

Brittany Ferries '*Honfleur*' – order confirmed for a new ship



'*Honfleur*' will be built at the Flensburger Schiffbau shipyard in Germany and will be powered by LNG (liquefied natural gas)

'*Honfleur*' promises to be the most environmentally friendly ship regularly operating in UK waters when she takes to the seas in June 2019



Technical specifications:

- Length : 187.4 metres
- Breadth : 31 metres
- Max Draught : 6.6 metres
- Tonnage : 42,400 gross tonnes
- Speed : 22 knots
- Decks : 11
- Passengers : 1,680
- Passenger cabins : 257
- Passenger areas : 5,200 m²

Vehicle capacity : 2,600 lane metres
(130 freight trailers, or 550 cars and 64 freight trailers)

Liquefied natural gas (LNG)

Liquefied natural gas (LNG) is a cleaner burning fuel than diesel (see below for more on the benefits of LNG). But ships that feature LNG-electric propulsion systems are also quieter, more efficient and are less prone to vibration. This means a smoother, more comfortable ride for passengers.

To address the issues of LNG infrastructure, specifically the lack of storage facilities in ports served by ships, Brittany Ferries has partnered with Total for an innovative delivery solution in France.

Honfleur will be the first passenger ship in the world to be equipped with on board cranes that allow 40 feet (ISO standard) LNG containers to be lifted into a fixed position.

The containers will be transported by truck from an LNG terminal to Ouistreham and then driven on board. They will then be hoisted into position alongside a fixed LNG storage tank located at the rear of the superstructure. Upon the next call at port, empty containers will be removed and replenished with full units.

Power delivery will also be very different to other ferries in the fleet. Powered by LNG, *Honfleur's* four main engines will feed electric generators and two electric shaft propulsion motors with two fixed pitch efficient propellers. This is a standard known by the collective name diesel-electric-propulsion - a configuration applied extensively on large cruise vessels for enhanced passenger comfort and optimised fuel consumption at reduced speeds.

The benefits of LNG

Although *Honfleur* is not the first ship to be powered by LNG, she will be the first regularly operating on the Channel. Ferry services powered by LNG already operate in the Baltic Sea and the technology is tried, tested and safe.

As the name implies Liquefied Natural Gas, is a process by which a liquid is created from a naturally occurring gas. This is cooled to temperatures of -162 degrees Celsius, which shrinks it by a factor of 600 in volume, creating a liquid.

This is colourless and odourless, and many thousands of cars and commercial vehicles are currently fuelled by LNG. It's a more efficient combustion process than burning traditional fossil fuels, with around 25% fewer carbon dioxide emissions. More significant benefits come from the fact that emissions are sulphur-free and there is a significant reduction in nitrogen dioxide and PM (particulate matter).

LNG is now becoming increasingly common as a fuel for passenger ships. Ferry lines such as Viking Line and Tallink, as well as cruise lines like Carnival, Aida and MSC, have turned to LNG.

Ships operating on LNG have an excellent safety record and are required to comply with a new set of regulations known as the IGF code. This has been specifically developed for the use of gas as a propellant, with safety elements drawn directly taken from ocean-going LNG carriers. This sector has operated without major incident for the last forty years, with many LNG carriers able to handle up to 120 000 m³ of LNG. *Honfleur*, by comparison, will carry up to a maximum of approximately 350 m³.

LNG is clearly a fuel for the future. It is favoured by regulators and everyone who is concerned about protecting our planet. The European Commission's Energy Roadmap 2050 for example, points to natural gas as key to aspirations for clean energy targets in 2050.