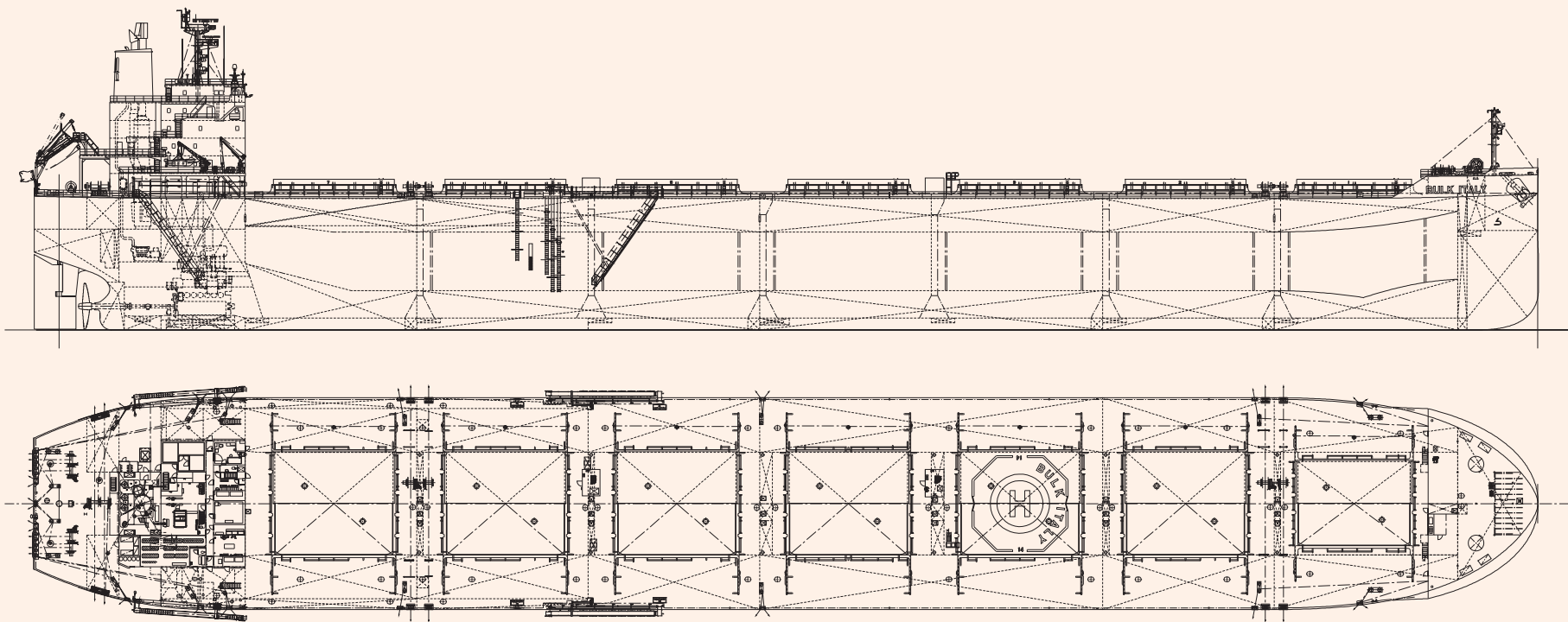


BULK ITALY 81,603 DWT Bulk Carrier 54

☐ Contents ☐ By Builder ☒ By Ship Type



BULK ITALY 81,603 DWT Bulk Carrier 54



PRINCIPAL PARTICULARS

Length (o.a.)	228.94 m	Main engine	MITSUI-MAN B&W 6S60ME-C8.2
Breadth (mld.)	32.24 m	MCR (kwxmin ⁻¹)	9,660 kW × 89.0 min ⁻¹
Depth (mld.)	20.00 m	Speed (service)	abt. 14.5 knots
Draft (ext.)	14.469 m (Summer draft)	Complement	25 Persons
Gross tonnage	43,644	Classification	NIPPON KAIJI KYOKAI (NK)
Deadweight	81,603 MT	Builder	Imabari Shipbuilding Co., Ltd. / Hiroshima Shipyard

SAKIZAYA VICTORY 82,400 DWT Bulk Carrier

55

☐ Contents ☐ By Builder ☒ By Ship Type



SAKIZAYA VICTORY 82,400 DWT Bulk Carrier 55

Japan Marine United Corporation (JMU) delivered the J-Series 82,400 DWT bulk carrier “SAKIZAYA VICTORY” at Maizuru Shipyard on May 26, 2021.

