

Ro-Pax Vessels & Ferries



Grontmij | Carl Bro has designed several ferries in different sizes, according to different requirements and for different countries. In all projects there has been a strong focus on the owner's needs regarding the vessels' capabilities, efficiency, maintenance etc.

Marine

The ORØ ferry

In 2003 the ORØ ferry was put into regular service on the 25-30 minute crossing between Orø and Holbæk. The new ferry replaced its 45-year-old predecessor, which was one of the oldest ferries in service in Denmark.

The capacity of the ferry is 98 passengers and 16 cars or a mixed configuration of lorries and cars, and the service speed is 11.5 knots.

Grontmij | Carl Bro has carried out the design of the ferry, has been responsible for the tender documents and contract negotiations, and has supervised the construction during the building period.



Old and new ORØ ferry

Bornholmstrafikken

In 2002/2003 the Danish Parliament made a decision to change the structure of the ferry service to the Danish island of Bornholm. It had previously been served by the Danish state-owned ferry company Bornholmstrafikken.

The following was decided:

- The traffic should be tendered within the EU according to EU rules
- Bornholmstrafikken should be transformed into a shareholding company able to participate in the tendering

The tendering material required the route to be served by two Ro-Pax ferries, one conventional ferry and one high-speed ferry.

Bornholmstrafikken asked Grontmij | Carl Bro to provide assistance during the tender period which involved preparing the tender material and technically evaluating the suitability of existing and future tonnage and harbours.

Of their existing tonnage Bornholmstrafikken was able to reuse one conventional ferry and one high-speed ferry for the new service, given some modifications. But the Owners had to acquire

two Ro-Pax ferries to fulfil the strict requirements.

Grontmij | Carl Bro assisted with the evaluation of the existing tonnage, but it was decided to go for newbuildings as no suitable second-hand vessels could be found.

The Dutch shipyard Merwede was able to deliver two Ro-Pax ferries in due time to fulfil the challenging obligation of the new contract period set to commence in 2005.

The Tender came out successfully as Bornholmstrafikken actually won the contract.



Ro-Pax ferry to Bornholm

Grontmij | Carl Bro Marine provides ship design and ship inspection services, and offers its assistance to ship owners and the shipbuilding and offshore industry worldwide as well as to public institutions and private organizations.

Grontmij | Carl Bro Marine has design experience with almost any type of ship. We cover all aspects of advanced ship design including general ship design, structural design, stability and safety aspects, hull and propulsion optimizations, machinery, vibration and noise analyses etc in accordance with classification rules and IMO requirements.

The employees include naval architects, mechanical and electrical engineers and draughtsmen. Our surveyors are qualified as marine engineers or naval architects and are experts on inspecting ships during construction and in service.

Grontmij | Carl Bro Marine is based in Copenhagen, Denmark and has an affiliated design office in Shanghai, China.