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NAMURA completes newly developed Dunkirkmax-type bulk carrier VERITAS QUEEN



Namura Shipbuilding Co., Ltd. delivered the VERITAS QUEEN, a 182,000DWT bulk carrier, at its Imari Shipyard & Works on 8 July 2026. It is the fourth vessel in a newly developed Dunkirkmax-type bulk carrier series, combining excellent operational performance with advanced energy-saving technologies.

The vessel's principal dimensions are optimized to meet the restrictions at the Port of Dunkirk in France.

Improved propulsion performance and fuel efficiency are achieved through Namura's proprietary Namura flow Control Fin (NCF), Rudder-Fin and additional fins installed behind the NCF, combined with the latest high-efficiency propeller and low-friction anti-fouling paint. These features enable the vessel to fully comply with the IMO EEDI Phase 3 regulations.

In response to environmental regulations, the vessel is equipped with a ballast water treatment system compliant with the International Convention for the Control and Management of Ships' Ballast Water and Sediments. Its main engine and generator engines meet the nitrogen oxide (NOx) emission regulations Tier III requirements within the Emission Control Areas (ECAs), and its exhaust gas cleaning system (EGCS) conforms to the sulfur oxide (SOx) emission regulations in global area.

In addition, an Inventory of Hazardous Materials (IHM) has been prepared in accordance with the Ship Recycling Convention and its guidelines, minimizing environmental impacts.

<Principal Particulars>

L (o.a.) x B (mld.) x d (mld.):	291.92m x 45.0m x 18.2m
DWT:	182,700t
GT:	94,783
Main engine: MAN B&W 7S60ME-C10.6-EGRBP diesel x 1unit	
Complement:	24
Registry:	Panama
Classification:	NK
Completion:	8 July 2026

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Imabari Shipbuilding Delivers Capesize Bulker FRONTIER PEACE



Imabari Shipbuilding Co., Ltd. on 26 May 2026 delivered the FRONTIER PEACE, a 181,000-DWT Capesize bulk carrier that had been completed at its Saijo Shipyard.

Being of the largest size to call at the French Port of Dunkirk, the vessel is outfit with nine holds and nine hatches in compliance with the International Association of Classification Societies (IACS)'s Common Structural Rules for Bulk Carriers and Oil Tankers (CSR BC&OT).

For a structure suitable for carrying solid bulk cargo such as iron ore and coal, the vessel has both topside and hopper tanks for each of its cargo holds. To load and transport iron ore, which is assumed to be its main item, furthermore, the vessel is designed to handle high-density commodities (up to 3 tons per cubic meters) in alternate hold loading.

As environmental measures, the vessel has an exhaust gas recirculation (EGR) system for its main engine and a selective catalytic reduction (SCR) system for its power generators to meet the International Maritime Organization (IMO)'s Tier III NOx standards, which are limits on NOx emissions to prevent air pollution. To reduce SOx emissions, the vessel has an exhaust gas cleaning system (EGCS) as well. In addition, the vessel improves propulsion and environmental performances by installing energy-saving equipment around its propeller and applying paint that is effective in minimizing friction with seawaters for its hull plating.

Consequently, the vessel has already reached the CO_2 emission levels enforced in Phases 2 and 3 of the IMO's Energy Efficiency Design Index (EEDI), which are the requirements that it needs to satisfy. To protect the natural environment, moreover, the vessel is equipped with a ballast water treatment system and keeps an inventory of hazardous materials that is mandated under the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (Hong Kong Convention).

<Principal Particulars>

Measurements: 291.96m in LOA x 45.00m in breadth x 24.70m in depth
DWT: 181,987t
GT: 94,321
Main Engine: 7S60ME-C10.6
Service Speed: Abt. 13.65kt
Classification: Nippon Kaiji Kyokai (ClassNK)
Registry: Panama

JMU Delivers Next-Generation Suezmax Tanker 'NISSOS SANTORINI'



Japan Marine United Corporation (JMU) delivered "NISSOS SANTORINI" at its Tsu Shipyard on 29th July 2026. This vessel is JMU's newly developed Suezmax Tanker that offers improved fuel efficiency and less environmental impact compared with previous generations. It is a masterpiece of both JMU's latest technologies and all the expertise of oil carrier.

