

MAGAZINE FOR THE SHIPBUILDING, SHIP REPAIR AND MARINE SUPPLY INDUSTRY

SBI | VOLUME 2 | NO. 4

# Ship Building industry

## **Eurodam**

THE NEW ART OF CRUISING

## **SMM 2008**

BIGGER, NEWER, BETTER

## **Maersk PS Class**

WORLD'S LARGEST CONTAINERSHIP

## **HOS Achiever**

RELIABLE INNOVATION



# *Caballo Criollo*

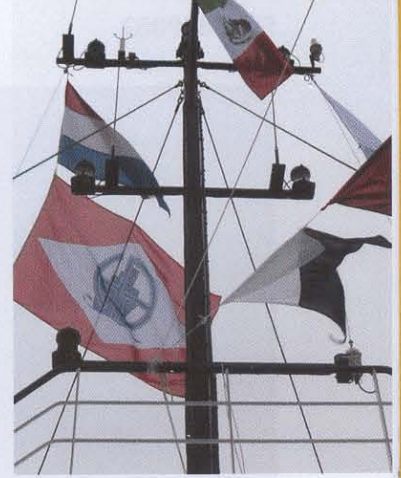
Ultimate Offshore Workhorse



**CABALLO CRIOLLO**

BUILDERS  
OWNERS

De Hoop Lobith  
Oceanografia S.A. de C.V.



June 26, 2006, Mexican Oceanografía S.A. de CV awarded shipyard De Hoop Lobith with the order for the construction of a 62m offshore support vessel. Twelve months later, 8 June 2007, saw the keel laying ceremony on the slipway.

**C**aballo Criollo (literally translated Creole Stallion) was built for Oceanografía S.A. de C.V. a repeat client of shipyard De Hoop Lobith. The offshore support vessel was launched on 19 November 2007 at the premises of shipyard De Hoop Lobith where assembly and outfitting took place before she was transported to Rotterdam for technical sea trials. On 29 January 2008 the 1600 GT vessel successfully passed all technical sea trials and was handed over to her owners. A week after the handing-over ceremony the offshore vessel departed for her maiden voyage to Mexico where she arrived one month later. During the Atlantic shakedown crossing the vessel successfully

coped with heavy seas featuring significant wave heights of more than 10 m.

### Superstructure

The accommodation section is situated in the superstructure forward. The superstructure has been designed for 46 persons accommodated in two single rooms, six twin-berth cabins and eight four-person cabins. Night accommodation is situated on B-Deck, the living quarters on A-Deck. Accommodation spaces include laundry, a galley, dry, freeze and cold stores, messroom, dayroom, change room, and two offices. Technical spaces on board include a thruster room,





## Full Order Book

Shipyards De Hoop Lobith meanwhile also completed the offshore support vessel Caballo Lusitano for the same owner Oceanografia. The design of this vessel is based on the same hull form as the Caballo Criollo, however, features mud, brine and bulk tanks. The launch of the vessel took place on May 31 this year and is the first vessel launched and completed since the take over of Volharding Shipyards in Foxhol in April 2007 where she was built. The Caballo Lusitano left the Eemshaven on July 9 for her maiden trip to Mexico.

The take over of Volharding Shipyards – now renamed to De Hoop Foxhol – is recognised as a welcome addition and enables De Hoop to boost capacity for shipbuilding in the Netherlands. The Foxhol yard is in total approximately 2.5 hectares, has its own steel-cutting facilities, three section-build halls (hall 1, 2 and 3) and a shipbuilding hall (hall 4) with two cranes of 2 x 25 tons and a door of max. 16 x 16 m. In addition, there is a finishing shop, a warehouse and some small shops for various purposes. With this, De Hoop Foxhol is a flexible shipyard where various types of seagoing and inland vessels can be built. In total De Hoop has contracted seven additional vessels: six offshore support vessels and a multipurpose diving support vessel, Don Amado. The vessels are due for delivery in 2009, 2010 and 2011. The yard is currently working on twelve shipbuilding contracts and two large engineering contracts in total.



engine room, switchboard room, laundry, store, bow thrusters room, AC room, and emergency generator room.

## DP2 System

The wheelhouse is situated on top of the superstructure and is fitted with a comprehensive navigation and communications package of Alpatron Marine Rotterdam. In addition Alpatron also supplied the following DP navigation components: two Alpatron Alphawind wind measurement systems, one Alpatron maintenance free gyro compass, two Novatel DGPS/Glonass receivers, and one Navis DP2 system. The NavDP 4000 Series is a new generation of Navis Dynamic Positioning Systems combining the best qualities of the previous system, the Navis IVCS Series, with the latest achievements in technology and recent design ideas gained from experienced users' feedback, recent Class rules changes and market trends.

