



# ULSTEIN®

T U R N I N G   V I S I O N S   I N T O   R E A L I T Y



## 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/manoeuvring 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.



BOURBON

*Shipbuilding by Ulstein Verft AS: Ulstein builds sophisticated vessels with a strong focus on innovative technological solutions and methods*



## MAIN DIMENSIONS

Length over all	approx. 88,8	m
Length between p.p.	82,0	m
Breadth moulded	19,0	m
Depth to main deck	8,0	m
Draught max	6,6	m

## CAPACITIES

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

## CLASSIFICATION / FLAG

DnV ✱1A1, SF, E0, DynPos AUTR, CLEAN DESIGN, COMF-V(3), LFL\*, ICE C, DK(+), HL(+), NAUT-OSV (LOC).  
Standby Vessel 250 persons acc. to NMD regulation.  
Flag: NOR.  
NLS Certificate

## PERFORMANCE

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

## ACCOMMODATION

Hotel compliment of high standards and with capacity for 23 crew and 250 rescued persons.

- Two one-bed state cabins with day-room and bedroom
- Five one-bed cabins
- Six two-bed cabins
- One four-bed cabin
- Reception, rescue area, hospital, and morgue on main deck
- Galley and mess on A-deck
- Day room and Smoker's day room on B-deck
- Dry provisions, cooler, and freezer rooms adjacent to galley
- Separate engine control room on main deck

## TECHNICAL DATA

### Deck Cranes

- One telescopic boom crane, 2 t - 17 m

### Dry bulk plant

- Six tanks, each of 65 m<sup>3</sup>
- Duplex BHS compressors, 2 x 29 m<sup>3</sup>/min, 6 bar
- Two dust cyclones with dust collectors
- Two segregated loading/discharge systems

### Liquid Cargo Discharge Systems

- Two fresh water pump, 250 m<sup>3</sup>/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
- Retractable azimuth thruster, 850 kW, cpp, frequency controlled

### Roll Damping System

- Two roll reduction tanks

### Manoeuvring/Positioning

- Joystick
- Dynamic Positioning System dual redundant (IMO Class II) with:  
Position reference systems:
  - DPS 700, Laser, Radius,
  - DP system is "hardware in the loop" (HIL) tested

### Navigation / Communication

- S-band ARPA radar and X-band ARPA radar
- Digital chart system ECDIS (duplo)
- Conning station, VDR, AIS
- Radio installation according to GMDSS – area A3
- SEV-SAT

### 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 bkW 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)

# ULSTEIN VERFT AS