

# HIGH BULK

40,000DWT Type Handy size log/bulk carrier Innovated by NAMURA (GN) and HAKODATE







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# **SUPERIOR PERFORMANCE TODAY** CHARTERING THE SEAS OF TOMORROW

Ship owners around the world rely on our high performance bulk carriers to transport their commodities safely and efficiently to markets. Our new, progressive HIGH BULK 40E ship takes our shipping family one big step forward. Equipped with the latest eco-friendly technology and features, the ship has been re-invented to bring you exceptional performance on the seas.

Be bold and make a statement with our most environmentally-friendly and fuel efficient ship to date. HIGH BULK 40E wasn't engineered to run errands. Fast and seaworthy, this fearless carrier was made for the long-haul. Navigate the rugged seas with ease and confidence.

As previous models, HIGH BULK 40E is built with prized features. It has a large holding capacity, and outstanding stability. It is highly suitable for short-term charter, realizing voyage with low risk exposure. Get to the coast with low maintenance and superb environmental performance that will leave competitors in your wake.

## 9.30/10.37 Draught m (dd/ds) 21,0000**Cruising range** nm

ZEO, DOOD Log capacity SCR

50,500 Hold capacity (Grain) m<sup>3</sup>

**50000** Deadweight

Fuel consumption t/day





# CONCEPT OF HIGH BULK 40E

## Innovative excellence & Seaworthy technology

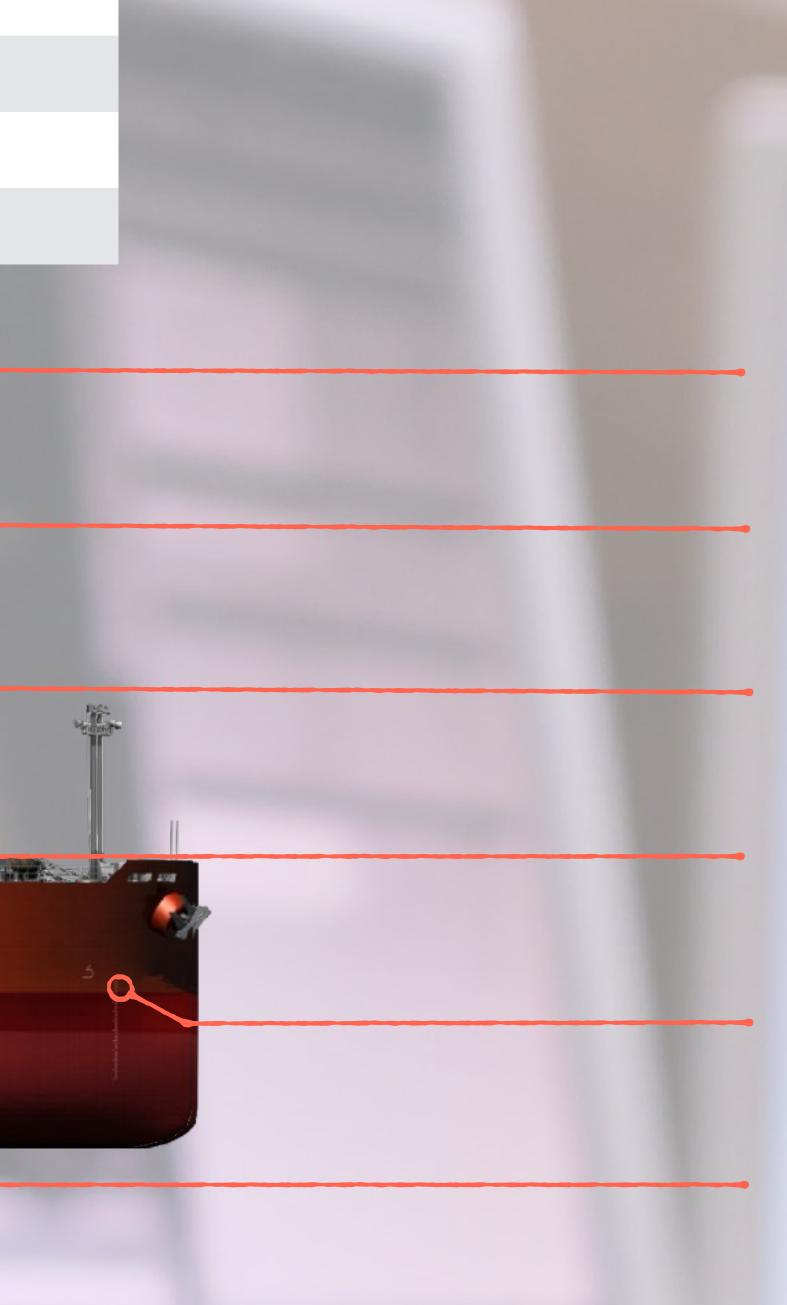
Large Hatch Opening
SOx Scrubber (option)
3 Diesel Generators
NOx Emission Limits (Tier III)
Low CO <sub>2</sub> Emissions (EEDI Phase2, 27%)
Energy Saving Devices
Fuel-Efficient Main Engine (J-ENG 6UEC42LSH-Eco-D3)
Ballast Water Treatment System
Large Marine Gas Oil Tank
Large Sewage/Grey Water Holding Tank



