

Efficient and flexible solution  
for the most demanding clients



## Bourbon PX 105 MACS®

Series of Large Platform Supply Vessels

Bourbon Front - Bourbon Clear - Bourbon Calm - Bourbon Rainbow



**BOURBON**

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MAIN PARTICULARS	(US)	(Metric)
Deadweight [st/mt]	4,685	4,250
Length overall [ft/m]	291.3	88.8
Breadth moulded [ft/m]	62.3	19
Depth [ft/m]	26.2	8
Max draft [ft/m]	21.7	6.6
Gross tonnage [st/mt]	4,346	3,943
Net tonnage [st/mt]	1,306	1,185

## MACHINERY / PERFORMANCE

### PROPULSION - MACHINERY

Main DG engines x 4		1,700 kw
Main propellers x 2 azimuth		2,500 kw
Tunnel bow thrusters x 2		1,200 kw
Retract. bow thruster x 1 azimuth		850 kw
Aux. generator x 1		425 kw
Emerg. generator x 1		160 kw

### SPEED / CONSUMPTION

At 15.5 knots [USG/h-t/day]	355.9	27.8
At 12.2 knots [USG/h-t/day]	184.4	14.4
At 11.5 knots [USG/h-t/day]	107.5	8.4
Port [USG/h-t/day]	44.8	3.5

## CAPACITIES

Free cargo deck area [sq.ft/m <sup>2</sup> ]	9,994	928
Deck load [st/mt]	3,108	2,820
ORO [USG/m <sup>3</sup> ]	422,192	1,598
Fresh water [USG/m <sup>3</sup> ]	143,725	544
Ballast/Drill water [USG/m <sup>3</sup> ]	1,186,522	4,491
MACS® tanks [USG/m <sup>3</sup> ]	244,385	925
Methanol (LFL) [USG/m <sup>3</sup> ]	118,890	450

## DELIVERY RATES

2 fresh water pumps	(US)	1,100 USG/min at 130 psi
	(Metric)	250 m <sup>3</sup> /h at 9 bar
2 ballast pumps	(US)	1,100 USG/min at 130 psi
	(Metric)	250 m <sup>3</sup> /h at 9 bar
8 MACS® cargo pumps	(US)	132 and 330 USG/min at 260 psi + 440 USG/min at 115 psi
	(Metric)	30 and 75 m <sup>3</sup> /h at 18 bar + 100 m <sup>3</sup> /h at 8 bar
6 methanol (LFL) pumps	(US)	330 USG/min at 130 psi
	(Metric)	75 m <sup>3</sup> /h at 9 bar
6 product pumps	(US)	330 USG/min at 130 psi
	(Metric)	75 m <sup>3</sup> /h at 9 bar
Product tanks		2 agitators for each aft tanks
MACS® tanks system		1 agitator for each tank

## Norwegian flag

Classified DNV+ IA1, SF, EO, DynPos-Autr,  
Clean Design, Comf-v(3), LFL, DK(+), HL(+), Ice C, BIS,  
OilRec, Naut-OSV (A), FiFi 1

## ACCOMMODATIONS

	Total = 25 persons
Single cabins (Officers)	2
Single cabins	13
2 man cabins x 5	10
Mess room (1), day rooms (2), galley (1), dry provisions (1), cooler & freezer room (1), stores (1), hospital (1), gymnasium (1), separate engine control / instrument rooms on main deck, Full air-conditioned	

## EQUIPEMENT AND ELECTRONICS

### DECK EQUIPMENT

Tuggers [lt/mt] x 2	14.8	15
One double hydraulic combined windlass / mooring winch		
Deck cargo lashing winches x 12	9.8	10
Three passive roll reduction tanks		
Telescopic boom crane [lt/mt] x 1	2	2
at [ft/m]	55.8	17

### SAFETY EQUIPEMENT

<b>Fire-fighting class 1</b> with foam and waterspray		
Pump [USG/min-m <sup>3</sup> /h] x 1	14,971	3,400
Monitors [USG/min-m <sup>3</sup> /h] x 2	5,284	1,200
Alarm, monitoring and control system for periodically unattended machinery space.		
<b>Life saving arrangement:</b> life jackets, life buoys, immersion suits		
1 fast rescue boat (for 10 persons) with davit		
Prepared for 250 survivors upgrade		