Features

- 1. This is the sixth vessel of Panamax bulk carrier of J-Series, called J82BC, which is successful in both economical and environmental friendly design.
- 2. This J-Series is applied with MARPOL ANNEX VI NOx Tier III and SOx emission regulation, in addition to CSR BC&OT (Common Structural Rules for Bulk Carriers and Oil Tankers).

These regulations/rules make the ship environmental friendly and more secure in hull structure. On the other hand, these have negative impacts in economical design as decrease of cargo hold capacity, deadweight and increase of fuel oil consumption.

However, using the latest JMU technology, JMU has overcome these negative impacts in design and achieved more cargo capacity, deadweight and lower fuel consumption, compared with the previous series called G81BC which is categorized as Phase 1 of Energy Efficiency Design Index (EEDI). J82BC is so improved as to be categorized as Phase 2 of EEDI.

- 3. J82BC has larger deadweight and cargo hold capacity suitable for carrying grain, bulk coal and iron ore in its 7

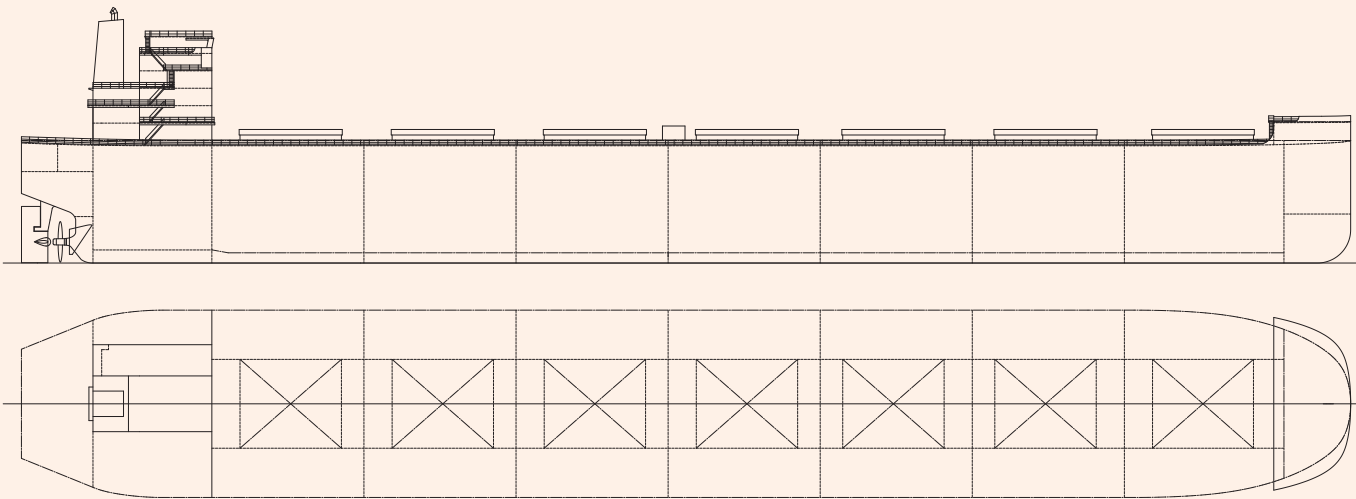
cargo holds, and has been developed with expertise and vast experience.

- 4. SSD® (Super Stream Duct®) and SURF-BULB® (Rudder Fin with Bulb) equipped fore and aft of its propeller, respectively, much improve the propulsion performance. In addition, ALV-Fin® (Advanced Low Viscous Resistance Fin) equipped fore of its propeller controls stern flow to get better propulsive efficiency. Furthermore, well-refined shape of superstructure can attains low wind resistance.