### **Overall Size**

Length overall (Loa):	182.9 m
Length between perpendiculars (Lpp):	179.9 m
Breadth moulded (B):	31.6 m
Depth moulded (D):	14.8 m





- 4 x 30.5 t Deck Cranes
- **Durable Bulwark**
- **Rugged Log Fitting Equipment**
- **Double Hull Construction**
- **Optimized Hull form**
- Low Friction Paint (option)
- **Superb Stability**

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# LEADING ENVIRONMENTAL PERFORMANCE

## **Reduce GHGs and save money with efficient, eco-friendly technology.**



## 27%

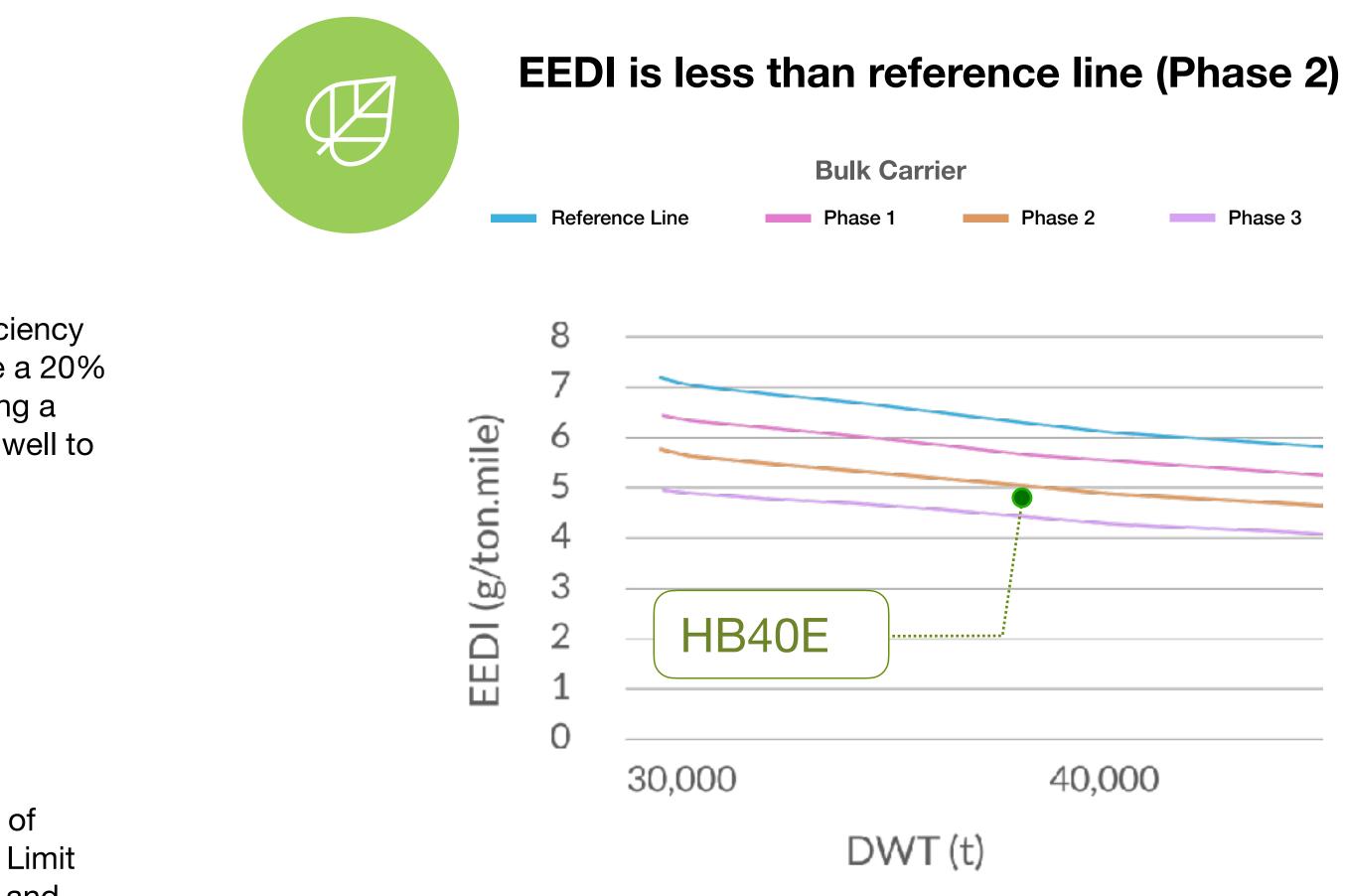
### CO<sub>2</sub> reduction from the EEDI reference