The vessel has not only high-efficiency propellers but also JMU's original energy-saving devices such as "Super Stream Duct®", "SURF-BULB®", "ALV-Fin®", and "T-Rupas®", all of which are optimized particularly for its hull. Those technologies significantly improve propulsion performance and reduce fuel oil consumption. Moreover, both "Ax-Bow®", which reduces wave resistance, and low wind-resistance accommo dations that comply with the latest onboard noise regulations, are applied to the vessel to improve performance in actual sea conditions.

The vessel complies with the Energy Efficiency Design Index (EEDI) Phase 3 (a 30% reduction from the reference line) with its hull form and latest energy-saving devices. This challenge contributes to green environment by its drastically improved eco-friendly performance. The vessel complies with the IMO NOx Tier III requirements and is equipped with an SOx scrubber to meet the IMO SOx emission requirements.

To comply with various environ¬mental regulations, the vessel has electronically controlled engines, a ballast water management system and is provided with an Inventory of Hazardous Materials (IHM). Furthermore, low-friction paints are applied on its hull. Also, both cargo oil tanks and ballast water tanks are coated in accordance with the IMO Performance Standard for Protective Coatings (PSPC) requirements, enhancing the vessel's anticorrosive performance.

<Principal Particulars>

L (o.a.) x B (mld.) x D (mld.): 274.30m x 48.00m x 23.15m
GT/DWT: Approx. 83,500/158,940t
Service Speed: 14.5 kt
Main engine: Everllence B&W 7S60ME-C10.6-EGRBP
Complement: 28 persons
Classification: LRS
Registry: Marshall Islands

Kawasaki Launches Collaboration with NVIDIA to Realize 'Next-Generation Digital Shipyard'

— Leveraging AI, Digital Twin Technology to Advance DX in Commercial Shipbuilding —

Tokyo, 16 July 2026 — Kawasaki Heavy Industries, Ltd. announced that collaboration with NVIDIA Corporation (headquartered in California, U.S.) has begun to realize a next-generation digital shipyard using physical AI and digital twin technology in shipbuilding.

Through this collaboration, Kawasaki will combine the extensive data and expertise it has accumulated over many years on shipbuilding sites and its advanced technological capabilities in robotics with NVIDIA's sophisticated AI, robotics, and digital twin technology. By combining these strengths, the two companies will aim to build a production system for a next-generation shipyard that connects every stage from the design to the construction of commercial vessels in a single, seamless flow at Kawasaki's Sakaide Works.

Japan's shipbuilding industry is currently facing serious challenges, including a declining number of skilled workers and labor shortages driven by a falling birthrate and an aging population. At the same time, global efforts to reduce environmental impact are driving demand worldwide for low- and zero-carbon vessels, making it an urgent priority for the shipbuilding industry as a whole to expand its construction capacity and improve its productivity.

To address these challenges, Kawasaki has been working to expand construction capacity and productivity at its shipyards through the promotion of digital shipyards, realized through digital transformation (DX) in commercial vessel construction, and through the development of AI robots for shipyards, carried out as part of the government-supported "Technology Development Project to Realize Next-Generation Shipyards through the Use of AI". Building on these efforts, this new collaboration with NVIDIA will make use of NVIDIA's physical AI stack (NVIDIA Cosmos™, NVIDIA Omniverse™, NVIDIA Isaac™, NVIDIA Metropolis, NVIDIA Jetson™, etc.) to advance a next-generation shipyard model that integrates robotics, AI, autonomous systems, digital twins, and simulation technology. This will contribute to improving the productivity of Japan's shipbuilding industry and to establishing a stable system for vessel supply. Looking ahead, Kawasaki will pursue the use of physical AI across the entire lifecycle of a vessel, extending it beyond construction processes to operation, maintenance, and servicing.



Kawasaki's Sakaide Works (Sakaide City, Kagawa Prefecture)

<Key Initiatives of This Collaboration>

Building on the commercial vessel DX/digital shipyard initiatives that Kawasaki has been advancing, the two companies will examine the implementation of and pursue further advancements in the following initiatives:

1) Building a Next-Generation Digital Shipyard (Further Advancing Efforts to Expand Construction Capacity and Improve Productivity)

Kawasaki will further advance the commercial vessel DX (shipbuilding based on BOM/BOP) it has been promoting by making greater use of digital twin technology, minimizing the risk of redoing work, and optimizing processes.