PRINCIPAL PARTICULARS

Length (o.a.)	229.0 m
Breadth (mld.)	32.26 m
Depth (mld.)	20.20 m
Draft (mld.)	14.55 m
Gross tonnage	44,317

Deadweight	82,418 t
Main engine	MAN B&W 6S60ME-C8.5-EGRBP
Speed (service)	14.5 knots
Complement	25
Classification	DNV
Builder	Japan Marine United Corporation



AQUAVITA AIM

82,192 DWT Bulk Carrier

56

☐ Contents ☐ By Builder ☒ By Ship Type



AQUAVITA AIM 82,192 DWT Bulk Carrier 56

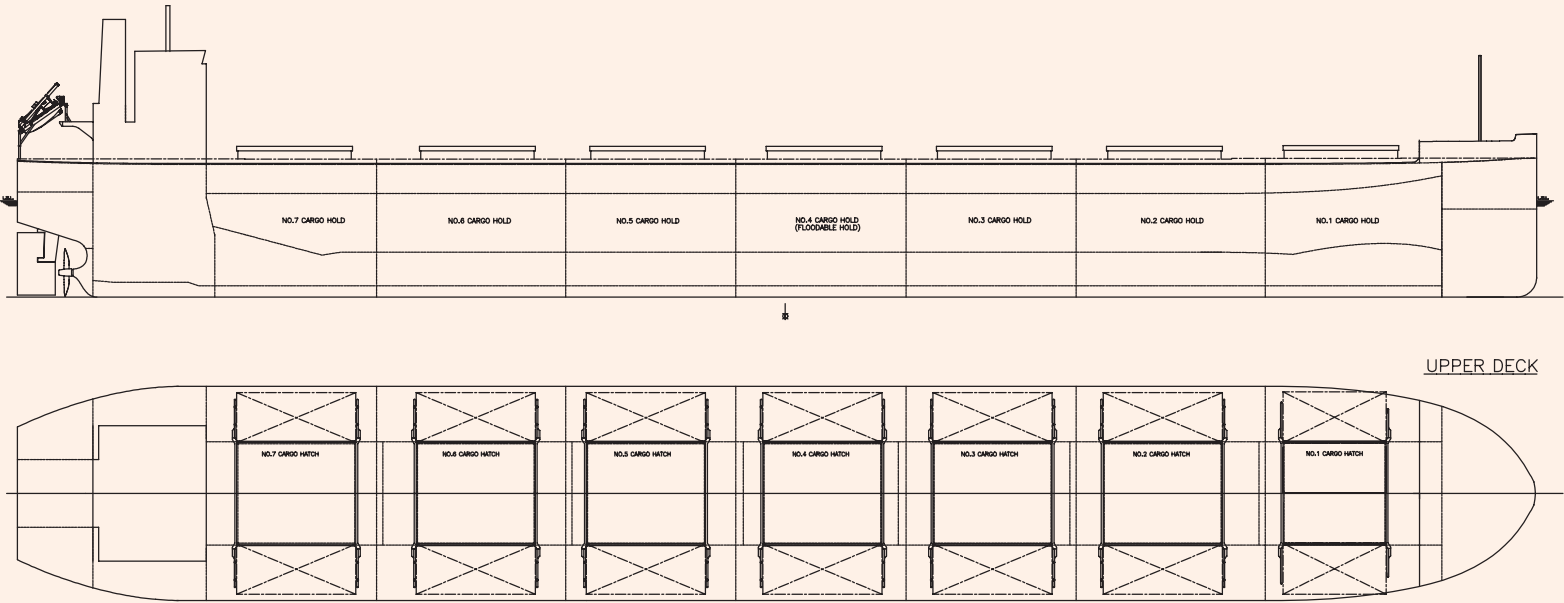
Oshima Shipbuilding Co., Ltd. delivered AQUAVITA AIM, a 82,192-DWT bulk carrier, to SEAFARERS SHIPPING, INC. , in November 2019.

Features

- 1. This vessel has largest deadweight of Panamax bulkers in the world with shallow draft and Wide hatch cover improves cargo handling efficiency.
- 2. Advanced Flipper Fins & Rudder Fin which improve propulsion efficiency are installed.
- 3. Special bow form, Seaworthy Bow improves speed performance in rough sea conditions as compared to ordinary bows.