### ELECTRONICS

**Navigation:** 2 radars with ARPA, 2 radars transponders, 2 GPS, 3 gyrocompasses, 1 magnetic compass, 1 echo sounder, 1 speed log, 1 autopilot, Navtex, VDR, AIS, SSAS, 4 search lights, 3 night search systems

**Communication:** 1 radio system compliant with GMDSS A3 rules MF/HF radio, DCS receiver, VHF/UHF/portable, Satcom C x 2, Fleet 77, SevSat, Intercom system

Loading & stability software: Autoload

### DYNAMIC POSITIONNING SYSTEM

ERN N° 99.99.99.92

**DP 2:** 2 stern azimuth thrusters, 1 bow azimuth thruster, 2 bow fixed thrusters

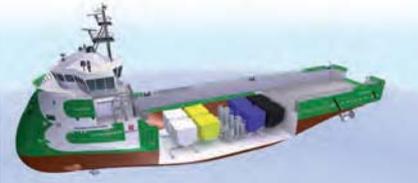
**DP type:** Kongsberg SDP 21, 2 operation consoles, 4 references systems, 2 VRU/VMU

*All particulars believed to be correct but not guaranteed*

# RELIABLE, EFFICIENT AND FLEXIBLE

A series of 4 modern diesel-electric and DP2 platform supply vessels meeting clients' needs

Performing in rough seas and Clean Design, **Bourbon Front (2011)**, **Bourbon Clear (2012)**, **Bourbon Calm (2012)** and **Bourbon Rainbow (2013)** offer clients an ultimate solution for optimized and flexible cargo transportation.



## Flexible under-deck cargo solutions: MACS®

Equipped with the Multi-Application Cargo Solution (MACS®), Bourbon PX105 MACS® series offers flexible and safe under-deck cargo solutions:

- maximizing the capacity on any product wet or dry
- carrying a wide range of products from drill cuttings, generic liquids and muds to hazardous and special products;
- providing tanks adaptable to the whole life cycle of an oil field from exploration drilling phases to production phases.



## Exceptional maneuverability and station keeping

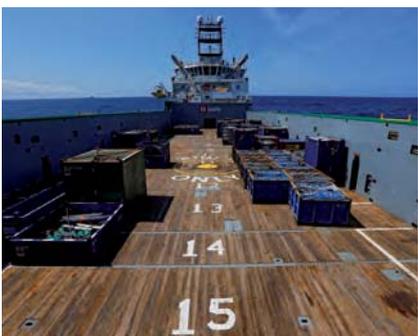
- Dynamic positioning system class 2 (DP2)** for an exceptional station keeping ability and precise positioning even in extremely bad weather conditions;
- Stem azimuth thrusters propulsion** together with bow thrusters redundancy (2 tunnel bow, 1 bow retractable) and DP2 system for precise positioning and high maneuverability and reliability;
- An additional roll damping tank** situated on the main deck for greater roll reduction, increased personnel safety and facilitated crane transfer operations in a wider range of sea conditions;
- The Schottel Twin** pulling and pushing propellers for greater thrust efficiency and reliability by reducing load on propeller and number of rotating parts.



## Significant fuel savings: diesel-electric propulsion and X-bow® shape

Highly competitive fuel savings through:

- adapting power needs to the type of operation with diesel-electric propulsion, allowing significant fuel consumption reduction compared to traditional vessels;
- the X-bow® shape with outstanding stability performances in rough seas allowing therefore speed regularity and reduced fuel consumption.



## Efficient safety stand-by solution: stern fire-fighting and oil recovery

- Classed OIL REC with a storage capacity of more than 2,000 m3 of recovered oil with the possibility to install booms and skimmers on clients' request;
- Fire-fighting monitors located on the stern for a closer approach of the fire and better control during emergency operations.

## Maximized deck cargo and under-deck drill cuttings

Designed to provide clients with an optimized cargo capacities:

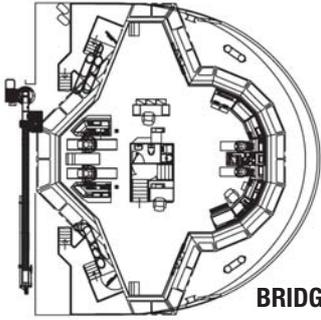
- 928 m<sup>2</sup> deck surface with a deck cargo load up to 2,820 tons;
- an under-deck solution for drill cuttings and hazardous products tanks, consequently freeing space on the main deck and avoiding spillage risks.



