

HUANG HE KOU – LNG dual-fuel pure car truck carrier



Shipbuilder:	Guangzhou Shipyard International Company Limited (GSI)
Designer:	Shanghai Merchant Ship Design and Research Institute (SDARI)
Vessel's name:	Huang He Kou
Owner/Operator:	SPDBFL/ COSCO
Country:	China
Flag:	Liberia
Total number of sister ships already completed:	2
Total number of sister ships still on order:	1
Contract date:	September 2022
Delivery date:	September 2024

Huang He Kou is a pure car truck carrier (PCTC) built by Guangzhou Shipyard International Company Limited (GSI), a subsidiary of China State Shipbuilding Corporation (CSSC).

The vessel was delivered to SPDB Financial Leasing (SPDBFL)/COSCO, to ship cars made in China, in September 2024, alongside a second vessel, *Gan Jiang Kou*. The vessel's car-carrying trade has already seen it embark on a route from Shanghai to Chile, Guatemala and Peru, among other countries.

Slightly under 200m in length, the vessel is equipped with an LNG dual-fuel engine, which effectively reduces pollutant emissions. This installation has helped the ship to achieve a significant reduction of more than 30% in CO₂ emissions, an 80-90% decrease in NO_x emissions and virtual elimination of SO_x emissions, thus meeting IMO's stringent Tier III standards.

This onboard propulsive set-up aligns with GSI's focus on building alternatively fuelled ships, including LNG, methanol and other eco-friendly propulsion systems. For example, GSI previously built the 49,990dwt methanol dual-fuel medium-range (MR) tankers *Stena Pro Patria*, *Stena Pro Marine* and *Stena Prosperous* for Proman Stena Bulk, a joint venture between Stena Bulk AB and Proman.

Huang He Kou features 12 vehicle decks, including eight fixed decks and four liftable decks, allowing flexible space adjustment, with a car capacity of 7,000 units. The ship's automated deck adjustment system optimises utilisation of space and enhances loading/unloading efficiency.

The 11th and 12th decks of the ship are specially designed for hydrogen-fuelled vehicles, making it a new generation of energy-saving, environmentally friendly and highly efficient large car carriers.

TECHNICAL PARTICULARS

Length, oa	199.9m
Length, bp	195.6m
Breadth, moulded	38m
Depth, moulded	14.8m
Gross tonnage	68,252
Design, draught	8.6m
Design, deadweight	11,579dwt
Service speed	19knots

Main engine(s):	
Number of engines	1
Make	MAN
Model	MAN B&W 6S60ME-C10.5-GI-EcoEGR, Tier II/III

Output of each engine	14,940kW@105rpm (MCR)
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Propeller(s):	
Number of propellers	1
Material	Ni-Al-Bronze
Number of blades	4
Fixed/controllable pitch	Fixed

Deck machinery	
Crane(s):	
Number of cranes	4
Capacities/SWL	1 x main crane – 5tonnes SWL 2 x overhead cranes – 2tonnes SWL 1 x provision crane – 5tonnes SWL

Onboard capacities:	
Fuel oil	1,100m ³ (VLSFO) 500m ³ (MGO)
LNG	3,350m ³
Ballast water	7,000m ³

Complement:	
Number of crew	26
Number of passengers	0

Vehicles:	
Number of vehicle decks	12
Number of cars	7,000

Classification	
Classification society	China Classification Society
Notations	★ CSA Car Carrier; PSPC(B); In-Water Survey; Loading Computer(S,I,D); ★ CSM AUT-0; Natural Gas Fuel; OMBO; G-ECO (BWM(T)); G-EP(GPR(EU)); SCM; ERS*