PRINCIPAL PARTICULARS

Length (o.a.)	228.995 m	Main engine	MITSUI MAN B & W 6S60ME-C8.5
Breadth (mld.)	32.26 m	MCR (kw×rpm)	9,120 kw × 84.0 rpm
Depth (mld.)	19.98 m	Speed (service)	14.5 knots
Draft (mld.)	14.48 m	Complement	24
Gross tonnage	43310	Classification	BV
Deadweight	82,192 MT	Loading capacity (grain)	97,710 m³
		Builder	Oshima Shipbuilding Co., Ltd.



BRILLIANT SAKURA 82,000 DWT Bulk Carrier 57

☐ Contents ☐ By Builder ☐ By Ship Type



BRILLIANT SAKURA 82,000 DWT Bulk Carrier 57

Sanoyas Shipbuilding Corporation delivered the 81,800-DWT bulk Carrier “BRILLIANT SAKURA” in October 2020.

Features

1. This is the memorable 1st vessel of a series of the SANoyAS newly developed 82,000DWT type PANAMAX bulk carriers. The vessel not only applies latest rules such as CSR B&T, NOx Tier III regulations, but also has the equivalent level of deadweight with shallower draft than builder's previous design. And the vessel exceeds 20% reduction of CO₂ emission by IMO's EEDI (Energy Efficiency Design Index : the grams CO₂ per ton nautical mile) regulation in advance and mostly approaching 30% reduction that shall apply to ships for which the building contract is placed on or after 2025.
2. For improvement of propulsion efficiency, the vessel is equipped with low-speed & long-stroke electronically controlled main engine combined with a high-efficiency propeller and rudder appendages. Furthermore, the company's patented energy saving devices such as SANoyAS developed “STF” (Sanoyas-Tandem-Fin) and ACE DUCT (Sanoyas Advanced flow Controlling and Energy saving DUCT) are applied. These energy saving devices have achieved about 8 % reduction of energy consumption and CO₂.
3. Considering eco-friendly features, various countermeasures such as main engine with SCR complied with NOx emission Tier III limit for the prevention of air pollution, SOx scrubber for SOx emission control in global area and

dedicated low Sulphur gas oil tank to cruise in ECA(Emission Control Area). In addition, various countermeasures such as Ballast Water Treatment System and independent holding tanks for rainwater on upper deck for the protection of marine environment, are also incorporated.

4. Furthermore, for improvement of the vessel's maintenance, access trunks are arranged to make it possible to gain access from upper deck to double bottom even at laden condition. Accommodation complied with the latest IMO noise reduction regulation makes a contribution to improve comfortable working and living environment for officers/crews in the vessel.

PRINCIPAL PARTICULARS

Length (o.a.)	229.00 m	Deadweight	81,800 MT
Breadth (mld.)	32.24 m	Main engine	WIN GD 6X52
Depth (mld.)	20.15 m	Speed (service)	abt. 14.2 knots
Draft (mld.)	14.57 m	Classification	NK
Gross tonnage	43,509	Loading capacity (grain)	97,034 m ³
		Builder	Sanoyas Shipbuilding Corporation

