MARVEL PELICAN 155,000 m³ LNG Carrier 16

Kawasaki Heavy Industries, Ltd.

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MARVEL PELICAN 155,000 m³ LNG Carrier 16

Kawasaki Heavy Industries, Ltd. has delivered the MARVEL PELICAN (HN: 1729), a 155,000m³ capacity LNG transport vessel, for use by Mitsui & Co., Ltd. The MARVEL PELICAN is the second of Kawasaki's line of 155,000m³ LNG carriers to be commissioned, and is designed to enable passage through the newly expanded Panama Canal, which opened for full operations in 2016. Kawasaki will continue to pursue shipbuilding operations in the future with the anticipated rise in demand for LNG and other clean-energy fuels.

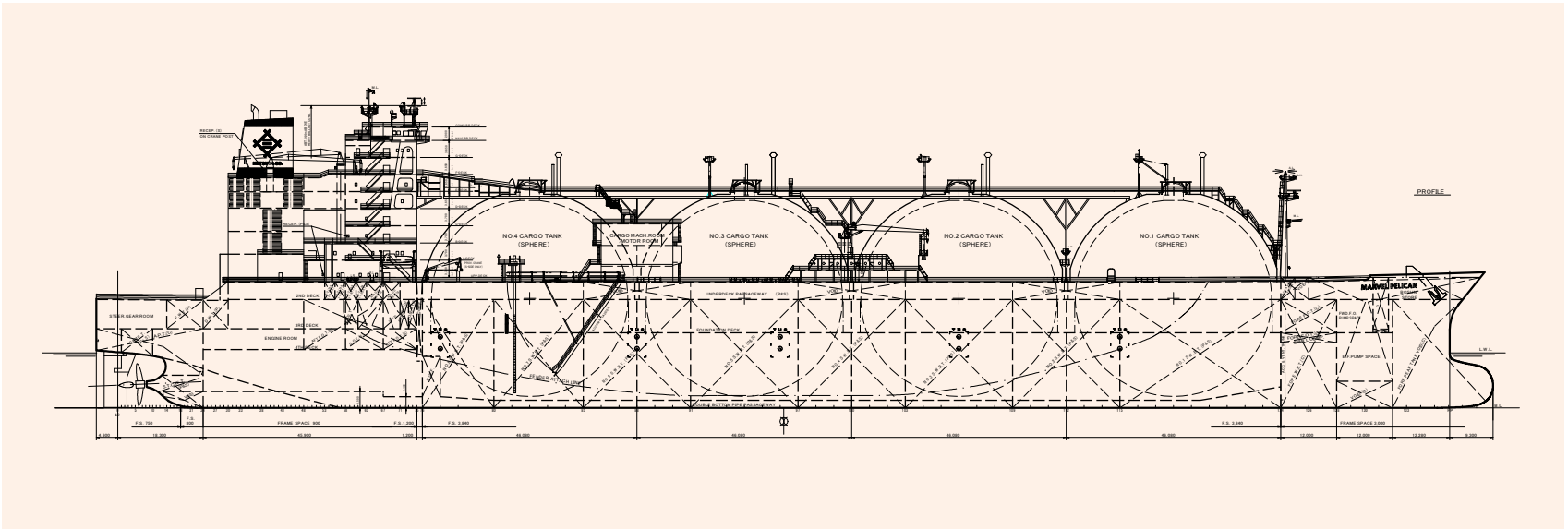
The MARVEL PELICAN will be used by Mitsui & Co., Ltd., primarily to transport LNG procured via the American Cameron LNG Project. Kawasaki has retained the hull dimensions to enable docking at major LNG terminals around the world, but has also optimized the hull structure to decrease overall ship weight. This LNG carrier is equipped with four independent Moss LNG tanks for a total cargo capacity of 155,985m³. The thermal insulation system of the LNG tanks adopts the proprietary Kawasaki Panel System, which offers outstanding heat insulation performance for an LNG boil-off rate of no more than approximately 0.08% per day.

The MARVEL PELICAN uses a dual fuel diesel (DFD) electric propulsion system,* which enables greater fuel efficiency than the existing steam turbine plant design. The DFD engine can consume both oil and gas, whereas a conventional generator engine can only burn oil for fuel. The propulsion system comprises multiple generator diesel engines and variable-speed propulsion motors. Either gas or oil is supplied to the engines to generate electricity, which drives the propulsion motors that power the propeller. The two-motor, twin-screw propulsion system enables high propulsive performance at a wide range of speeds.

The cargo tank section is protected by a double-hull and double-bottom design, so even if the carrier's hull were to sustain damage the LNG tanks within would remain safe and undamaged. The bridge is designed with state-of-the-art electronic navigation equipment concentrated in one location for greater ease of operation as well as panoramic windows offering a 360-degree view to the outside.

PRINCIPAL PARTICULARS

Length (o.a.):	299.90 m
Length (b.p.):	286.00 m
Breadth (mld.):	48.90 m
Depth (mld.):	27.00 m
Draft (mld.):	11.80 m
Gross tonnage:	128,917
Deadweight:	74,787 t
Main engine:	2 propulsion motors, 2 reduction gears
Speed (service):	Approx. 19.5 kt
Complement:	44 people
Classification:	Class NK
Loading capacity (tank)	155,985 m³ (at -163°C, 100% capacity)
Builder:	Kawasaki Heavy Industries Ltd.



KAGUYA 3,500 m³ LNG Bunkering Vessel

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KAGUYA 3,500 m³ LNG Bunkering Vessel

Kawasaki Heavy Industries, Ltd. has held a naming ceremony for the LNG (liquefied natural gas) bunkering vessel, KAGUYA (HN: 1744), at the Sakaide Works. The vessel is being built for Central LNG Shipping Japan Corporation (a corporate joint venture owned by Nippon Yusen Kaisha, Kawasaki Kisen Kaisha, Ltd., JERA Co., Inc. and Toyota Tsusho Corporation).

Vessels fueled by LNG instead of heavy fuel oil have been progressively introduced throughout the world as an effective measure in response to exhaust-gas emission regulations for vessels, which have been tightened since 2020. The KAGUYA will be Japan's first LNG bunkering vessel outfitted with facilities for supplying LNG-fueled ships with LNG at sea. Hitoshi Nagasawa, President, Representative Director of Nippon Yusen Kaisha, and Yukikazu Myochin, Representative Director, President and CEO of Kawasaki Kisen Kaisha, Ltd., named the vessel KAGUYA at the ceremony. Following this, Sunao Nakamura, Managing Executive Officer of JERA Co., Inc., and Toshiro Hidaka, CEO for Machinery, Energy & Project Division of Toyota Tsusho Corporation performed the rope-cutting ceremony.

The vessel will be delivered after various tests using actual LNG. Once construction is complete, the vessel will be based at JERA Kawagoe Thermal Power Station and used to supply LNG fuel to LNG-fueled ships in the Chubu region (Central Japan).

Kawasaki says that it will continue to actively work on the construction of various types of liquefied gas vessels including LNG, as demand is expected to increase as a clean form of energy.

PRINCIPAL PARTICULARS

Length (o.a.):	81.70 m	Draft (mld.):	4.80 m
Breadth (mld.):	18.00 m	Loading capacity (tank)	3,500 m³
Depth (mld.):	7.80 m	Builder:	Kawasaki Heavy Industries Ltd.