2) Building an Environment for Introducing AI and Robotics to Shipyards and Strengthening Integration with On-Site Data

Kawasaki and NVIDIA will jointly build a framework for rapidly introducing Kawasaki-developed robots into shipbuilding operations (such as welding, painting, inspection, and material handling) through motion planning, path generation, simulation, and on-site applicability verification. In addition, the two companies will build a system that uses real-world shipyard environment data and construction/inspection data together with AI solutions to optimize robot operating conditions and continuously improve the accuracy of quality assessments.

3) Improving Shipbuilding Process Efficiency through Agentic AI

Agentic AI will be used to support work across shipbuilding processes such as design, procurement, manufacturing, and quality management, thereby improving productivity.

4) Application to the Vessel Lifecycle (Operation and Maintenance)

Kawasaki will examine a framework for connecting data generated during construction to post-delivery operation, maintenance,

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and refit work, and for feeding the information back to maintenance services.

Kawasaki will advance these initiatives through phased demonstration and implementation. The company will first carry out technology verification and identify on-site challenges in commercial vessel construction mainly at its Sakaide Works. Kawasaki then aims to apply the knowledge gained through these efforts to other large structures and manufacturing sites, while contributing to greater efficiency in the operation and maintenance of vessels after delivery.

<Comments on This Collaboration>

"Shipbuilding is one of the world's most complex forms of manufacturing, and physical AI is opening a new era in how vessels are designed and built, by combining Kawasaki's shipbuilding expertise and field data with NVIDIA Omniverse libraries, Cosmos world models and the Isaac platform, Kawasaki can connect design to the shipyard floor, train and validate AI robots in simulation, and help create more efficient, next-generation shipyards."

Deepu Talla
Vice President of Robotics and Edge AI
NVIDIA Corporation

"Our collaboration with NVIDIA marks an important step in advancing the use of AI in shipbuilding to a new stage. By combining the shipbuilding technology we have cultivated over many years with NVIDIA's advanced AI and simulation technology, We will achieve more sophisticated design, production optimization, and skills transfer, while taking on the challenge of creating new value to support the shipbuilding industry of the future."

Yasuhiro Hashimoto
President, Representative Director and CEO
Kawasaki Heavy Industries, Ltd.