KAMSARMAX 82,400 DWT Bulk Carrier 58

☐ Contents ☐ By Builder ☒ By Ship Type



KAMSARMAX 82,400 DWT Bulk Carrier 58

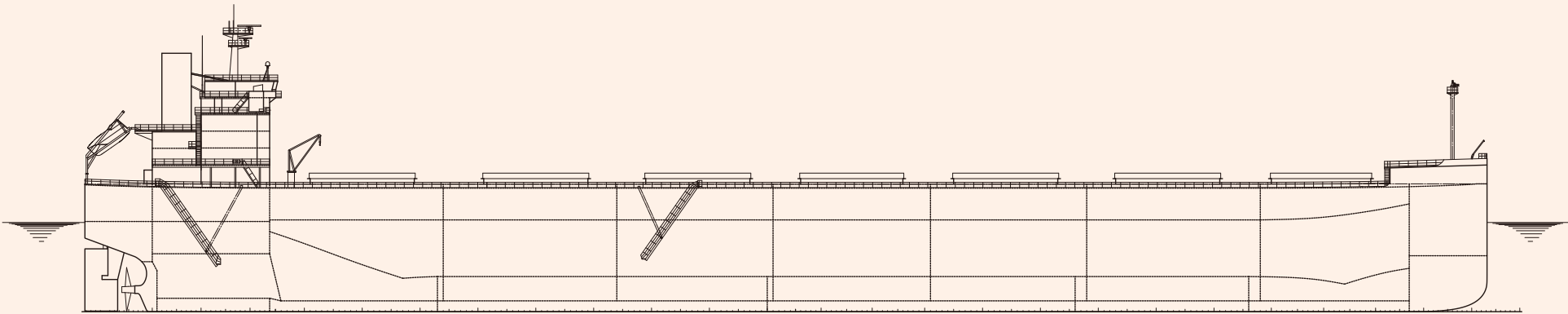
Features

- 1. Comply with EEDI Phase 3 regulations.
- 2. The unique hull form, which reduces resistance, is paired with our exclusive fuel-efficiency technologies to improve the ship's performance. A further improvement of about 31% reduction on the fuel consumption per ton-mile has been achieved successfully when comparing to the first KAMSARMAX delivered in 2005.
- 3. Equipped with the environmental technologies devices to prevent the air pollution from the NOx and SOx emissions and marine pollution from the oil spillages, etc.
- 4. Length of 229 meters, which allows entry to Kamsar Port in the Republic of Guinea.

PRINCIPAL PARTICULARS

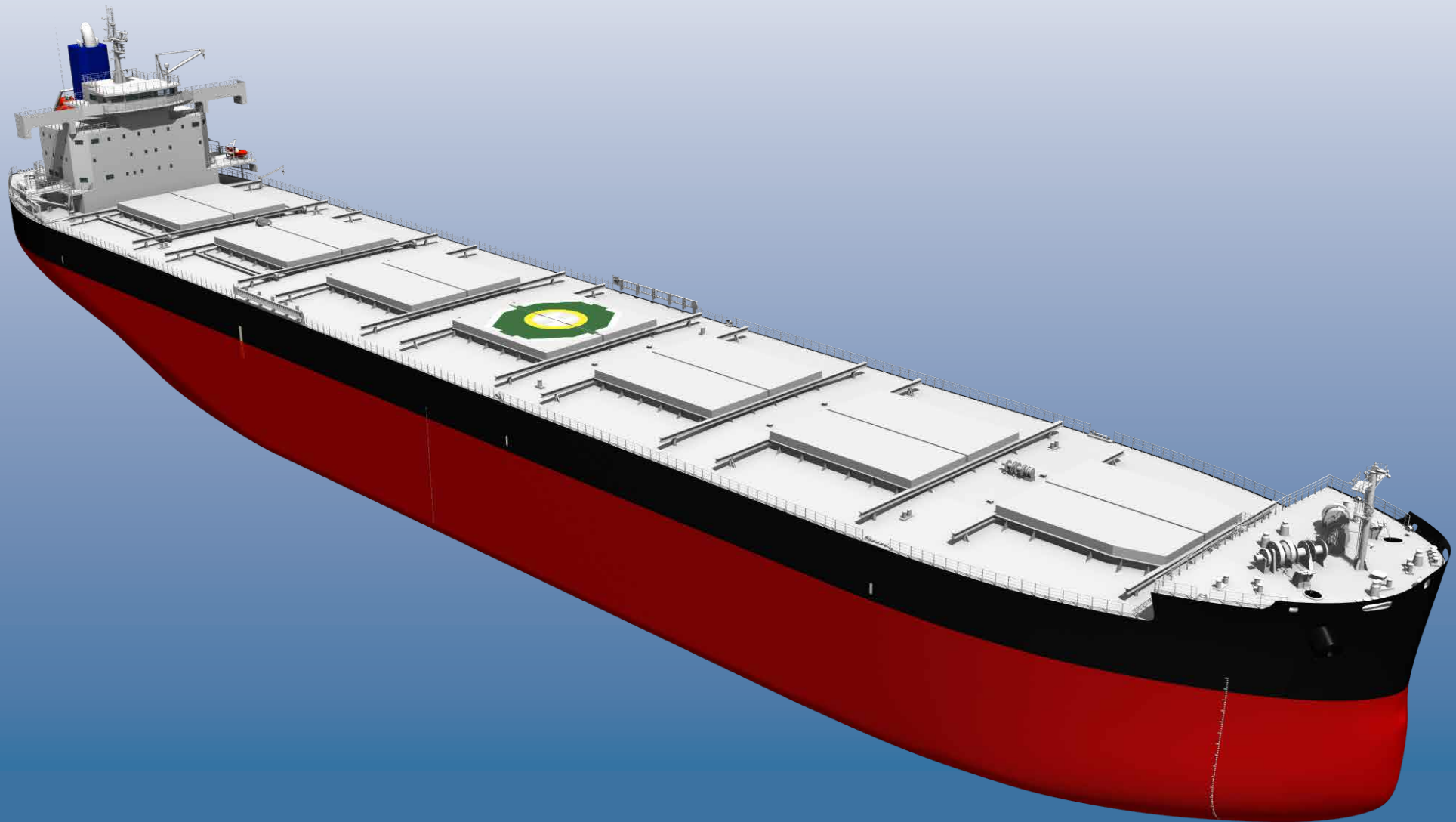
Length (o.a.)	229 m	Gross tonnage	44,000
Breadth (mld.)	32.26 m	Deadweight	82,400 mt
Depth (mld.)	20.15 m	Loading capacity	98,000 m³
Draft (mld.)	14.55 m	Builder	Tsuneishi Shipbuilding Co., Ltd.

