



## **CMA CGM Christophe Colomb,**

CMA CGM Christophe Colomb is one of the largest container ships in the world. It is also the largest container ship ever to cruise under French flag. The ship was delivered to CMA CGM Group on 10 November 2009 in South Korea. It was built by Daewoo Shipbuilding & Marine Engineering (DSME) at Geoje Shipyard in South Korea. The ship was christened by Christine Lagarde, Minister of Economic Affairs, Industry and Employment in July 2010 at Terminal de France, Le Havre.

Christophe Colomb is the first of the eight sister ships ordered by CMA CGM. The subsequent vessels in the series will be named after great explorers Marco Polo, Vasco de Gama, Amerigo Vespucci, Corte Real, La Perouse, Magellan and Zheng. The second ship, CMA CGM Amerigo Vespucci, was delivered in July 2010. In technical terms, these ships will be very similar to MSC Daniela Class ships.

As decided by the owner, the ship will be deployed on the FAL 5 (French Asia Line), which is operated in partnership with Maersk. On this line, CMA CGM will deploy its one vessel, while nine vessels will be deployed by Maersk. Through this decision, CMA CGM is expecting to optimise its new transport capacity and improve service quality.

### **Christophe Colomb design**

With an overall length of 365.5m and beam of 51.2m, the ship is capable of holding 13,300TEUs of cargo and ten passengers. The designed gross tonnage of the ship is 153,022t, net tonnage is 81,900t and the deadweight has been kept at 157,092t. The length between perpendiculars, and depth of the ship, have been maintained at 349.5m and 29.9m, respectively.

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### **Ship construction**

The ship has been built in compliance with the MARPOL 12A regulations which became effective from August 2010. The ship has been built with a steel double-hull to protect its fuel tanks located underneath the superstructure.

In general, a container ship has its single superstructure established on the deck.

The superstructure of Christophe Colomb is, however, located in the front. This adjustment allows the ship to be better visible from the bridge and utilises maximum space. To further maximise the use of space, the engine room has been built close to the propeller.

**In order to minimise the environmental footprint of its activities, the ship has been fitted with numerous environmental technologies.**

In order to treat bilge, engine and grey water, the ship is equipped with additional tanks. These tanks are linked with connecting pipes to allow the extraction of hydrocarbons by injecting hot water.

The ship is also equipped with a Fast Oil Recovery System which is a new pollution prevention technique developed by JLMD. This system helps in rapid recovery of hydrocarbons without going through the hull.

## **Accommodation**

Christophe Colomb is furnished with four double-bedded and one twin cabin to accommodate its ten passengers. The ship also has a dedicated passenger lounge, library and an outside terrace. There is also a swimming pool and gym to allow passengers to stay fit.

## **Christophe Colomb propulsion**

The ship is installed with WARTSILA 14 RT-flex 96C diesel propelling engine. The electronic injection system of the engine allows the ship to reduce its bunker fuel consumption by 3% and oil consumption by 25%.

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The ship also has two 4,125kVA- 4,755HP and two 4,800kVA-5,435HP diesel generators.

Christophe Colomb has got the distinction of being the first vessel of the CMA CGM Group to be equipped with a Pre-Swirl Stator and twisted leading edge rudder.

While this innovative rudder edge reduces energy consumption and CO2 emissions by optimising the water flow, the Pre-Swirl Stator helps in maximising propulsion efficiency by altering inflow angles to the propeller.

Working together, both these devices are capable of cutting down fuel consumption and greenhouse gas emissions by 2% to 4% by optimising the overall hydrodynamics of the ship.

The ship can cruise at a top speed of 24.3kt but if required it can be operated at a super eco-speed of 14 to 15kt.

<http://www.ship-technology.com/projects/cmactgmchristophecolo/>