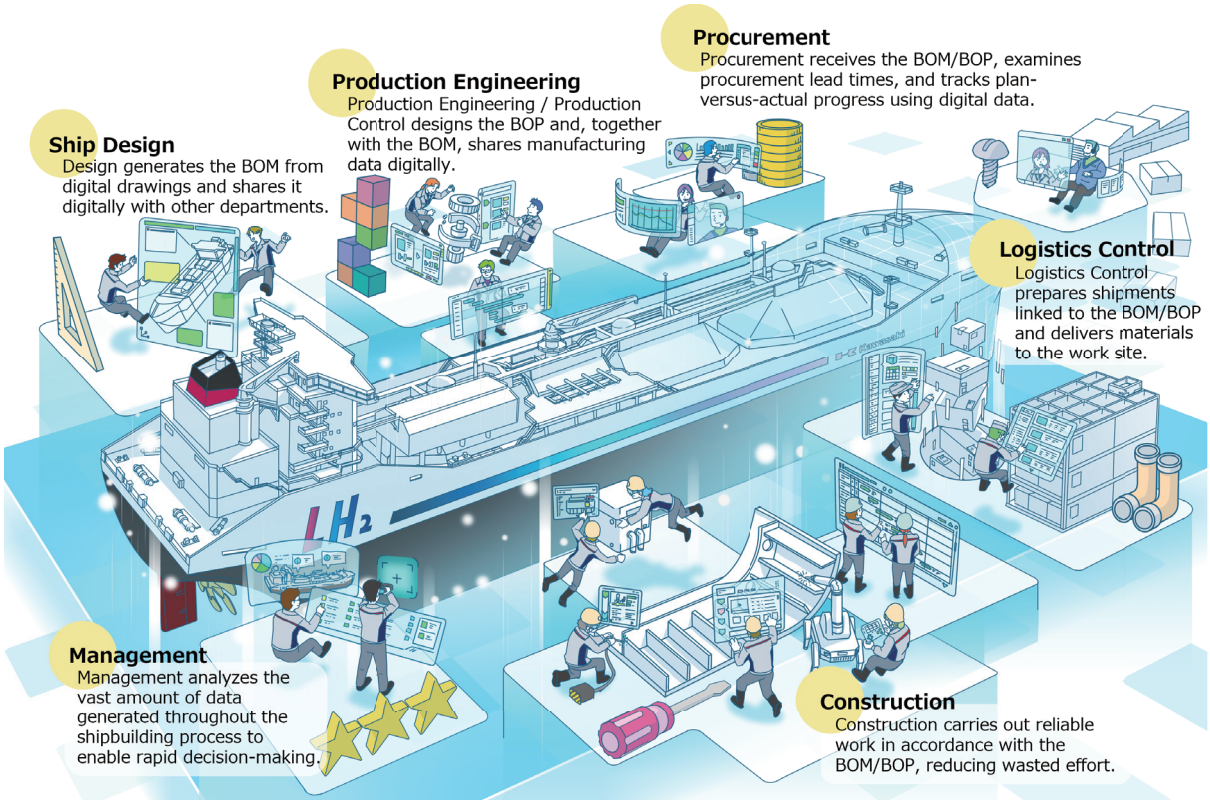


Image of Kawasaki's Commercial Vessel DX Initiatives

MITSUI E&S to Expand Ammonia Fuel Supply Facilities for Marine Engines

MITSUI E&S Co., Ltd. (Headquarters: Chuo-ku, Tokyo; President and CEO: Takeyuki Takahashi; hereinafter, "MITSUI E&S") has decided to expand its ammonia fuel supply system facilities for land-based testing in preparation for projected growth in demand for marine engines fuelled by ammonia.

In the maritime sector, reducing greenhouse gas (GHG) emissions from vessels is a critical challenge. MITSUI E&S currently boasts the largest domestic production volume of large marine dual-fuel engines utilising low-CO_2 fuels such as LNG, LPG, and methanol, all of which are compatible with future net-zero emission fuels. Through investment in the facilities, MITSUI E&S aims

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to further develop/increase its production capabilities for ammonia-fuelled engines, which are expected to become a key zero-emission fuel in the future.

The facilities will incorporate technologies from TGE Marine Gas Engineering GmbH (hereinafter, "TGE Marine"), a wholly owned subsidiary of MITSUI E&S. TGE Marine has developed or received orders for over 150 fuel gas systems for LNG, LPG, ethane and ammonia.

To date, MITSUI E&S has advanced the development of ammonia fuel supply systems and ammonia fuel tanks under the NEDO Green Innovation Fund. By the end of the fiscal year 2025, MITSUI E&S had conducted integrated operation testing of ammonia-fuelled engines and fuel supply systems at its Tamano Works location, verifying their reliability and safety.

Going forward, MITSUI E&S will conduct further integrated testing and validation of engines and fuel supply systems through land-based trials. This will contribute to the enhanced reliability, safety, and a wider adoption of ammonia propulsion systems in marine applications.

In addition, through collaboration with TGE Marine, MITSUI E&S will provide integrated marine propulsion systems combining engines and fuel supply systems, enabling it to meet diverse customer needs both in Japan and globally.

MITSUI E&S aims to evolve from a conventional standalone engine business into a comprehensive marine propulsion system supplier as well as expanding its range of services and solutions to grow its market presence while enhancing its corporate value and contributing to the realisation of a sustainable future. This capital investment is supported by the "Zero-Emission Ships Construction Promotion Project," a joint initiative by the Ministry of the Environment and the Ministry of Land, Infrastructure, Transport and Tourism of Japan.

NAIKAI ZOSEN completes 40,000-DWT General Cargo Ship HSL ONOMICHI

NAIKAI ZOSEN CORPORATION completed the HSL ONOMICHI, a 40,000-DWT general cargo ship ordered by ABO SHOTEN, LTD., at its Setoda Shipyard on Thursday, 25 June 2026. The features and main particulars of the vessel are as follows.



<Features>

1) The HSL ONOMICHI is a cutting-edge general cargo ship with all of its holds being double-hulled;
2) Double hulls prevent water from entering cargo holds and bunker oil from leading out of fuel tanks in the event of ship damage. In addition, stiffeners are not exposed to cargo hold surfaces, making it easier to maintain cargo holds;
3) Having a wide beam and a shallow scantling draft, which only measures 10 meters, the vessel is designed to easily enter and depart shallow-draft ports and harbors as well as to navigate the river, canal, lake, and elsewhere;
4) The vessel is capable of carrying grains, coal, ore, steel coils and other steel products, cement, cement clinker, and sulfur, among others. It is equipped with five cargo holds, four deck cranes, and semi-open wide hatches; and
5) With energy-saving equipment, a bow shape for maintaining seakeeping capability in rough water, and energy-saving paints, the vessel improves its cruising performance in adverse weather conditions and enables its main engine to reduce horsepower output and fuel oil consumption.