EEDI Phase 2 (1 Jan 2020-31 Dec 2024) energy efficiency regulations require new bulk carrier ships to achieve a 20% CO<sub>2</sub> reduction from the EEDI reference line. Achieving a 27% CO<sub>2</sub> reduction, HIGH BULK 40E positions you well to satisfy current and future seafaring requirements.



### 21,000 nm great range efficiency

HIGH BULK 40E enjoys a super-long cruising range of 21,000 nm, an 24% increase over HIGH BULK 34E. Limit your re-fueling stops and save on fuel consumption and costs.





# NOx

### **NOx emission limits**

HIGH BULK 40E has been re-engineered to clear IMO's stringent, Tier III emission limits, a new requirement for cruising the North America and Caribbean ECA.

# SOx

### **SOx emission limits**

Go further in combatting air pollution with marine gas oil and low sulphur fuel oil for the main and generator engines. Increasingly important for operations in ECA today and across all oceans in the future, a SOx scrubber can be installed (option).

### Leaders anticipate. Charter your destiny.

Climate change has shifted global thinking and action towards sustainable economic development. This new world order brings challenges and opportunities to the shipping industry.

HIGH BULK 40E is designed to help you easily navigate the seafaring of tomorrow.

Featuring highly-efficient, environmentally-friendly options, HIGH BULK 40E will get your hold or cargo to port safely and economically over long distances. Leading energy-saving technology and reduced GHG emissions put you in the captain's seat of our environmental shift.

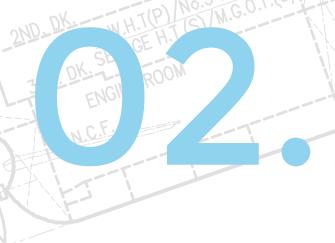


# SMART DESIGN HIGH ENVIRONMENTAL PERFORMANCE

#### **Ballast Water Treatment System**

Combat the spread of invasive aquatic species through ships' ballast water. Our advanced water treatment system dumps dirty water and harmful bacteria, while protecting marine life.

#### Fuel Oil Tank (about 1,400 m<sup>3</sup>)



Secure and dependable. HIGH BULK 40E's FO tank is protected by double side structure or arranged on double bottom with probabilistic safety evaluation.

#### Marine Gas Oil Tank (about 270 m<sup>3</sup>)

In response to our clients' needs and regulatory requirements, HIGH BULK 40E further expanded the MGO tank.

