SELF-ELEVATING PLATFORM

PRINCIPLE
SPECIFICATIONS

FEBRUARY 2017
## PLATFORM DETAILS

### Principle specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of Construction:</td>
<td>2006 (platform)</td>
</tr>
<tr>
<td></td>
<td>2007 &amp; 2009 (Accommodation added)</td>
</tr>
<tr>
<td>Place of Build:</td>
<td>The Netherlands, Hull # Combifloat 73</td>
</tr>
<tr>
<td>Classification Society:</td>
<td>Kazakh Register of Shipping (KZR)</td>
</tr>
<tr>
<td>Classification:</td>
<td>* O-PR 2.0</td>
</tr>
<tr>
<td>IMO Number:</td>
<td>8770003</td>
</tr>
<tr>
<td>GL Register Number</td>
<td>214637</td>
</tr>
<tr>
<td>Flag:</td>
<td>Republic of Kazakhstan</td>
</tr>
<tr>
<td>Call Sign:</td>
<td>USC</td>
</tr>
<tr>
<td>Length over all (L.O.A.):</td>
<td>32.00 meter</td>
</tr>
<tr>
<td>Breadth moulded:</td>
<td>18.30 meter</td>
</tr>
<tr>
<td>Depth:</td>
<td>2.13 meter</td>
</tr>
<tr>
<td>Draught minimum (working)*:</td>
<td>1.45 meter</td>
</tr>
<tr>
<td>Spud legs Length:</td>
<td>34.0 meter</td>
</tr>
<tr>
<td>Spud legs Diameter:</td>
<td>1.20 meter</td>
</tr>
<tr>
<td>Gross Tons:</td>
<td>329 Tons</td>
</tr>
</tbody>
</table>

* Vessel currently configured as Accommodation Platform

### Capacities:

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel capacity:</td>
<td>21.0 m³ (60 days)</td>
</tr>
<tr>
<td>Fresh water capacity:</td>
<td>21.0 m³ (RO Plant onboard, self-sufficient)</td>
</tr>
<tr>
<td>Sewage capacity:</td>
<td>110.0 m³</td>
</tr>
<tr>
<td>Dirty oil capacity:</td>
<td>0.6 m³</td>
</tr>
<tr>
<td>Waste capacity:</td>
<td>2 x 600ltr freezers for food waste</td>
</tr>
<tr>
<td></td>
<td>1 X Compactor</td>
</tr>
<tr>
<td></td>
<td>4m³ waste containers</td>
</tr>
</tbody>
</table>

*Incinerator can be added against long term charter*

| Endurance (max):          | 18 days (sewage capacity constraint with 55 onboard) |
| Accommodation:            | Current configuration 55 (incl. crew of 11)         |
Food storage

Autonomous 10ft freezer, reefer and 2 x dry stores containers

**Engine Specifications:**

Generators:

- Geko Super Silent Type 130000
- 2 x Deutz BF6M1013E, 2 x 128 kW (2 x 167 BHP) 380V/50 Hz

Fuel Consumption:

- 300 ltrs/day

Luboil consumption:

- 90l/month

**Power Pack Specifications:**

Engines:

- 2 x Deutz 1700S B20 3R00 A1MO,
- 2 x 90 kW (2 x 122 BHP)

Approximate Consumption:

- 10 ltrs/hrs (each)

**Other particulars:**

- Hydraulic Crane: Fassi F110A.22
- Capacity: 10 Tm
- Table: 5.28 T x 2.0 m
- 1.33 T x 7.9 m
- 0.50 T x 14.2 m

- Reverse Osmosis Plant: Water Bird - Reverse Osmosis Plant
- Max TDS (Total Dissolved Solids):
- Capacity: 45,000ppm
- 12.0 m3 per day

- Main deck (w/o acc. units): 270 m2
- Deck strength: 15 T/m2

**PLATFORM CERTIFICATION**

**Class specifications (KZR):**

- Classification as per Kazakh Register of Shipping (current Class Society):
- Type and purpose: Non-self-propelled vessel, Self-Elevating Unit
- Year of construction: 2007
- Class: * O-PR 2.0

**Pontoons Class Certification (German Lloyds):**

- Classification as per German Lloyds Register:
- Type and purpose: Self-Elevating Platform
- Year of construction: 2006
- Place of Construction: The Netherlands
- Class: + 100 ASK (20) Coastal Service
PLATFORM PARAMETERS

Hull
Platform assembled from autonomous watertight pontoons providing assured stability in the event of a hull puncture incident.

