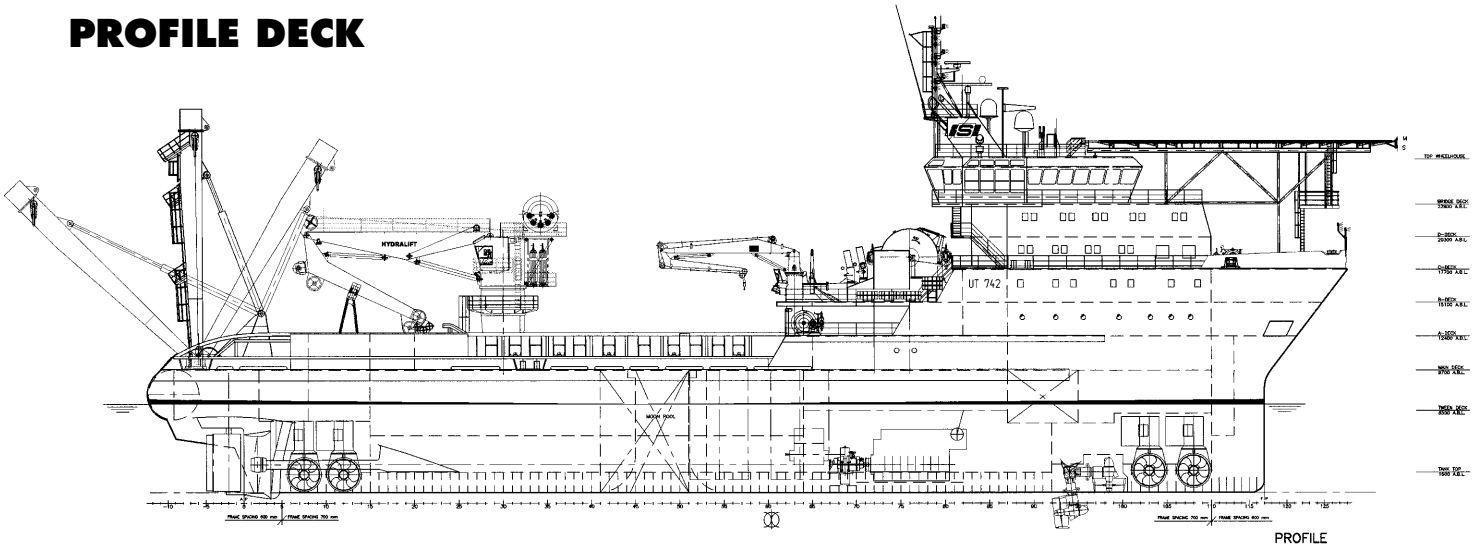
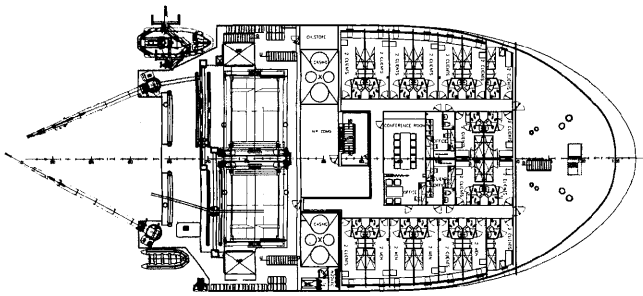
Gullhaugen Trykkeri a.s - Jan. 2004

PROFILE DECK

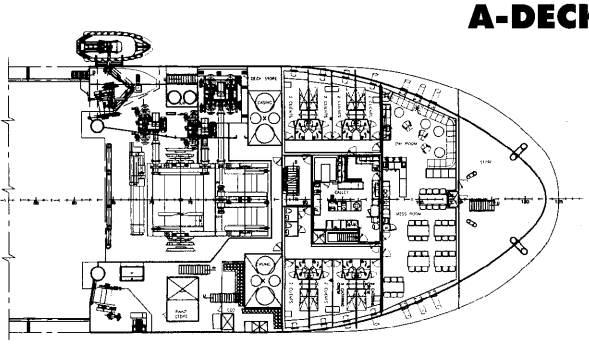


PROFILE

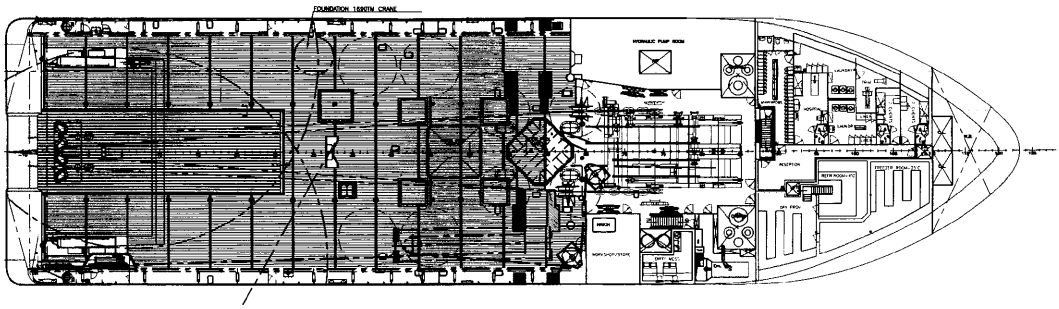
B-DECK



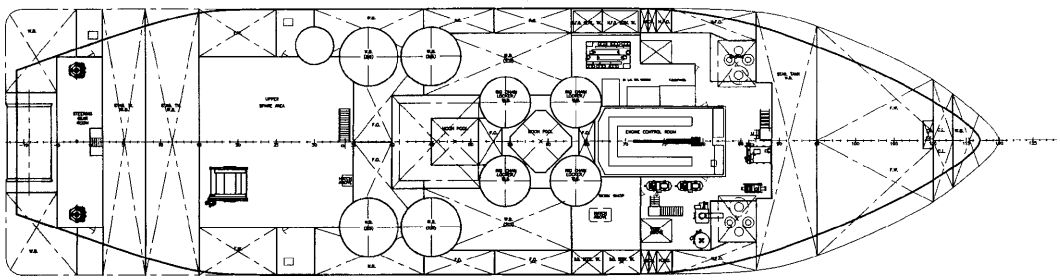
A-DECK



MAIN DECK



TWEEN DECK



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