<Main Particulars>

Length overall: 183.00m
Length between perpendiculars: 177.00m
Breadth (mld.): 32.20m
Depth (mld.): 14.50m
Designed draft (mld.): 9.50m
Scantling draft (mld.): 10.00m
International gross tonnage: 25,257
Deadweight tonnage: 40,145tons
Cargo hold capacity: Approximately 50,000m^3
Crew: 25persons
Main engine: Everllence B&W 5S50ME-C9.7 EGRBP x 1unit
Maximum output: 5,200kW x 91.0min-1
Normal output (84%): 4,370kW x 85.9min-1
Service speed: Approximately 13.3 knots
Registry: Liberia
Qualification society: Nippon Kaiji Kyokai (ClassNK)
Construction commenced: 10 October 2025
Launched: 5 March 2026
Construction completed: 25 June 2026

Shin Kurushima Sanoyas Shipbuilding Completes ULTRAMAX Bulk Carrier 'AG VARVARA'



ULTRAMAX bulk carrier M/V "AG VARVARA," under construction at the Mizushima Shipyard of Shin Kurushima Sanoyas Shipbuilding Co., Ltd., was named and delivered on 30 June 2026.

This is the 11th vessel of a series of the SANOYAS newly developed 64,000DWT type ULTRAMAX bulk carriers. The vessel not only complies with the latest rules such as the CSR B&T, NOx Tier III and SOx regulations, but also has the large deadweight under the condition that its length is less than 200m. And the vessel exceeds 30% reduction of CO_2 emission (Phase 3) by IMO's EEDI (Energy Efficiency Design Index : the grams CO_2 per ton nautical mile) regulation in advance that shall apply to ships for which the building contract is placed on or after 2025.

For improved propulsion efficiency, the vessel is equipped with a low-speed, long-stroke electronically controlled main engine combined with a high-efficiency propeller and rudder appendages. Furthermore, Shin Kurushima Sanoyas Shipbuilding's patented energy saving devices such as "STF" (Sanoyas-Tandem-Fin) and ACE DUCT (Sanoyas Advanced flow Controlling and Energy saving DUCT) are applied. These energy saving devices, which have been improved from previous designs, have achieved an over-8% reduction in energy consumption so that the EEDI Phase3 requirements are surely satisfied.

For eco-friendly features, various countermeasures such as a main engine with an EGR system complying with the NOx emission Tier III limits for the prevention of air pollution and a dedicated low-sulfur diesel oil tank for cruising in ECAs (Emission Control Areas), are applied. In addition, other countermeasures such as a ballast water treatment system and independent on-deck holding tanks for rainwater for the protection of the marine environment, are also incorporated.

