

LUCIANO FEDERICO L

77 metre B60 Ultra High Speed Catamaran
...the world's fastest ferry



FOR SALE

www.LucianoFedericoL.com

LUCIANO FEDERICO L

Luciano Federico L is a B60 Class catamaran designed by Advanced Multihull Designs (AMD) and built by Bazan (Izar), Spain's premier shipyard at the time of the vessel's delivery.

Built to Det Norske Veritas Class DNV + 1A1 HSLC R4 Passenger Car Ferry B E0 and delivered in October 1997, **Luciano Federico L** has been a long-standing entry in the Guinness Book of World Records as the "fastest car ferry in the world". **Luciano Federico L** has a maximum speed in excess of 60 knots and it can sustain loaded service speeds of 56 knots.

Notable features of **Luciano Federico L** include:

- The worlds fastest ferry (service speed 56 knots)
- Very shallow draft (only 2.15 metres)
- Interior designed by Arquitecto Julio Cesar Ortega
- First Class saloon with 92 seats
- Economy Class saloon with 358 seats
- Duty free shop
- AAB turbine package completely overhauled by Siemens, Sweden, and they have not be operated since
- Capacity for 450 passengers and 52 cars

DESIGN

For this challenging shipbuilding project, Advanced Multihull Designs and Bazan (Izar) optimized the hull form in model testing conducted at the Huazhong University of Science and Technology in China. In order to achieve the ultra high operating speeds required by Buquebus, the ferry operator, **Luciano Federico L**'s hull was refined to accommodate very large diameter waterjets. To verify the initial model testing performance, a larger model of the final hull form was then built and tested at the El Pardo Towing Tank in Spain. Detailed CAD design of the vessel was then completed.

Luciano Federico L is powered by a pair of ABB Stal GT35 gas turbines, each developing 16.1MW of power at 3,250rpm. The ABB GT35 turbines offer a number of advantages over an aero derivative gas turbine including longer intervals between overhauls. The turbines drive KaMeWa 112 SII steerable waterjets through a flexible coupling and Renk AUS 135 reduction gearbox.

The electrical and control systems are based on elements from ABB's Advant system.

A Maritime Dynamics Inc (Vosper Thornycroft) ride control system consisting of active aft trim tabs was specifically designed for the **Luciano Federico L**.

At the time of delivery **Luciano Federico L** was one of the most expensive fast ferries ever built.



SPECIFICATION

| | |
|----------------------------|---------------------------------------------|
| IMO Number..... | 9154684 |
| Vessel Type..... | B60 Ultra High Speed Catamaran |
| Builders..... | Bazan, Spain |
| Designer..... | Advanced Multihull Designs (AMD), Australia |
| Interior Designer..... | Arquitecto Julio Cesar Ortega |
| Construction Material..... | Aluminium Alloy |
| Classification..... | DNV + 1A1 HSLC R4 Passenger Car Ferry B E0 |
| Flag..... | Uruguay |
| Built..... | 1997 |

DIMENSIONS

| | |
|---------------------------|-------|
| Length Overall (m)..... | 77.32 |
| Waterline Length (m)..... | 69.94 |
| Beam (m)..... | 19.00 |
| Draught – loaded (m)..... | 2.13 |

CAPACITIES

| | |
|--------------------------|------|
| Gross Tonnage..... | 1737 |
| Passengers..... | 446 |
| Crew..... | 16 |
| Deadweight (tonnes)..... | 142 |

PERFORMANCE

| | |
|---------------------------------------|---------------------------------------|
| Maximum Speed (knots)..... | 60 |
| Service Speed (knots)..... | 56 |
| Consumption (kg / nm @ 54 knots)..... | 160 |
| Consumption (kg / nm @ 54 knots)..... | 148 |
| Seakeeping..... | Maritime Dynamics Inc (MDI) Trim Tabs |

PROPULSION

| | |
|-------------------|---------------------------------------------|
| Main Engines..... | 2 x ABB GT 35 Turbines (2 x 16,100 kW each) |
| Gearbox..... | 2 x Renk AUS 135 |
| Waterjet..... | 2 x KaMeWa 112 SII |

POWER SUPPLY

| | |
|-----------------|------------------------|
| Generators..... | 2 x Caterpillar 3604TA |
|-----------------|------------------------|

GENERAL ARRANGEMENT

