

Environmental Preservation

Mitsui E&S Group Global Environmental Philosophy

The Mitsui E&S Group's approach to global environmental preservation is introduced on our website

Mitsui E&S Group Global Environmental Philosophy / Mitsui E&S Group Global Environmental Action Guidelines / Environmental Accounting (Non-Consolidated)

<https://www.mes.co.jp/english/sustainable/environmental/>

Environmental management data

<https://www.mes.co.jp/english/sustainable/environmental/detail03.html>

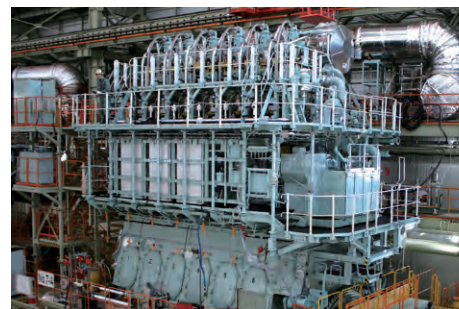
Initiatives to Reduce Environmental Impact through Business

Expansion of production of large marine diesel engines that comply with the NOx Tier III regulations

As part of its efforts to develop technologies that comply with environmental regulations and deploy them in actual equipment, Mitsui E&S Machinery, which boasts the top market share in large marine diesel engines in Japan, has developed the world's first built-in exhaust gas recirculation (high-pressure EGR) system using the world's largest test diesel engine installed in the Tamano Machinery Factory.

The company's high-pressure EGR system cools and cleans a portion of the exhaust gas from the engine and recirculates it back into the scavenging pipes, thereby reducing the oxygen content of the scavenged air and significantly suppressing NOx formation during combustion. Compared to other NOx control technologies, EGR has a relatively small impact on the engine room design and ship construction process thanks to its compact size, which is possible because the main components of the EGR system are integrated into the engine (built in).

We also support high-pressure SCR (Selective Catalytic Reduction), a technology that reduces NOx in exhaust gas through a chemical reaction using a catalyst or reducing agent. In this way, we can build systems that meet the needs of a variety of customers.



Environmentally friendly large marine diesel engines

Mitsui-MAN B&W engines Production schedule and number of diesel engines that comply with the NOx Tier III regulations

FYE Mar. 2019: 2 units
(2 high-pressure EGR, 0 high-pressure SCR)

FYE Mar. 2020: 14 units
(13 high-pressure EGR, 1 high-pressure SCR)

FYE Mar. 2021: 81 units
(71 high-pressure EGR, 10 high-pressure SCR)

We developed and accepted orders for the "neo66BC," a 66,000-ton, next-generation environmentally friendly bulk carrier with low fuel consumption and improved performance

https://www.mes.co.jp/english/press/2019/0820_001292.html

Mitsui E&S Shipbuilding has completed the development of an advanced version of its next-generation eco-friendly ship, the "neo66BC" 66,000-ton bulk carrier, that further improves fuel efficiency. The two ships ordered in FYE Mar. 2020 ('19/4 - '20/3) will be built at the Tamano Shipyard and completed in the second half of 2020 or later.

The neo66BC is the next-generation eco-friendly ship in 'the neo series' of bulk carriers. Its wide-beam, shallow-draft design provides excellent shipping flexibility and transportation efficiency. The advanced neo66BC adopts the latest main engine model and new energy-saving equipment to further improve fuel efficiency. It adopts the Harmonized Common Structural Rules (H-CSR), new rules that increase the weight of the hull, even as it maintains the listed cargo weight of 66,000 tons of the original version. To comply with regulations on sulfur oxides contained in exhaust gas, SOx scrubbers are available as an option in addition to low-sulfur fuel oil.

This is the second 'neo series' model to adopt the H-CSR, following the neo87BC. Going forward, Mitsui E&S Shipbuilding will continue to expand its lineup of 'neo series' models that adopt the H-CSR and will continue to develop vessels that are environmentally friendly and offer high transportation efficiency.



"African Batis," a neo66BC-model 66,000-ton bulk carrier