



ULSTEIN P128

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No. Of Pages7

# ULSTEIN P128

**Diesel Electric Platform Supply Vessel**



**ULSTEIN DESIGN & SOLUTIONS AS**



## GENERAL DESCRIPTION

The Vessel shall be arranged with accommodation forward and machinery forward and amidships. The Vessel shall be arranged as a single-decker.

The hull form, and a diesel electric propulsion system, ensures exceptional performances with regards to fuel consumption, sea keeping, station keeping, speed, stability and cargo capacity.

The propulsion system comprises two propulsion units, each driven by an electrical motor.

Two tunnel thrusters are installed in the front of the Vessel.

The Vessel shall be arranged for totally 24 persons accommodated in 8 single cabins and 8 double cabins. In addition there shall be arranged dayroom, mess room, galley, provision stores etc.

Vessel to be approved for max.12 passengers according to SOLAS, included in total of 24 persons.

## Main Particulars

Length over all:	71,5 m
Length between perpendiculars:	65.9m
Breadth moulded:	15,0 m
Depth from Main deck:	7,1 m
Max. draught:	6,0 m
Design draught	5,0 m
Freeboard at max. draught:	1,1 m

## Tonnage, Capacities

Fuel oil Cargo:	Approx.	840 m <sup>3</sup>	
Fresh water:	Approx.	480 m <sup>3</sup>	
Mud/Brine:	Approx.	750 m <sup>3</sup>	
Ballast water / Drill water:	Approx.	1200 m <sup>3</sup>	
Dry bulk:	Approx.	220 m <sup>3</sup>	5 tanks
Cargo deck area:	Approx.	610 m <sup>2</sup>	
Deck strength:		5 t/m <sup>2</sup>	
Deadweight at maximum draught:	Approx.	3000 t	
GT		2265.7	
NT		964	



## Performance, Trial Speed

Trial speed at 100 % load on each of the propulsion drive shafts, at 4,0 m draught, clean hull and with Sea state 0-1 shall be minimum 12,5 knots.

## Class, Tonnage Regulations, Certificates

### **Class:**

Main Class shall be Bureau Veritas with following symbols and notations:

I + HULL + MACH  
Supply Vessel-Oil Product, Fire-Fighting ship 1, Water spraying  
Unrestricted Navigation  
+ AUT-UMS  
+ DYNAPOS AM/AT R  
SDS  
HEAVYCARGO (DECK, 50 KN/m<sup>2</sup>)  
CLEANSHIP

### **Flag state:**

The Vessel shall fly Tuvalu flag.

### **National and International requirements:**

The Vessel shall fulfill the flag state's requirements for offshore supply vessel, including but not limited to

1. International convention for Safety of Life at Sea (SOLAS 1974 including later amendments). (Safety Convention).
2. The International Convention for Prevention of Pollution from Ships, MARPOL 1978 Annex I, II, III, IV, V and VI.
3. IMO Resolution MSC.235(82) – Guidelines for the design and construction of offshore supply vessels, 2006.
4. IMO Resolution A.673(16) Guidelines for the transport and handling of limited amounts of hazardous and noxious liquids substances in bulk on offshore support vessels.
5. International and Flag State rule for worldwide operation.
6. MLC 2006