- 5. Designed with shallow draft and minimal air draft for versatility to accommodate the majority of major ports.
- 6. Excellent trading flexibility for carrying the three major bulk cargoes of iron ore, grains, and coal, as well as hot coils.
- 7. Achieve a deadweight of over 82,000 MT with the shallowest draft in its category.
- 8. With a cargo capacity of 98,000m³, it can carry large volumes of low-density cargo, such as grains.
- 9. The original interior concept NEXT STYLE, utilizing exquisite design and indirect lighting, provides the crew with relaxation and comfort.



WIDE KAMSARMAX 88,500 DWT Bulk Carrier 59

☐ Contents ☐ By Builder ☒ By Ship Type



WIDE KAMSARMAX 88,500 DWT Bulk Carrier 59

Features

- 1. Comply with EEDI Phase 3 regulations.
- 2. The unique hull form, which reduces resistance, is paired with our exclusive fuel-efficiency technologies to improve the ship's performance. This has improved fuel consumption per ton-mile by approximately 11%, compared to KAMSARMAX.
- 3. Equipped with the environmental technologies devices to prevent the air pollution from the NOx and SOx emissions and marine pollution from the oil spillages, etc.
- 4. Keeping the length of 229m makes the ship possible to enter the Kamsar Port in the Republic of Guinea as well as about 90% of the ports that the KAMSARMAXs built

PRINCIPAL PARTICULARS

Length (o.a.)	229 m	Gross tonnage	47,400
Depth (mld.)	20 m	Deadweight	88,500 mt
Draft (mld.)	14.45 m	Loading capacity	103,300 m³
		Builder	Tsuneishi Shipbuilding Co., Ltd.

- by TSUNEISHI SHIPBUILDING have called at.
- 5. Enable to carry the three major bulk cargos of iron ore, grains, coal, while alternate loading is possible for high-density cargo, such as iron ore.
- 6. Air draft was maintained at the same level as KAMSARMAX.
- 7. The increase of 6,000 MT loading capacity has achieved
- by the wider beam and shallower draft, compared with the KAMSARMAX.
- 8. Cargo capacity has increased by 5,300m³ with bigger loading volumes of low-density cargo, such as grains.
- 9. The original interior concept NEX STYLE, utilizing exquisite design and indirect lighting, provides the crew with relaxation and comfort.

