



## ECO Valencia and Sisters

### General:

The nine vessels will have a length of 238 metres and will be able to transport over 7,800 lane meters of rolling units, equivalent to above 500 trailers.

The design was developed in a fruitful cooperation between the Grimaldi Group, Nanjing Jinling Shipyard and KNUD E. HANSEN.

The vessels will be 'ultra green' with 600m<sup>2</sup> of solar panels, large-capacity batteries to achieve zero emissions in port and a peak shaving system. Furthermore, an air lubrication system is included so the ship will ride on a carpet of micro bubbles, hereby reducing the frictional resistance between the hull and the water.

### Main Particulars:

Length o.a.	238.00 m
Length p.p.	229.75 m
Breadth moulded	34.00 m
Depth to main deck	9.30 m
Draught to summer load line	7.20 m
Deadweight (design/summer draught)	17,000 t

### Capacity:

Crew	31 pers
Passengers	12 pax
Lanemetres	7,800 m
Trailers	above 500 pcs

### Speed:

Service speed	20.80 kn
Range on HFO	Approx. 7,000 nm
Range on MGO	Approx. 1,000 nm

### Machinery and Equipment:

Fuel	HFO and MGO
Main engines	Two (2) slow speed 2-stroke Diesel
Installed power	12,780 kW (MCR) per engine
Aux. engines	Three (3) 1,580 kW (MCR) per engine
Propellers	Two (2) CPP propellers



## ECO Barcelona and Sisters

---

<b>Miscellaneous:</b>	Classification	RINA
	Number of vessels	9
	IMO numbers	9859533, 9859545, 9859557, 9859569, 9859571, 9859583, 9859595, 9859600, 9859612
<b>Scope of Work:</b>	From Concept to full Basic Design, including: General Arrangement and Technical Specification for contract signing Lines plan, optimization and model test assistance Intact and damage stability calculations Noise and vibration prediction calculations Hull structure design FEM verification of hull structure, global and local Deck outfitting Machinery - Engine Room Design Machinery - System Design Machinery - Hull Engineering HVAC Electric, instrumentation and automation Statutory- and Class documents	
<b>Ref. No.:</b>	KEH 18029.01	