Self-Propelled, Self-Elevat ing L iftboat

BR IEF INT RODUCT ION

The platform is defined as a self-propelled Jack-up that is designed as according to a GustoMSC type NG-2500X which mainly designated for operation in worldwide ocean environments with sea water depths up to 70 m at all specified weather and the sea conditions stated in specification at that region.

The unit is intended to be used as a basis for maintenance activities in oil and gas fields, and for permanent accommodation. The main physical dimensions, characteristics and specification are stated in the Technical Specification.

The prime operational functions of the Unit will be as follows:

- 1. Maintenance activities in oil and gas fields.
- 2. For permanent accommodation of 150 persons on board.
- 3. Wind Turbine Installation, Maintenance and Repair.

The unit is to be designed for 25 moves per year of a period of minim um 20 years. The dynamic positioning system is executed for DPS-2 notation.

MAIN PARTICULARS

1. HULL

Length main deck 61.0 m

Length overall approx 76 m

Width 36.0 m
Depth 6.0 m

Distance between leg centers:

Longitudinal 37.0 mTransverse 28.0 m

2. LEGS

Number 4

Type Triangular truss-type,

X-braced structure

Width 5.0 m

Length overall 94.2m

Maximum leg reaction at footing level Approx. 3,000 t

Footing area Approx. 30 m²

Footing type can with pin

3. JACKING SYSTEMS

Type GustoMSC floating, opposed

rack and pinion

Drive electric, variable speed

Number of pinions 3 x 24

Jacking capacity 90 t per pinion

Pre-load capacity 153 t per pinion

Jacking speed, hull lifting 0.16 – 0.8 m/min (stepless)

Jacking speed, leg handling 0.16 – 1.2 m/min (stepless)

4. PROPULSION SYSTEM

Thruster: 2 azimuthing thrusters with fixed pitch propeller at the stern

2 azimuthing thrusters with fixed pitch propeller at the bow

Size: propeller diameter of thrusters approx 2.3m

Power: 4 x 1500kW

Dyn. Positioning: DPS-2

Design Transit speed: 6 knots

5. ACCOMMODATION

General spaces for 150 persons (single berth

cabins, double berth cabins,

four berth cabins)

6. HELICOPTER DECK

Helicopter type S61N/S92

Dimensions 22.2 m diameter

7. CRANES SPECIFICATION

Main crane Electrical hydraulic power driven

Main hoist capacity: 300t at 15.0 m (onboard),

Auxiliary hoist capacity: 30t at all radii (onboard)

Boom length: approx 60 m

Auxiliary crane

Electrical power driven

Main hoist capacity: 12.5t at 30 m (onboard)

Boom length: approx 35 m

8. DESIGN CAPACITY

Potable water: approx 480m3

Fuel Oil: approx 420m3

Water Ballast: 900m3

Free Deck Area: approx 750m2

Design Draft: 3.8m

Variable Load: approx 1300t

Max. Operational Air Gap: 30m

Main Engine: 4 x 1700kW

Em. Engine: 1x 550kw

REGISTRATIONS

Flag: Panama

Class: **※A1**, Self Elevating Unit, **※AMS**, **※ACCU**, **※DPS-2**, HELIDK, CRC,

Wind IMR

SURVIVAL CONDITIONS

The unit is designed to withstand the following combination of survival conditions:

	ABS 1	ABS 2	SNAME-RP
Total elevated weight *) [t]	5500	5500	5500
Maximum water depth [m]	60.0	60.0	70.0
Air gap to SWL [m]	7.0	15.0	7.0
Maximum wave height [m]	6.0	8.5	7.5
Associated wave period [s]	7.5	9.0	8.0
Wind speed(1 min at 10m) [m/s]	51.4	33.0	32.5
Surface current [m/s]	0.5	1.3	1.0
Leg penetration [m]	3.0	3.0	1.0

^{*) =} The horizontal center of gravity of the elevated weight shall be located within 0.1m of hull centerline and between 0.1m aft and 0.1m forward to the center of the leg pattern. The elevated weight includes a variable load of approximately 900t.

EXTREME OPERATION CONDITIONS

	ABS 1	ABS 2	SNAME-RP	SNAME-RP
Total elevated weight*) [t]	5900	5900	5900	5900
Maximum water depth [m]	60.0	60.0	70.0	50.0
Air gap to SWL [m]	7.0	15.0	10.0	30.0
Maximum wave height [m]	6.0	7.0	5.0	5.0
Associated wave period [s]	7.5	8.0	6.5	6.5
Wind speed(1 min at 10m) [m/s]	36.0	28.0	25.0	25.0

 Surface current [m/s]
 0.5
 1.1
 1.1
 1.1

Leg penetration [m]	3.0	3.0	1.0	1.0
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*) = The horizontal center of gravity shall be located within 1.25m of hull center line and between 2.25m aft and 2.25m forward of the center of the leg pattern. The elevated weight includes a variable load of approximately 1300t.

TRANSIT CONDITION

Legs

The unit is designed to sail under the following conditions:

• Variable load 1300 t (excl water in spudcans)

fully retracted

Displacement approx 7390t
 Max hull draft hull (average) approx 3.8m
 Max navigation draft (average) approx. 6 m

Wave height (significant)
 1 m

• Head wind 6.7 m/s (13 knots)

Under the above conditions the service speed is approx 6 knots.