

Press release  
For immediate release  
April 2011



## CHARACTERISTICS

Exterior Design & Naval architecture by SDI

Lenght overall :	22 M
Overall beam :	7 M
Draft :	1,2 M
Speed :	10 noeuds
Passengers :	130

## WORLD PREMIERE : ELECTRIC PASSENGER SHIP BASED ON SUPERCAPACITOR TECHNOLOGY

The new electric passenger vessels ordered by Lorient City Council (Brittany, France) are definitely a technological breakthrough for the design and construction of "zero emission" ships.

These 22 meter vessels are aimed at passenger transportation in the intercostals waterways around Lorient, from the city centre to the entrance of the roadstead, two and a half nautical miles away. These ships represent a significant improvement compared to existing fully electric ships operated on short and distances in harbour areas or inland waterways.

Based on supercapacitor technology developed and patented by STX Europe, the naval architecture and ship design of these new vessels have been developed by the design firm Stirling Design International (SDI) based in Nantes. The Shipyard based in Lanester benefited from the significant expertise of passenger ship design gathered by SDI during the last decades. This partnership allowed the STX shipyard to be selected after a long competitive process, part of this government procurement program. This unique vessel will be delivered to "Cap Lorient" in June 2012.

Energy storage based on supercapacitors led to re design entirely the ship architecture, from watertight compartment definition, lightweight distribution, electric thruster selection, as well as ship hull form. This 22.1 meter long catamaran by 7.2 meter wide for a design draft of 1.5 meter will be fitted with two azimuthal thrusters and will sail at 10 knots. The launch will be able to accommodate 113 passengers including three passengers with disabilities, and 10 bikes.

This new generation of vessels will allow a significant reduction in ship emissions with zero direct emission in electric mode, with no diesel engine in operation. Sound level and vibration in the passenger lounge and in the environment will be significantly reduced.

A special care has been brought to detail design, allowing reduction of thermic loads on the glassing of the passenger lounge and wheelhouse. Use of natural ventilation has been used though out the ship with numerous hatches on the roof. Photovoltaic panels contribute as well to improving the electrical autonomy of the vessel during navigation.



## SDI : NEWS AND INNOVATIONS

During the first quarter of 2011, two other significant events contributed to SDI involvement in significant shipbuilding programs :

- The launch of a large R&D program NCT2 ( (New construction technology), aimed at designing new type of superstructure for cruise ships with STX Europe (Saint Nazaire, France), the School of Architecture (Nantes, France), and the shipyard Multiplast specialized in composite racing yacht (Vannes, France).
- The christening ceremony of the 142 meter Austral on April 26th 2011 in Marseille for Ponant Cruises (part of CMA-CGM Group, sistership of Le Boreal, both vessels having an exterior styling by SDI. On April 27, l'Austral will start her christening cruise to Barcelona, Lisboa, via Baleares Islands, Malaga and Cadiz.



L'Austral and LE BOREAL - April 25th 2011  
[www.ponant.com](http://www.ponant.com)



**PRESS CONTACT**  
Thibaut Tincelin  
Manager  
**STIRLING DESIGN INTERNATIONAL**

Phone : +33 (0) 2 40 95 79 45  
Fax : +33 (0) 2 40 95 79 46  
E-mail adress : [tincelin@stirlingdesign.fr](mailto:tincelin@stirlingdesign.fr)  
Web Site : [www.stirlingdesign.fr](http://www.stirlingdesign.fr)