

ULSTEIN



ULSTEIN DESIGN AS

Ulstein Design AS is one of the world's leading designers of advanced offshore vessels; primarily anchor-handling tug supply vessels, platform supply vessels and more specialised and multifunctional vessels. Ulstein Design will act as a connection point between shipowner, yard and equipment suppliers, developing solutions and adapting vessel designs to the yard's production organization. An Ulstein Design delivery can include basic design, detailed design and class drawings, equipment packages, project management teams (yard supervision) and commisioning based on the customer's need for support.



BOURBON OFFSHORE NORWAY AS

Bourbon Offshore Norway AS is a fully integrated offshore supply shipowning company with some 500 employees, most of them employed onboard vessels in the North Sea, West Africa, Brazil and Mexico. The company is a member of the Bourbon group, a leading player within offshore shipping providing shipborne supplies to oil and oil-related companies all over the world.



www.bourbon-offshore.no www.ulsteingroup.com



ULSTEIN P105

M/V "BOURBON RUBY" M/V "BOURBON SAPPHIRE" M/V "BOURBON DIAMOND"

BOURBON



P105

Large Platform Supply Vessels Designed by Ulstein Design AS Built by Zhejiang Shipbuilding Co., China Built for Bourbon Offshore Norway AS Hull no. ZJB05-146/147/148 Delivered 2007-2008

- **Cargo deck area 990 m**²
- **Deadweight 4850 tonnes**
- **Oil recovery, Fire Fighter I**
- **Prepared for helideck and offshore crane**

"BOURBON RUBY"/"SAPPHIRE"/"DIAMOND" are large

Platform Supply Vessels designed by Ulstein Design. The optimised hull form combined with diesel-electric propulsion systems ensure great performances with regards to fuel consumption, sea-keeping, station-keeping, speed and cargo capacity.

The vessels are equipped, built and certified according to IMO Class II for Dynamic Positioning.

ULSTEIN P105 is designed with focus on environmental impact and built according to Det Norske Veritas CLEAN class. The vessels are prepared for catalytic reactors to minimize NO_v emissions.

MAIN DIMENSIONS

Length over all	91.1 m
Length between p.p.	80.3 m
Breadth moulded	19.0 m
Depth to main deck	8.0 m
Draught max.	6.5 m
Design draught	6.0 m

TANK CAPACITIES

Fuel oil	1170	m³
Base oil	250	m ³
Fresh water	980	m ³
Ballast water	1360	m ³
Drill water	950	m ³
Liquid mud (600 m ³ comb. with brine)	1170	m ³
Brine (combined with mud)	600	m ³
Dry bulk (6 x 50 m ³)	300	m ³
Chemicals (LFL*)	380	m ³
Oil recovery	1080	m³

VESSEL CAPACITIES/PERFORMANCE

Deadweight	4700	tonnes
Cargo deck load (IMO A.469)	2850	tonnes
Cargo deck load (IMO A.534)	2650	tonnes
Cargo deck area	990	m ²
Cargo deck strength	10	t/m ²
Gross tonnage	4300	GRT
Net tonnage	1300	NRT
Trial speed Accommodation		knots persons
Station keeping	99, 99, 99	(ERN)

CLASSIFICATION/FLAG

DNV∞1A1, SF, E0, DYNPOS-AUTR, OILREC, Fire Fighter I, CLEAN, COMF-V(3), LFL*, DK(+), HL(+), NAUT-OSV (SOC)

Flag: NOR

"BOURBON RUBY"/"SAPPHIRE"/"DIAMOND" are designed

with a hotel complement with permanent capacity for 50 persons. TV and sound system in all cabins and day rooms. Conference room with overhead and internet connection facilities.