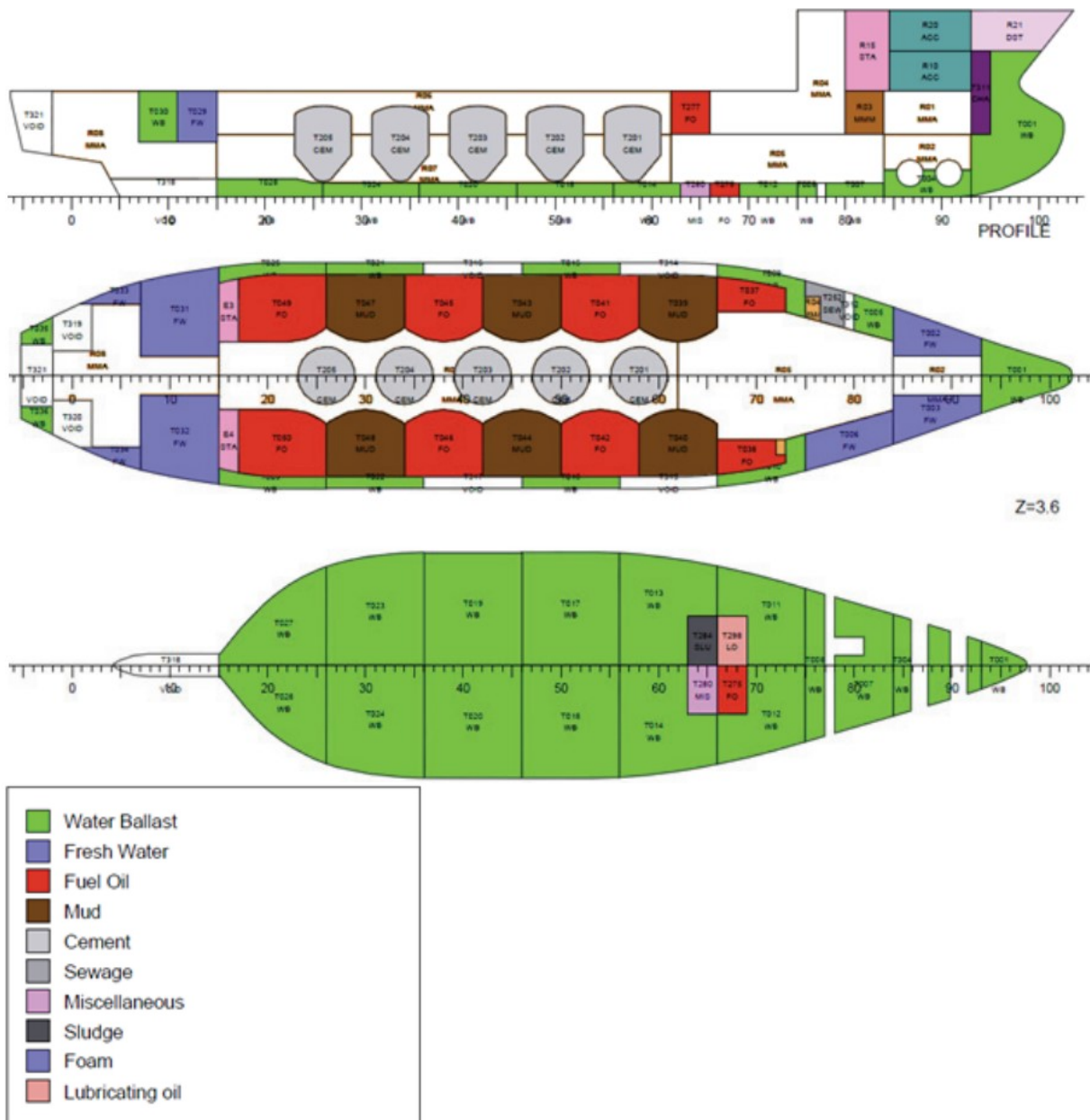


### General Layout

The vessel has a traditional layout with engine room and accommodation block forward.

The tank layout has been designed for high utilization of the hull volume without compromising simple pipe routing and sufficient service access for the equipment.

See figure below for tank layout and cargo legend.





## Cargo Systems

The cargo systems for dry and wet and dry bulk cargoes shall be arranged with filling / discharge points in general at both sides amidships and at one side at the stern.

Discharge of following capacities shall be installed:

Backup connections shall be arranged between FW & DW systems, DW systems and Mud systems.

Qty.	List of cargo pumps	Capacity – delivery pressure	Pump driven by:
1 off	Fresh water cargo pump.	100 m <sup>3</sup> /h –10 bar	Centrifugal type. El. motor, single speed.
2 off	Mud / Brine pump.	100 m <sup>3</sup> /h – 18 bar	Eccentric screw type. El. motor, frequency controlled.
1 off	Ballast / Drill water pump.	100 m <sup>3</sup> /h –10 bar	Centrifugal type. El. motor, frequency controlled.
2 off	Fuel oil cargo pump.	100 m <sup>3</sup> /h –10 bar	Centrifugal type. El. motor, frequency controlled.
2 off	Dry Bulk (BHS) compressor	20 m <sup>3</sup> /min at min. 5,6 bar each.	able to serve both individual dry bulk systems simultaneously.

\*Flow meter shall be installed for filling and discharge of DW ,FWand Cargo Fuel Oil.

\*Liquid mud tanks with recirculation line and agitator in each tank.

\* A computer based cargo control system shall be installed for control and monitoring during loading and discharging.

\*Tank cleaning system with permanent installed cleaning machines in all mudtanks.

## Deck crane / equipment

1 off Electrohydraulic deckcrane with fixed boom and single wire. Crane to have a capacity of minimum SWL 2 t at 8 m outreach.

1 off swivel type davit have a capacity ofSWL 1.5 t at 4 m outreachfor mob boat arranged at opposite side of crane.

2 off Hydraulic hoisting wincheswith pull capacitiesmin. 6 tonnes pull at first layer.

## Manoeuvring machinery and equipment

### Side thrusters:

2 off Tunnel thrusters forward, electrical driven, fixed pitch, variable speed type.



Propeller diameter: 1.800 mm.  
Motor rating : 550 kW.  
Thrust: abt.10teach

**Roll Reduction System:**

2 off Roll reduction tanks with damping grids shall be arranged as indicated in GA-plan & drawing. Working medium shall be ballast water or fresh water.

**Dynamic Positioning:**

The Vessel shall be fitted with a DP-2 system in compliance to class notation.

Reference systems:

- 2 off Wind sensors.
- 2 off Motion reference units.
- 2 off Differential Position System DPS 112.
- 1 off Laser beam reference system.

**Propulsion machinery:**

2 off Azimuth thrusters with 360 deg. rotation angle, fixedpitch propellers.  
1100 kW each, variable rpm. Diameter : 2.000 mm.

**Diesel Generator sets:**

All main and auxiliary generator sets shall have EIPP-certificate and satisfy emission limits given in IMO Tier-II and Class notation Clean Design.

- 2 off Main generator sets, each generator power 1400ekw – 900 rpm.
- 1 off Emergency generator set, 185ekw at 1.800rpm.

**Communication / Navigation equipment:**

A complete GMDSS A3 installation to be provided.

**Crew facilities:**

The Vessel shall be arranged for 24 persons in following set-up:

2 suites with separate sleeping compartment.

6 single occupancy cabins.

8 twin occupancy cabins.

All with attached toilet / shower.

Public areas include mess room, day rooms, offices, conference rooms,, change room, etc.

**Sanitary discharge systems:**

- 1 off Vacuum sewage plant,
- 1 off Sewage treatment plant with sewage transfer pump.

**Ventilation, AC and heating:**

A central air conditioning system shall be arranged for accommodation and control stations. Heating shall be provided by electriccoils, and cooling by chilled water plant.

**Design conditions:**

Fresh water cooling temperature	+37°C
Sea water temperature	+32°C
Outdoor air in summer	+40°C and 80 % relative humidity
Indoor air in summer	+27°C and 50 % relative humidity
Outdoor air in winter	- 10°C
Indoor air in winter	+22°C and min. 30 % relative humidity