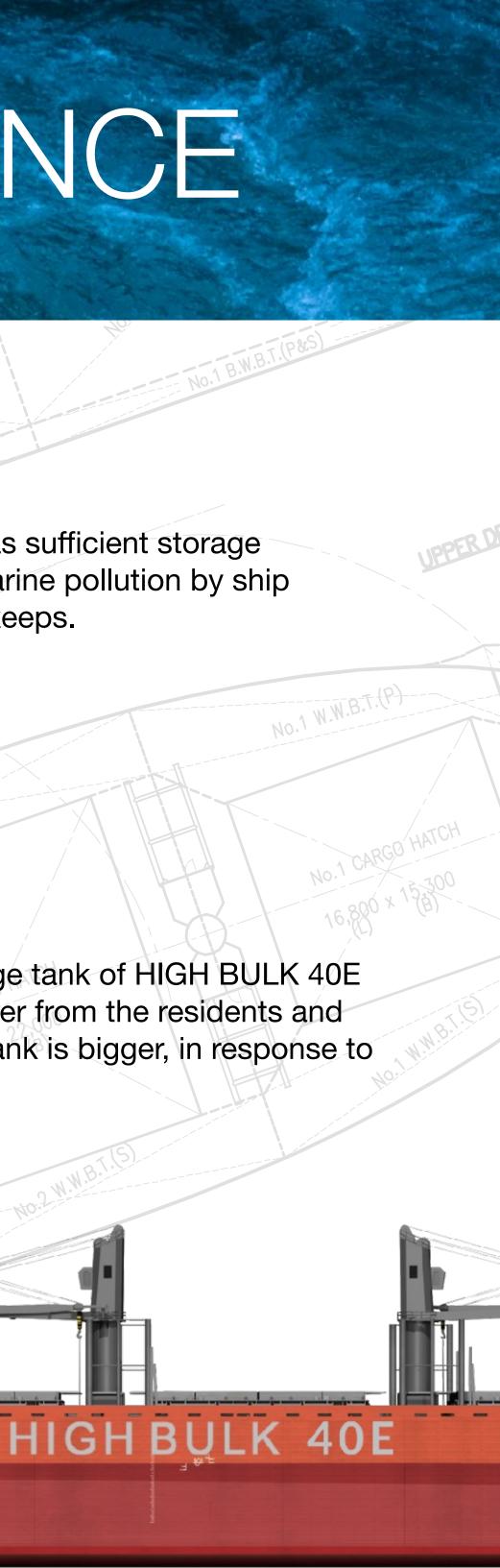
#### Slop Tank (about 200 m<sup>3</sup>)



HIGH BULK 40E's slop tank has sufficient storage capacity in order to prevent marine pollution by ship hold wash water that it safely keeps.

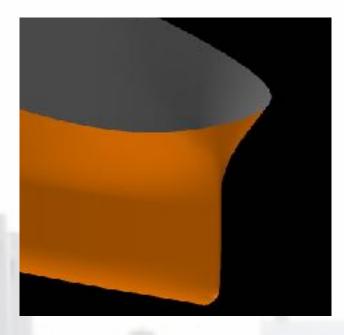
#### Grey Water Tank (about 80 m<sup>3</sup>)

The grey water tank and sewage tank of HIGH BULK 40E safely hold domestic wastewater from the residents and treated sewage. The sewage tank is bigger, in response to our clients' needs.



# NEXT LEVEL INNOVATION

The re-invented HIGH BULK 40E comes equipped with technical features giving it the highest ratings in the world.



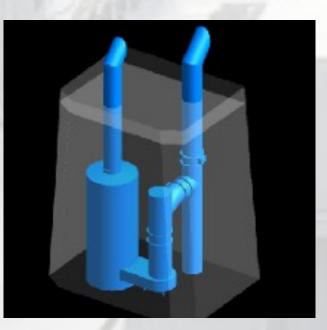
#### **Optimum Hull Form**

The ship has been optimized for both higher propulsive performance and lower fuel consumption.



#### **Energy Saving Devices**

The ship's combined Namura flow Control Fin (NCF) and Rudder Fin help stabilize the propeller inflow and increase energy efficiency by collecting and re-using energy from the propeller's outflow.



#### SOx cleaning technology

HIGH BULK 40E has increased the MGO tank capacity as a genuine product in order to cope with regulatory clearance by using MGO. In addition, it can be equipped with a SOx scrubber for purifying exhaust gas emission.





### **Non-Hub Vortex Propeller**

Recover lost energy. Hub vortex, which causes energy loss, can be almost or completely suppressed using only propeller blades, without the need for special equipment and additives.



