M/V “BOURBON MISTRAL”  
M/V “BOURBON MONSOON”  
Platform Supply Vessels with ULSTEIN X-BOW®

ULSTEIN PX105

Hull no. 275/276  
Designed by Ulstein Design AS  
Delivery 2006/2007 by Ulstein Verft AS  
Built for Bourbon Offshore Norway

M/V “BOURBON MISTRAL” and M/V “BOURBON MONSOON” are Platform Supply Vessels with ULSTEIN X-BOW® designed by Ulstein Design AS. The vessels are built as platform supply vessels with additional duty as standby vessels for 250 persons. The vessels are equipped with a diesel electric power plant and azimuth main thrusters, ensuring the vessels to obtain the best operating characteristics in both sailing and DP/manoeuvering modes.

ULSTEIN X-BOW® hull design advantages as compared to conventional foreship with flare:
• Higher transit speed in calm water due to low angles of entry and increased waterline length
• No bow flare, eliminating bow impact and / or slamming in foreship
• Reduced noise and vibration levels in foreship due to soft entries in waves
• Less spray due to water not being thrown forward
• Negligible occurrences of green water on bridge deck
• Working deck and deck equipment better protected due to hull extended to full beam in accommodation area
• Higher transit speed in head sea, giving reduced power consumption and / or higher fuel efficiency both in waves and in still water
• Lower pitch and heave accelerations due to foreship volume distribution and slender hull lines

M/V “BOURBON MISTRAL” and M/V “BOURBON MONSOON” are environmental friendly ships in all respects. The ships are arranged with exhaust catalysts for all main engines exhaust lines, and are certified by Det Norske Veritas according to the latest rules for class Clean Design entered into force 01.01.06. A Green Passport complying with IMO ship recycling recommendations is issued.

M/V “BOURBON MISTRAL” and M/V “BOURBON MONSOON” are built, equipped, and painted - tanks and exterior - in drydock inside covered dockhall, thus ensuring controllable atmosphere and the best quality of work.
**MAIN DIMENSIONS**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length over all</td>
<td>88,8 m</td>
</tr>
<tr>
<td>Length between p.p.</td>
<td>82,0 m</td>
</tr>
<tr>
<td>Breadth moulded</td>
<td>19,0 m</td>
</tr>
<tr>
<td>Depth to main deck</td>
<td>8,0 m</td>
</tr>
<tr>
<td>Draught max</td>
<td>6,6 m</td>
</tr>
</tbody>
</table>

**CAPACITIES**

<table>
<thead>
<tr>
<th>Type</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel (MDO)</td>
<td>917 m³</td>
</tr>
<tr>
<td>Fresh water</td>
<td>1261 m³</td>
</tr>
<tr>
<td>Ballast water</td>
<td>1520 m³</td>
</tr>
<tr>
<td>Brine</td>
<td>552 m³</td>
</tr>
<tr>
<td>Chemicals, Marpol category A (4 tanks)</td>
<td>289 m³</td>
</tr>
<tr>
<td>Liquid mud, 6 tanks, 2,5 t/m³</td>
<td>925 m³</td>
</tr>
<tr>
<td>Base oil</td>
<td>157 m³</td>
</tr>
<tr>
<td>Dry bulk tanks (6 off)</td>
<td>391 m³</td>
</tr>
<tr>
<td>Urea</td>
<td>20 m³</td>
</tr>
<tr>
<td>Cargo deck area (62,3 m x 16,1/12,9 m)</td>
<td>985 m²</td>
</tr>
<tr>
<td>Cargo deck loading</td>
<td>10 t/m²</td>
</tr>
<tr>
<td>Cargo rail height</td>
<td>4,14 m</td>
</tr>
<tr>
<td>Deck load (VCG 1,0 m above main deck)</td>
<td>3000 ton</td>
</tr>
<tr>
<td>Deadweight at max draught 6,6 m</td>
<td>4779 ton</td>
</tr>
<tr>
<td>Gross tonnage, international</td>
<td>3867 GRT</td>
</tr>
<tr>
<td>Net tonnage, international</td>
<td>1160 NRT</td>
</tr>
</tbody>
</table>

**CLASSIFICATION / FLAG**

- Dnv • IA1, SF, EO, DynPos AUTR, CLEAN DESIGN, COMF-V(3), LFL*, ICE C, DK(+), NAUT-OSV (LOC).
- Standby Vessel 250 persons acc. to NMD regulation.
- Flag: NOR.
- NLS Certificate
- Flag: NOR.

**PERFORMANCE**

- Max speed (at d=5.0m) approx. 15.5 knots

**TECHNICAL DATA**

**Deck Cranes**

- One telescopic boom crane, 2 t - 17 m

**Dry bulk plant**

- Six tanks, each of 65 m³
- Duplex BHS compressors, 2 x 29 m³/min, 6 bar
- Two dust cyclones with dust collectors
- Two segregated loading/discharge systems

**Liquid Cargo Discharge Systems**

- Two fresh water pump, 250 m³/h – 9 bar, centrifugal
- One brine pump, 100 – 24, screw spindle
- One brine pump, 125 – 9, centrifugal
- Two ballast / DW pump, 250 – 9, centrifugal
- Two fuel oil pumps, 250 – 9, screw spindle
- One base oil pump, 150 – 9, centrifugal
- Two mud pumps, 100 – 24, eccentric screw
- Four chemical pumps, 100 - 9, deepwell type, hydraulic driven
- All pumps are electric driven with freq. control
- Six electric agitators
- Inert gas generator for purging and padding of chemical tanks
- Tank washing system for mud and brine tanks
- Flowmeter for FO

**Side Thrusters forward**

- One tunnel thruster, 1200 kW, cpp, frequency controlled
- Two retractable azimuth thrusters, 850 kW, cpp, frequency controlled

**Roll Damping System**

- Two roll reduction tanks

**Internal Communication**

- ULSTEIN COM™ automatic telephone, data network, and satellite TV antenna signal to all offices and cabins
- TV satellite antenna

**Deck Winches**

- One double windlass / mooring winch
- Two tugger winches, pull 10 t
- Two capstans aft, pull 10 t

**Lifesaving and medical equipment**

- One fast rescue boat, twin engines and waterjets, 10 persons
- Medical package for 250 survivors

**Machinery / Propulsion System**

- Diesel electric power and propulsion plant
- Four main generator engines, each of MCR 1665 kW at 900 rpm
- Two off twin propeller azimuth thrusters, fixed pitch, variable speed, each of 2300 kW (max capacity 2750 kW at overspeed) diameter 2700 mm, speed 0-254 rpm with vertical integrated el. motors, variable speed 0-800 rpm

**Fire Detection System**

- Addressable fire detection central

**Video and monitoring system**

- A colour video camera system for rescue operations

**Fire Fighting System**

- Water mist protection system for engine room
- Local water mist protection system

**Electric Power Plant (440 Volt AC – 60 Hz)**

- Four main generators, each of 1580 ekW, 900 rpm, cosφ 0,9
- Power Management System (PMS), HIL tested
- Harbour generator, 340 ekW
- Emergency generator, 160 ekW

**Electric Equipment**

- ULSTEIN Main Switchboard 440 V, 220 V
- ULSTEIN Emergency Switchboard
- ULSTEIN consoles for ECR and bridge
- ULSTEIN IAS™ (Integrated Alarm and monitoring System)