

## Bahri Abha and Sisters, RoRo Vessel with Container Capacity

**General:** Tender Design developed for Bahri, (NSCSA), Kingdom of Saudi Arabia.

The vessel is flexible and has a large capacity, which is optimised for fast turnaround in harbours. Fully independent with regard to maneuvering and loading/unloading, these vessels are unique given that their size is smaller than the other vessels in the current fleet, yet they have more cargo lifting capabilities with lower fuel consumption. It is estimated that these lighter weight new vessels will consume 45 % less fuel than the current ships, thereby delivering considerable

fuel cost savings.

Main Particulars: Length o.a. (approx.) 225.00 m

Breadth moulded 32.30 m
Draught 8.90 m
Scantling draught 9.50 m
Deadweight (approx.) 26000 t

**Capacity:** RoRo space capacity 24800 m<sup>2</sup>

Container capacity 364 TEU

Speed: Service speed (85 % MCR and 15 % sea margin) (approx.) 17 kn

**Propulsion:** Diesel

Main engine (MCR)  $2 \times 1500 \text{ kWe} + 1 \times 2200 \text{ kWe all at 720 rpm}$ 

Shaft generator 2200 kW

Miscellaneous: Classification Lloyd's Register

IMO number Bahri Abha9620944IMO number Bahri Hofuf9620956IMO number Bahri Tabuk9620968IMO number Bahri Jazan9620970IMO number Bahri Jeddah9626522IMO number Bahri Yanbu9626534

**Scope of Work:** Concept and Tender Design, including:

General Arrangement Tender specification

Detailed weight and centre of gravity calculations, including weight distribution

Lines plans

Intact stability calculations
Damage stability calculations
CFD Lines optimisation

Technical support to the Owner in the tendering phase as well as in the construction phase,

including: Plan approval

**Ref. No.:** KEH 10039