### Low Friction Paint (option)

The drag – and wear and tear – of the ship's hull is reduced with high quality, high performance low friction paint.



### **UE-Eco-Engine** (J-ENG 6UEC42LSH-Eco-D3)

Cruise the seas with assurance that high performance, fuel-efficient engine will get you to your next destination safely.

M.C.O.: 5,680 kW at 105.0 rpm N.C.O.: 4,735 kW at 98.8 rpm

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# DELIVERING VALUE WITH INNOVATIVE EXCELLENCE

You asked and we are listening. HIGH BULK 40E is our most innovative and robust ship we have designed to date. This highly-efficient and environmentally-friendly carrier is equipped with all the capabilities to get your commodities to market safely and efficiently.



#### **Deadweight (dd/ds)**

### 34,350/39,800 t

Super deadweight carrying capabilities give you many cargo possibilities that HIGH BULK 40E can safely ship around the world.



#### **Cruising Range**

## 21,000 nm

We engineered HIGH BULK 40E with a significantly longer cruising range. Reduce your need to re-fuel and save big on fuel costs.



#### **Service Speed**



Get to your destination quicker.



#### **Fuel Consumption**

## 17.7 t/day

Its fuel consumption is markedly lower than that of our previous models, saving you money and time spent on re-fueling.



#### **Cargo Capacity**

50,500 m<sup>3</sup>

Cargo Hold (Grain)