Towing system
Platform equipped by DNV approved towing arrangement.

The towing gear consists of towing bridle (wire, shackles, triangle plate and chains) and emergency towing set.

Self Elevating system
Black Pearl at Kashagan location (2011).
Water depth 4 m. Airgap 2.5 m

Bautino in winter ice bound
Platform equipped with Combifloat hydraulic jacking system. Safe haven in extreme weather conditions.

**Diesel Generators**
2 x GEKO-Deutz sound-proofed diesel generators.

**Compactor ORWAK**
High capacity waste compactor ORWAK 5030

### Crane
Platform equipped with Fassi electric-hydraulic crane for cargo loading operations and FRC deployment.

Hydraulic Crane: Fassi F110A.22  
Capacity: 10 Tm  
Table:  
5.28 T x 2.0 m  
1.33 T x 7.9 m  
0.50 T x 14.2 m

### LSA equipment
Platform LSA equipped in accordance with SOLAS regulation and certified by licensed KZ service station. Life raft station for 60 persons plus 100% contingency. 60 x survival suits.
**Personnel transfer**

As a Self Elevating Platform, deck level of the Black Pearl can be adjusted to level of any crew boat for safe personnel transfer at sea.

Platform equipped with both gangway and swing rope embarkation points on both port and starboard.

**Fire-fighting equipment**

Platform equipped by FFE according SOLAS regulation and certified by licensed KZ service station.

**ToDo Connections**

All systems: fuel, fresh water, sewage equipped with ToDo fittings for drip free fluid transfer operations.

**Fresh Water Maker**

Platform equipped with reverse osmosis water plant, Water Bird type with production capacity of 12 m3 per day of potable water, more than sufficient for daily requirements of both drinking and technical water at full occupancy.
Accommodation

The guest accommodation capacity of the platform is 44 comprising 22 double occupancy cabins. Additionally configured with wheel-house/office, terrace gymnasium and outdoor seating, workshop, galley and mess-room facilities, laundry room and 2 x 10ft tailor-made food dry-stores, 1 x 10 ft freezer and 1 x 10ft chiller units.

Messroom and Galley

22 seat messroom. Full stainless steel galley installed in 2009. Equipped to international standards and in accordance with KZ SanPin regulations.

Laundry and Ablution Facilities

Full laundry facilities. Gender segregated ablution blocks configured in 3 separate units comprising 8 shower units, 7 sinks and seven toilets. Additionally 3 x ensuite cabins.
PLATFORM OFFSHORE PERFORMANCE

Jacking-up Characteristics

Jacking procedures performed pursuant manufacturer’s guidelines, which include preloading operations and use of vessel specific penetration models developed for NE Caspian.

<table>
<thead>
<tr>
<th>Calculation table</th>
<th>Leg 1 Stern PS</th>
<th>Leg 2 Stern SD</th>
<th>Leg 1 Stern PS</th>
<th>Leg 1 Stern PS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>J</strong></td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>H</strong></td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td><strong>Penetration</strong></td>
<td>9.9</td>
<td>9.9</td>
<td>9.9</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Only colour cells for filling

- **A**: Remaining meters above the spudwell
- **J**: Jacked from platform bottom to sea surface (airgap)
- **H**: Observed Water Depth
- **Penetration**: The SEP constant factors are included in the formula
- **D**: Observed Draft of the SEP

A: Clearance above Spudwell

Height of Spudwell = 6.1 m

Depth of SEP = 2.1 m

D = 1.0 m draft of afloat SEP

J: Jacked-up Clearance from platform bottom to sea surface (airgap)

H: Water Depth

Leg penetration
Design Operating Parameters (GL):

- Spud length: 34.0 m
- Spud Well: 6.10 m
- Spud Diameter: 1.20 m
- Working Load Design: 355 Tons
- Current: 1.50 m/sec
- Horizontal load: +15 Tons