

Hamburg Express Class

A cleaner Future for Shipping

February 2024 | Hamburg



ONE THE PATH TO CLIMATE NEUTRALITY

Immediate effect of LNG in comparison to diesel

~15 – 25%

fewer CO₂ emissions

approx. **95%**

less sulphur dioxide

approx. 95%

approx. **95%**

carbon black

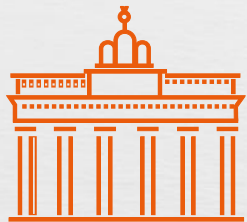
Future non-fossil fuels, such as synthetic gas or e-methane in comparison to diesel

approx. **0%**
CO₂ emissions

BY COMPARISON:

The Berlin TV Tower is

368 m high.



the Brandenburg Gate

62.5 m wide.



According to the internet, a 4-person single family house consumes an average of 4,000 kWh of electricity per year.

18.5 MW

can supply 40,515 households, 365 days a year.

A VW Golf has an output of around

75 kw



THE NEW HAMBURG EXPRESS CLASS: HANOI EXPRESS

THE HANOI EXPRESS IS 399 METRES LONG AND 61 METRES WIDE.

Max. height	76 m
Side height/ keel–main deck	33.2 m
Draught	16.3 m
Tonnage	24,995 t
Container capacity	23,664 TEU
Reefer slots	1,500 TEU
Max. speed	22 kn
Shipyard	Hanwha Ocean, South Korea

Propellers	
Diameter	10.3 m
Blades	6
Weight	102 t

Rudder blade	115 m ²
Empty weight of vessel	66,850 t
Size of LNG tank	18,650 m ³
Max. generator output	18.5 megawatts

Steel anchor	2
<i>(each 6.2 m long and around 4.2 m wide, 24,750 kg)</i>	
Anchor chains	2
<i>each 385 metres long</i>	

FACTS ABOUT THE MAIN ENGINE

- The Hyundai-MAN 11G95ME-C10.5-GI x 1-set main engine powers the propeller via the propeller shaft with 58,270 kilowatts.
- **Cylinder** 11
- **Piston diameter** 0.95 metres
- **Piston stroke** 3.46 metres

LNG

- LNG is a gas that changes into liquid form at temperatures below -162 °C and is therefore ideal for transport and storage. In order to use it, it is heated up and thus turned back into a gas.

FRESH WATER

- The fresh water generator can produce 40 t of fresh water a day. It does this by converting ocean water into freshwater by means of evaporation. Around 9 t of fresh water a day are needed on board.

VESSEL DIMENSIONS

- A tour of the deck is almost a kilometre long. There are 135 steps between the officers' station on deck A and the bridge (at a height of 31.5 m).