7,280,000 SCR

Log Capacity



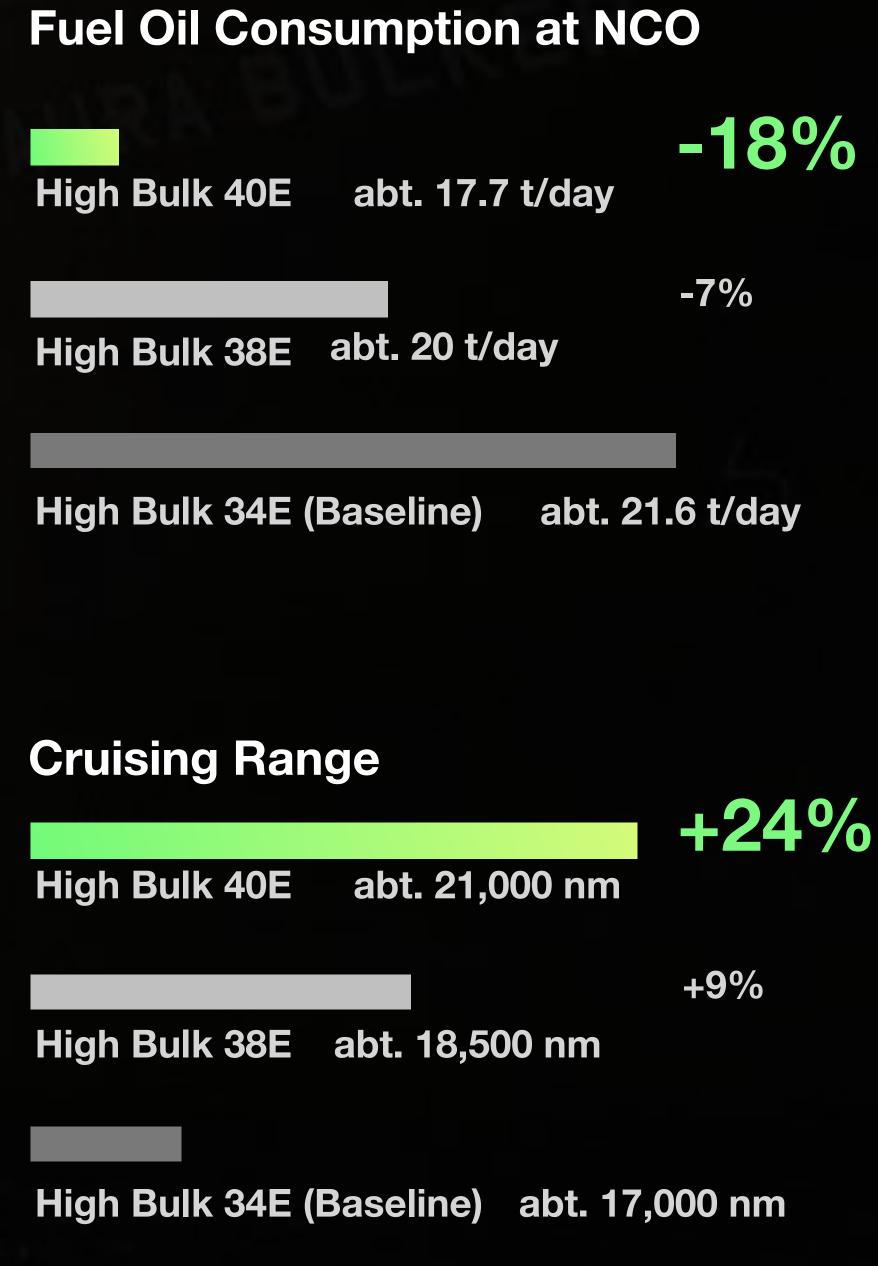
# EVOLUTION FROM OUR PREVIOUS MODELS

We are endlessly searching for ways to improve performance, reliability, and safety of our carriers. Since our last ship, we have achieved significant improvements in fuel oil consumption and cruising range.

Continue counting on our ship's reliable components, large hold capacity, and strong working capabilities to get your hold to shore safely and efficiently.

	Ane I	HIGH BULK 34E	HIGH BULK 40E	
	DWT	abt. 34,000 t	abt. 39,800 t	
	FOC at NCO	abt. 21.6 t/day	abt. 17.7 t/day	
	Cruising Range	abt. 17,000 nm	abt. 21,000 nm	
	Hold Capacity (Grain)	abt. 44,150 m <sup>3</sup>	abt. 50,500 m <sup>3</sup>	
	Log Capacity	abt. 6,535,000 SCR	abt. 7,280,000 SCR	
	Heavy Fuel Oil	abt. 1,300 m <sup>3</sup>	abt. 1,400 m <sup>3</sup>	
	DO/MGO	abt. 70/80 m <sup>3</sup>	abt. 80/270 m <sup>3</sup>	
	Hatch Opening	No.1: 14.05 m (L) x 14.2 m (B)	No.1: 16.8 m (L) x 15.3 m (B)	
		No.2-5: 20.4 m (L) x 20.4 m (B)	No.2-5: 21.0 m (L) x 22.0 m (B)	







## CRUISE THE SEAS IN COMFORT AND EASE SKIP THE TROUBLES

HIGH BULK 40E features a large space and clear, widewindow view. Its wheelhouse is expertly arranged for navigation equipment to facilitate ease of navigation. We will also deliver you and your package safely and efficiently to your destination with high-quality, technical packaging by Japanese manufacturers and secure, aftercare service and support.



Cabins, dining areas, and living quarters are designed with comfort and functionality in mind. HIGH BULK 40E imposes a strict standard for interior noise (SOLAS II-1/3-12, CODE ON NOISE LEVELS ON BOARD SHIPS, MSC337(91)).