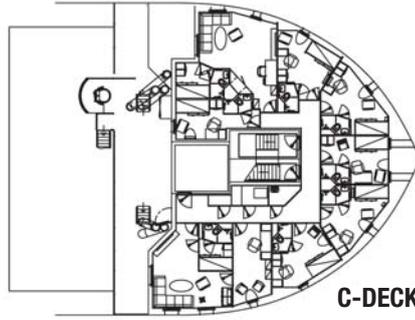
## Minimized impact on the environment: Clean Design

Classified Clean Design by DNV to comply with client's environmental expectations:

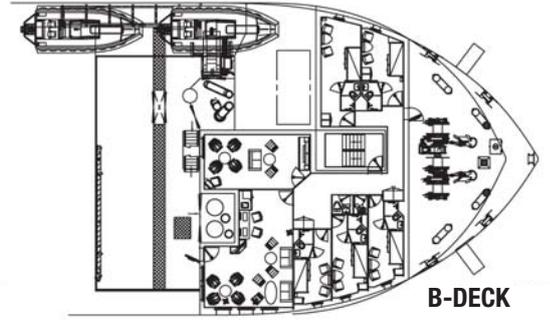
- adapted processes for fuel oil, ballast water and sewage handling;
- hull isolated fuel and products tanks, avoiding grounding damage;
- combustion machinery emissions rules;
- reduction of emissions in compliance with applicable norms (NOx and SOx).