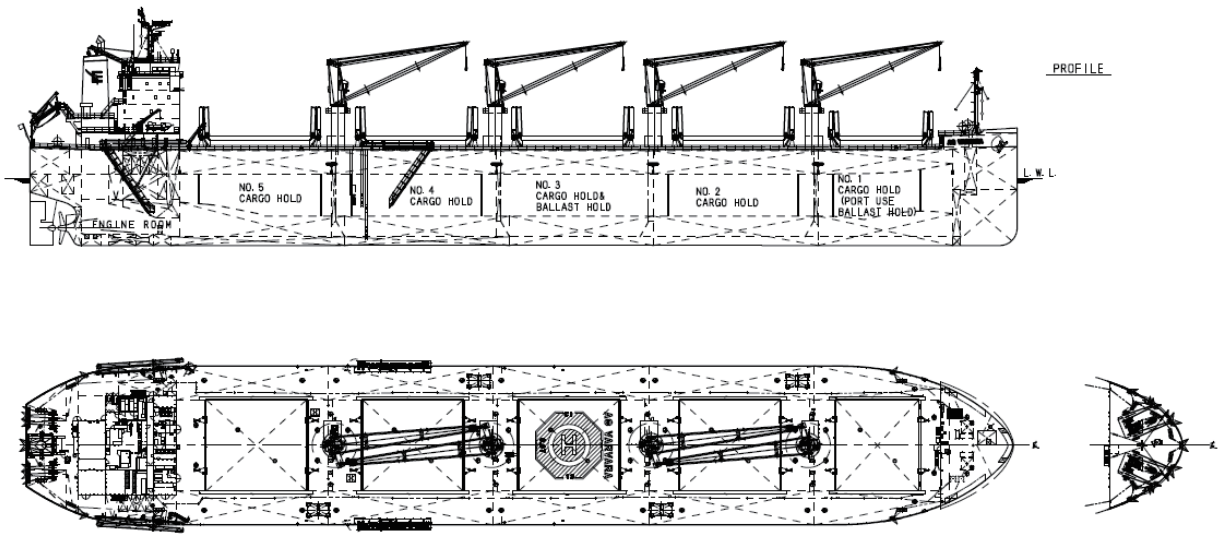
The vessel has five cargo holds with hatch openings that are maximized to load various cargos such as grain, ore, coal, hot coils and steel pipes. Four 31-ton deck cranes for handling cargo are installed. Furthermore, for improved maintenance, trunks are arranged to make it possible to gain access from the upper deck to the double bottom even when the vessel is laden.

SANOYAS ULTRAMAX continue to be around the seven seas as "ECO-ships."

<Particulars>

Ship No.:	1415
Keel Laying:	9 December 2025
Launched:	15 April 2026
Delivered:	30 June 2026
Dimensions	
Length (o.a.):	199.99m
Breadth (mld.):	32.24m
Depth (mld.):	19.22m
Summer Draft (ext.):	13.522m
Tonnage and Deadweight	
Gross Tonnage:	36,372
Deadweight:	63,918mt
Cargo Hold Capacity (grain):	81,490m^3
Classification:	NIPPON KAIJI KYOKAI
Complement:	25 persons
Service Speed (at C.S.O. with 15% sea margin):	About 14.1knots

GENERAL ARRANGEMENT



PAIWAN ELEGANCE

Builder: Imabari Shipbuilding Co., Ltd.
Ship type: 40 ,000-DWT type bulk carriers
L (o.a.) x B x D: 182.93m x 31.00m x 15.00m
GT: 25,009
Main engine: 6G45ME-C9.7
Speed, service: about 14.0kts
Classification: DNV
Registration: Liberia
Completion: 22 June 2026



ATLANTIC OLIVE

Builder: The Hakodate Dock Co., Ltd.
Hull No.: 928
Ship type: 40,000 DWT Type Bulk Carrier
L (o.a.) x B (mld.) x D (mld.) x d (mld.): 179.95m x 32.20m x 15.00m x 10.50m
DWT/GT: 39,905t/24,219
Main engine: J-ENG 6UEC42LSH-Eco-D4-EGR
Classification: NK
Registration: Marshall Islands
Completion: 13 May 2026



AYSEL

Owner: BRIGHT CARRIER S.A.
Builder: ONOMICHI DOCKYARD CO., LTD.
Hull No.: 842
Ship type: Bulker
L (b.p.) x B x D: 174.00m x 32.00m x 14.80m
DWT/GT: Abt. 40,000t/Abt. 25,200
Main engine: Japanese-made engine
Speed, service: Abt. 14.0 kts
Classification: CLASS NK
Registration: Majuro
Completion: 26 May 2026



OLIVE K

Builder: Oshima Shipbuilding Co., Ltd.
Hull No.: 11141
Ship type: Bulk Carrier
L (b.p) x B x D: 185.79m x 32.26m x 18.54m
DWT/GT: 58,427/33,087
Main engine: MITSUI-Everllence B&W 6S50ME-C9. 7-EGRBP (Derating)
Speed, service: 14.30kts
Classification: NK
Registration: Panama
Completion: 13 May 2026



GINGA JAGUARUNDI

Builder: SHIN KURUSHIMA HIROSHIMA DOCKYARD CO., LTD.
Hull No.: S-6277
Ship type: Chemical Tanker
L (b.p) x B x D: 149.50m x 26.5m x 15.0m
DWT/GT: 26,597/17,323
Main Engine: MAKITA 6G45ME-C9.7-EGRBP
Speed, service: 14.7kts
Classification: NK
Registration: Panama
Completion: 27 May 2026



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