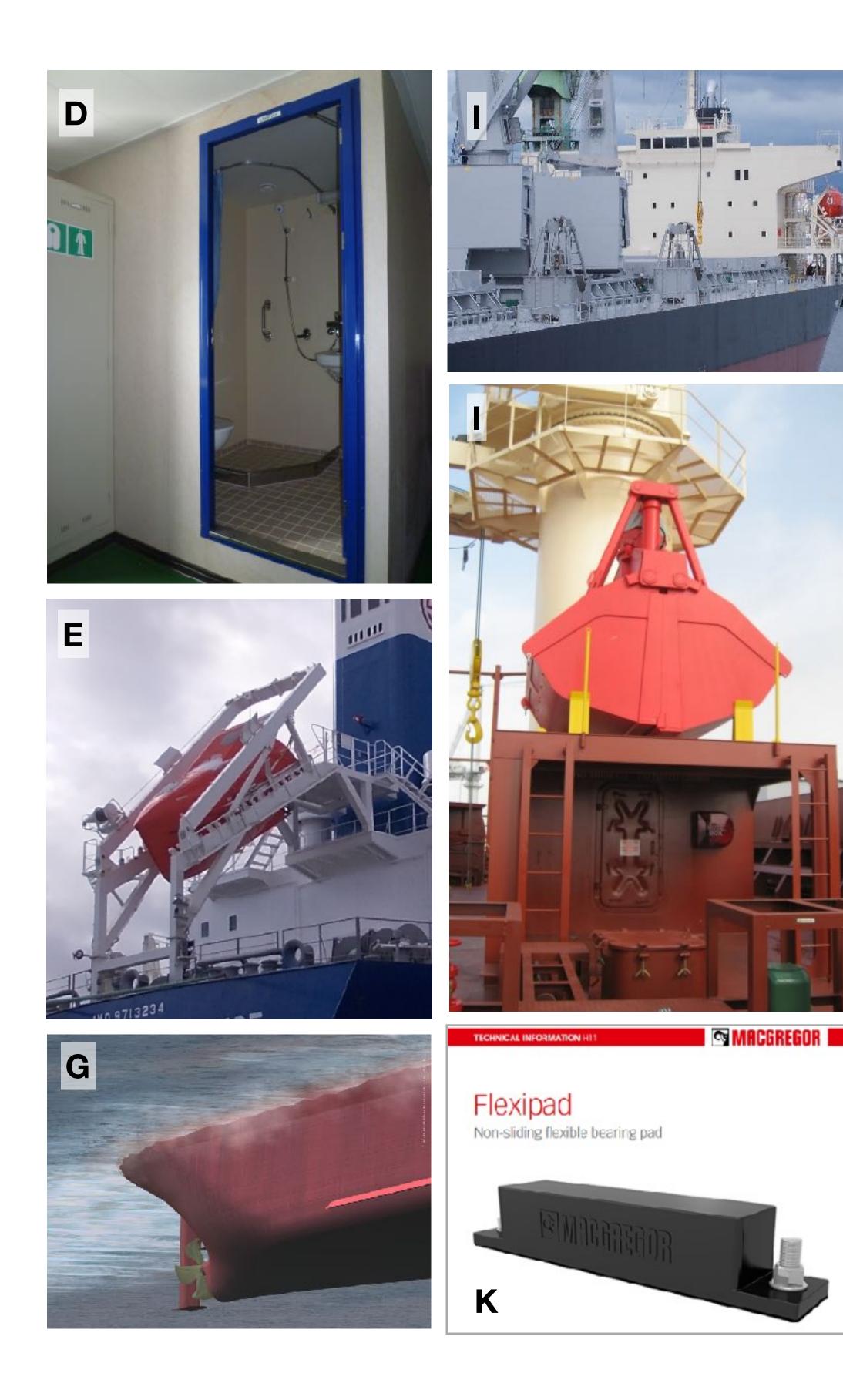
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# OPTION LIST

Buyer's choice: The following options are available with cost adjustment.

- A. "MAN B&W 6S46ME-B8.5" for main engine
- B. SOx scrubber
- C. Alternate loading for heavy cargo (S.G. =  $3.0 \text{ t/m}^3$ ) with full draught (Nos.2 & 4 holds may be empty)
- D. Private lavatory for junior officer class or all class
- E. Free-fall lifeboat
- F. Five (5)-years A/F paint on out side shell
- G. Low-friction type A/F paint for flat bottom, side bottom (Up to normal ballast line)
- H. Unattended machinery space (NK,"M0")
- I. Grab fitting;
  - 1. Grab shall be supplied by the Owner.
  - 2. Grab seat shall be provided.
- J. In water survey (NK,"IWS")
- K. "MACGREGOR Flexipad" for hatch cover (Non-sliding flexible bearing pad)
- L. Log rack on upper deck
- M. Equipments for transiting the Neopanamax Locks at PANAMA CANAL

## ABOUT US

In 1896, the company was founded in Hakodate, which overlooks the scenic, Tsugaru Straight.

For over a century, we have met various needs and demands for shipbuilding, ship repair, bridge construction, and industrial machineries as the largest heavy industry company in the north of Japan.

In addition, we provide a wide range of products and services, including environmental facilities and large cargo handling gears for port services.

Based upon our accumulated techniques and experiences over many years, we continue our efforts to meet customers' needs by providing quality products and services.

HAKODATE

TOKYO

## CONTACT INFO



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NAMURA SHIPBUILDING CO., LTD.

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## HIGH BULK 40E