## Diesel-Electric Propulsion

The Caballo Criollo features a diesel-electric propulsion plant with two azimuthing thrusters aft and two transverse tunnel thrusters forward. All the thrusters were supplied by Veth Motoren Papendrecht. The diesel-electric main propulsion plant consists of three Caterpillar C32 marine high speed diesel engines each driving a 1138kVA Caterpillar C32 main





generator, and two 900kW induction motors. The two 900 kW azimuthing Veth-Z-Drive's rudder propellers type VZ-1250 are fitted with nozzles and are used for propulsion, position keeping, and free sailing. The thrusters are remotely controlled from the bridge consoles situated forward and aft in the wheelhouse, but can also be controlled locally from the engine room in case of emergency. Veth Motoren also supplied the Veth-Tunnel Thrusters, type VT-400 with an output of 350 kW at 1500 rpm. The transverse thrusters feature a controllable pitch propeller with a diameter of 1200 mm and are remotely controlled from the navigation bridge with a joystick. All thrusters are electric-driven and linked to the vessel's DP II installation. Emergency power is derived from a 268kVA Caterpillar C9 harbour/emergency generator set.

### Spacious Cargo Deck

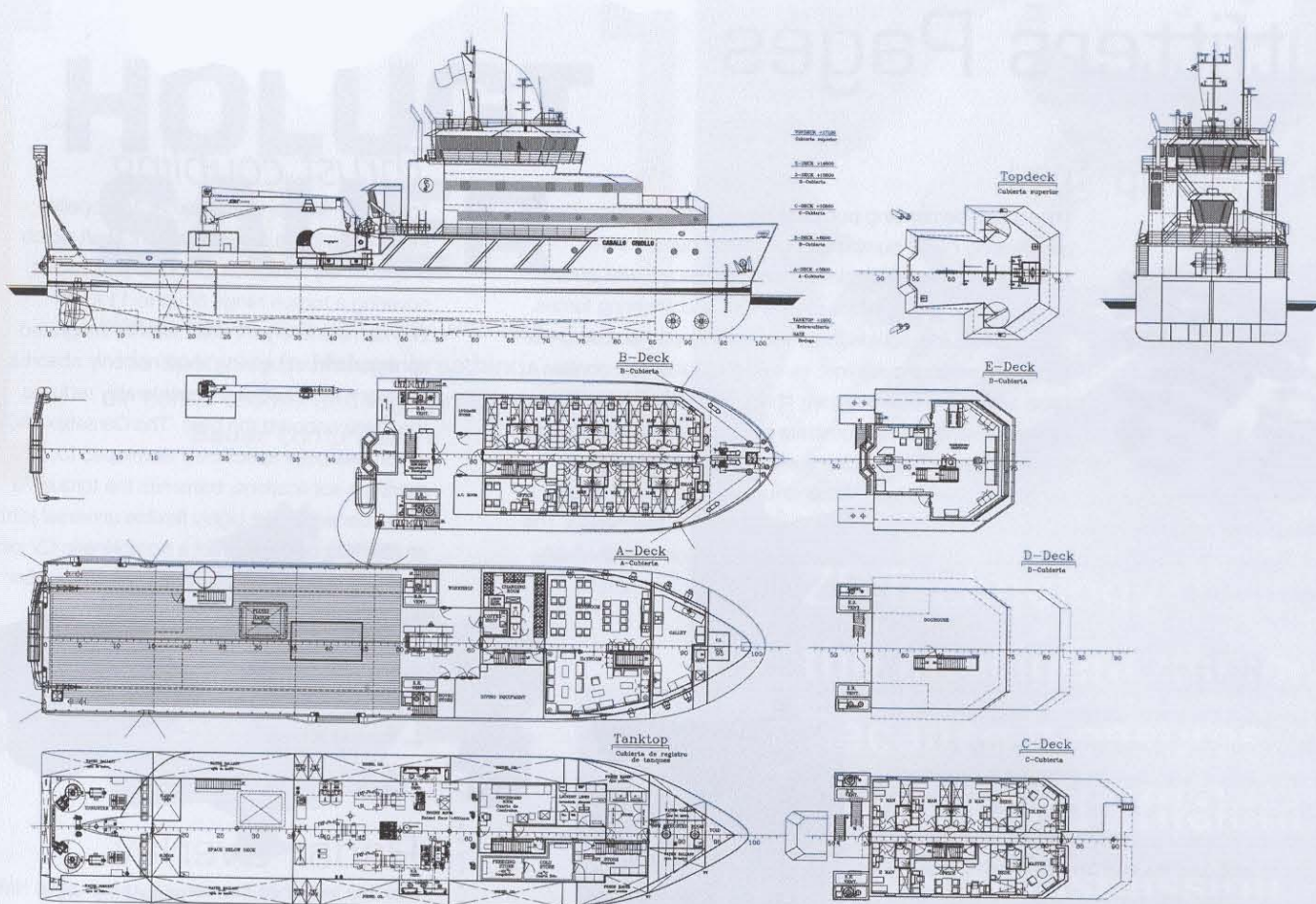
Aft of the superstructure is a spacious cargo deck measuring a free surface of approximately 360 m<sup>2</sup>. The cargo deck carries a powerful winch with a pulling force of 60 tons and carrying 700 m of 1.25 inch diameter steel cable. Protection of the cargo deck surface is with a top layer of 3 inch thick fir-wood. The vessel's port side of the cargo deck accommodates provisions for a deck crane with a capacity of 60 tons at an outreach of 6 m which will be installed in Mexico. The vessel's stern carries a 25ton A-frame with a hoist length of 50 m served by an electric winch. Below the main deck are the vessel's store spaces that are accessible via a cargo hatch with a 2.5 x 2.5m clear hatch opening.