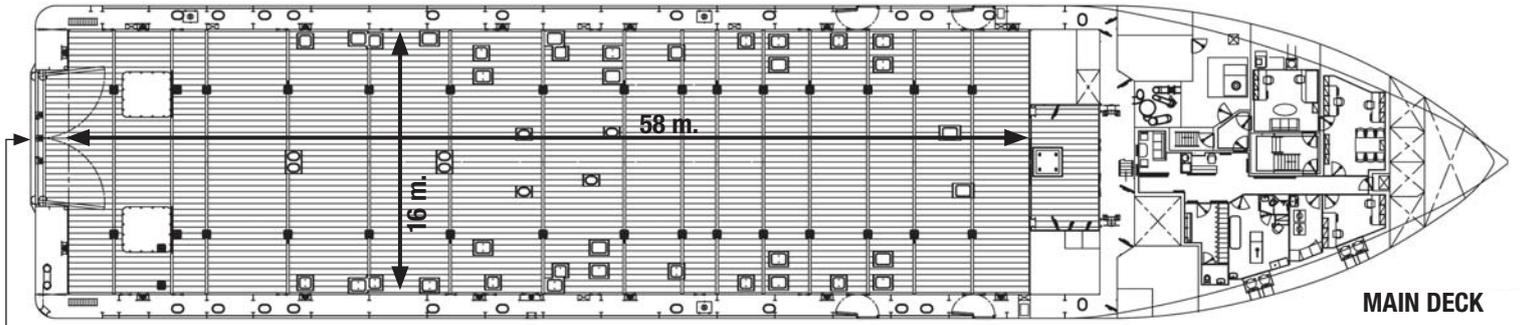
**BRIDGE DECK**



**C-DECK**

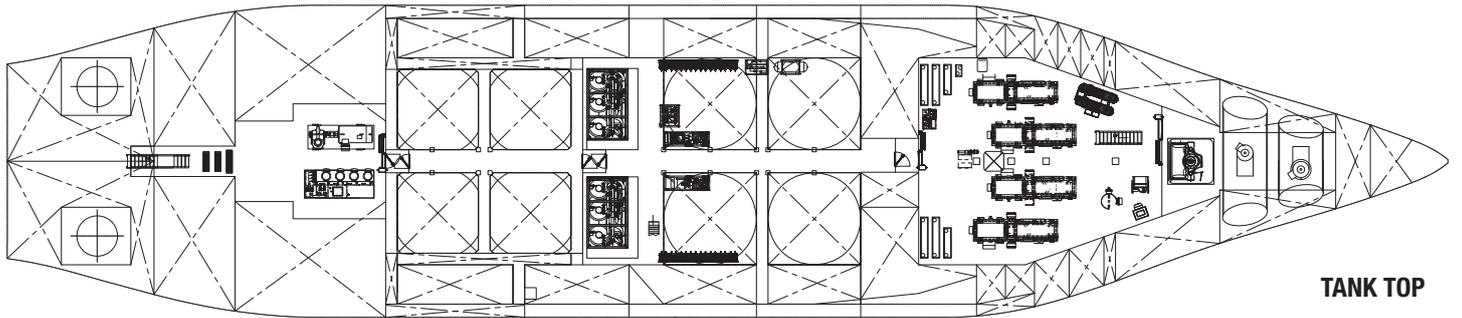


**B-DECK**



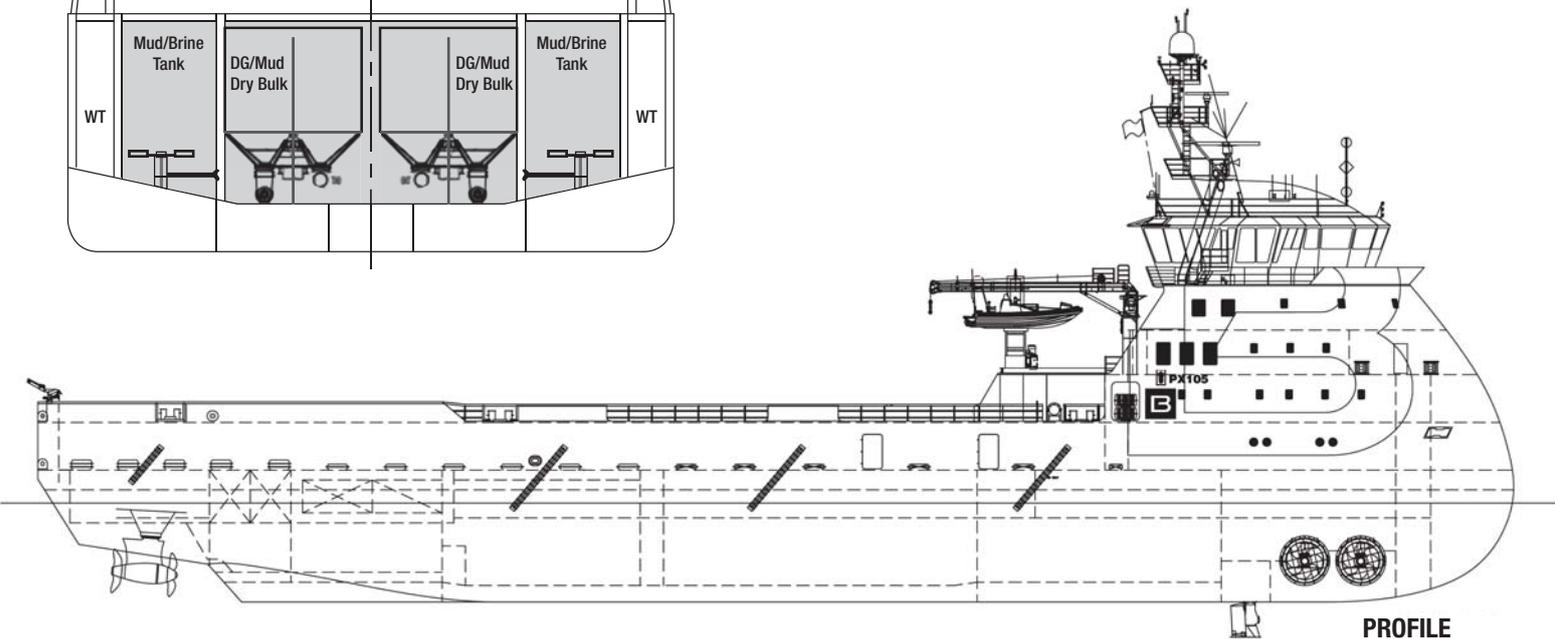
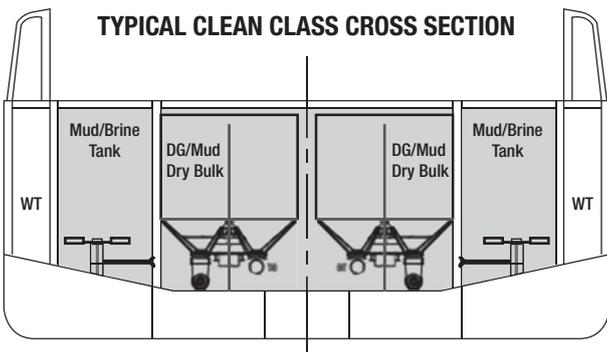
**MAIN DECK**

RORO stern door



**TANK TOP**

**TYPICAL CLEAN CLASS CROSS SECTION**



**PROFILE**



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