- Eight officer cabins
- One client cabin
- Five single cabins
- Five two berth cabins
- One four berth cabin
- Two four berth cabins with two bedrooms
- One six berth cabin
- Three six berth cabins with three bedrooms
- Hospital
- Galley, messroom (24 persons) with servery, two day-rooms
- Dry provision, cooler, and freezer room
- Conference room, office and client office
- Deck pantry, wardrobe, laundry, gymnasium
- Engine control room, instrument rooms

Deck cranes for cargo

- One knuckle boom crane SB, SWL 10 t at 10 m
- One knuckle boom crane PS, SWL 3 t at 15 m

Dry bulk system

- Six tanks for dry bulk
- One duplex BHS compressor unit
- Two BHS dust cyclones for ventilation lines
- Two BHS dust collectors for ventilation lines

Loading/discharging pumps

- Two fresh water cargo pumps, 250 m³/h 9 bar
- Two brine (ORO) pumps, 100 m³/h 24 bar
- One base oil pump, 150 m³/h 9 bar
- Two ballast/drill water pumps, 250 m³/h 9 bar
- Two fuel oil cargo pumps, 250 m³/h 9 bar
- Four chemical pumps, 100 m³/h 9 bar
- Two mud pumps (ORO), 100 m³/h 9 bar
- Cargo systems are remote controlled and monitored from IAS

Loading/discharging systems on deck

- Loading/discharging connections on both sides amidships and one side aft
- Chemical system has loading/discharging connection amidships and aft, starboard side

Loading/discharging systems in pump room

• Discharge pipes for cargo systems to be used as filling lines with bypass line at pumps. Non return valves installed at pressure side of all cargo pumps.

Inert gas system

• Inert gas system for purging and padding of chemical product pipes and tanks with cofferdams

Side thrusters

- Two tunnel thrusters forward, 880 kW, controllable pitch
- One swing-up compass thruster forward, 880 kW, contr. pitch

Roll damping system

• Two roll reduction tanks connected to the water ballast system

Manoeuvering and positioning

• Dynamic positioning system - DNV AUTR, IMO Class II



St

- Two operator stations
- One redundant controller
- One DPS700 DGPS position reference system
- One laser reference system

Navigation and communication

- S-band ARPA radar and X-band ARPA radar
- Digital chart system ECDIS (duplex)
- One GPS for navigation
- Conning station, VDR, AIS
- Radio installation according to GMDSS A3, SatcomC, Fleet-77
- V-SAT communication with interface to **ULSTEIN COM**®

Winches

- Two hydraulic tugger winches, approx. 15 t pull
- One double hydraulic combined windlass/mooring winch

Lifesaving and rescue equipment

- Six life rafts, each 25 persons
- One MOB boat in single point davit

Machinery and propulsion system

Diesel-electric power and propulsion plant, 690V-60Hz:

- Four main generator sets, each 1825 ekW at 1800 rpm
- One harbour generator set, 315 ekW, 1800 rpm
- One emergency generator set, 250 ekW, 1800 rpm
- Two main azimuth thrusters with 360° rotation angle and controllable pitch, each approx. 2500 kW at 800 rpm
- Two electric propulsion motors with frequency converters, each approx. 2500 kW at 1200 rpm

Integrated automation system (IAS)

Monitoring and control interface to following systems:

- Propulsion, main engines, thrusters
- Cargo system
- Tank sounding
- Power management system
- Loading computer
- E0 alarm system with deadman and watch call
- GPS, VDR

Fire fighting systems

- Fi-fi system according to class requirements for Fire Fighter I
- Foam system for chemical cargo system
- Fire fighting system of water mist type for engine room

Video and monitoring system

- CCTV system
- Four video cameras in engine room area, one in ECR

Electric equipment

- Main switchboard divided in 440 V and 220 V system, 60 Hz
- Emergency switchboard
- ULSTEIN COM® common distribution of automatic telephone, data network and satellite TV antenna signal to all offices and cabins
- ULSTEIN NAV

Special vessel features

- Prepared for helideck
- Prepared for offshore crane
- Oil recovery