

Hamilton Jet Model HM651
Application Review

Australian Built Low-Wash River Ferries for Portugal's River Tejo



The enclosed waterways of the River Tejo in Lisbon, Portugal, are home now to a pair of 37-metre low wash river catamarans, each utilising twin Hamilton Model HM651 waterjets. Built by Image Marine (a subsidiary of Austal Ships) in West Australia, the two ferries will enhance commuter transportation between ports on the North and South margins of the river.

The vessels were launched in January 2002 and owner/operator Transtejo took delivery in April 2002. Low wash was a main requirement of the hull design, as was the need for easy passenger loading and unloading to shorten turnaround times on their busy commuter routes.

Waterjets were the ideal propulsion option for this type of vessel. The twin HM651 units, which utilise Hamilton MECS electronic controls, generate less wake compared to other forms of propulsion and allow for shallow water operation. They also

provide a service speed of 27 knots and excellent manoeuvrability to make docking faster and safer.

The ferries, named *Cesario Verde* and *Pedro Nunes*, carry 292 passengers seated on a single level, with a minimum of three crew required. There are two wide hydraulic loading gangways fore and aft on each side, and passenger amenities include a kiosk for light refreshments and television monitors at the front of the saloon. There are outside viewing decks on the bow and on the upper level behind the bridge and crew mess.



▶ Brief Specifications

TYPE:
Low Wash River Catamaran

SERVICE:
Passenger Ferry

LENGTH:
37.43 metres [LOA]

BEAM:
10.70 metres

DRAUGHT:
1.15 metres

CONSTRUCTION:
Aluminium

CLASSIFICATION:
Germanischer Lloyd

PAYLOAD:
292 passengers + 3 crew

SPEED:
29 knots [maximum]

WATERJETTS:
Twin Hamilton Model HM651

WATERJET CONTROLS:
Hamilton MECS Electronic

ENGINES:
Twin MTU diesel,
Model 16V 2000 M70, each
1050kW (1400hp) @ 2100rpm

GEARBOXES:
Twin Reintjes VVS430/1

DESIGNER:
Austal Ships, Perth, Australia

BUILDER:
Image Marine, Henderson,
West Australia

OWNER/OPERATOR:
Transtejo, Transportes Tejo SA,
Lisbon, Portugal

HamiltonJet DISTRIBUTORS:
Electro Central Vulcanizadora
LDA, Lisbon, Portugal
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