### What's in a Name



The origins of the Caballo Criollo – the creole stallion – can be traced back to the discovery of the New World in the days of Christopher Columbus. They are direct descendant of the horses – mainly Barb and Andalusian – the Spanish conquistadores brought to South America during the 16th century. The ones that escaped and returned to the wild had adapted to life on the open plains. Four

centuries of natural selection led to a breed in its own right, adapting characteristics such as resilience, resistant to diseases and the ability to withstand drought, making the Criollo the perfect means of transportation and the ideal workhorse for the indigenous South American population. At the end of the 19th century the breed was facing degeneration by the introduction of European and North American stallions, but by stringent selection the breed has been reconstructed. Although the Criollo breed can be found throughout South America, Argentina claims the Criollo breed closest to the original standard.



## Facts & Figures Caballo Criollo

### Principal particulars

Length o.a.	61.87 m
Length b.p.	57.10 m
Length waterline	59.65 m
Beam mld.	12.80 m
Depth mld.	5.50 m
Draught design	4.50 m
Summer draught	4.65 m
Deadweight	1500 t

### Working deck

Maximum permissible deck load	5.00 t/m <sup>2</sup>
Working deck area	360 m <sup>2</sup>

### Installed power

Propulsion power	2 x 900 kW azimuthing thrusters
Transverse thrusters	2 x 350 kW
Speed	13 knots

### Tank capacities

Potable water	162 m <sup>3</sup>
Diesel oil	663 m <sup>3</sup>
Ballast water	487 m <sup>3</sup>
Lube oil tanks	5 m <sup>3</sup>

## Main Suppliers & Subcontractors

Alfa Laval Benelux Separators | Alphon Marine Communications & dynamic position system | Bovi Upholstery | CENTA Nederland Elastic couplings | Deno Compressors | Droste Elektro Electrical installation, e-motors, drives, propulsion transformers | Econosto Valves | Electrolux Laundry equipment | Emcé Winches | Facet Industrial Bilge water separator | GTK Galley equipment | Heinen & Hopman Chiller | Kraaijeveld Anchor winch | Kroon Inexa modular bulkheads, Alvedoor doors | MacGregor Lashing equipment | Madisa Main engine | Ned-Deck Marine MOB/rescue boat with davit | NRF Coolers | Pon Power Caterpillar harbour generator set | Qua-Vac Sewage treatment installation | Reikon Azcuc pumps, Ueberall UV sterilizer | Ship's Equipment Centre (SEC) Bollard and chocks | Smits Neuchâtel Subfloors | Theunissen Technical Trading Pesch Seemats search lights | Transport & Offshore Services Compass adjusting | Tyco Integrated Systems Fire extinguishing systems | Uitor Ships Service Fi-Fi monitor | VDI Insulation | Veld Provision cooling | Veth Motoren Tunnel thrusters, Z-Drive rudder propellers | Jac de Vries Hot water boiler | Wetcab Wet units | Winel WET musketeerdeuren, tank vent check valves | H.K. van Wingerden en Zonen Wigo® windows & portholes | Wortelboer Anchors & anchor chains

i. [www.dehoop.net](http://www.dehoop.net)