

Kawasaki develops sustainable aquaculture system aimed at strengthening food security

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Kawasaki Heavy Industries, Ltd. announced that it is developing a sustainable aquaculture system that contributes to improving food security in Japan. Capitalising on Kawasaki's technologies for filtering, sterilising, and other water treatments used for industrial plants, as well as its fluid control technologies for developing marine vessels, marine machinery, and railcars, this innovative system prevents viruses and parasites from entering the aquaculture farms, and allows for marine farming at locations near ports and coastal areas that are close to consumers and distribution centers. These advantages should enable fish farmers to provide safe and secure marine food to consumers.

The system is also designed to protect the beautiful, resource-rich sea and to provide a safer working environment for the people involved in the fishing industry, which leads to sustainable development of the industry.

In the period between 2022 and 2025, Kawasaki conducted four aquaculture tests, and starting in January 2025, the fifth test is being conducted for farming "rainbow trout" (rainbow trout cultured in seawater) in the area near the Port of Kobe (by Kawasaki's Kobe Works).

To provide solutions to these challenges, Kawasaki launched a project in 2021 to develop technology for aquaculture that is sustainable, leaves a small environmental footprint, and is robust against external factors such as red tides (harmful algal blooms) and water temperature changes. Named the "MINATOMA System" (literally, "right-by-the-port" system), this project aims to utilise the sea near ports and coasts (close to consumers and distribution centres) that have not been used previously for aquaculture. Through this system, Kawasaki aims to present the potential for the aquaculture business in areas near ports and coasts, thereby contributing to the future food-related challenges facing humanity.