

# ONE introduces world's first dual-temperature refrigerated container

February 6, 2024



Ocean Network Express (ONE) announced the introduction of the world's first trial for a dual-temperature refrigerated container featuring Controlled Atmosphere (CA) capabilities, developed in partnership with Pan Pacific International Holdings Inc. (PPIH) and NAX Japan.

This groundbreaking initiative marks the maiden voyage of a marine transportation system utilizing such advanced technology, aimed at transporting a diverse array of perishable goods and fruits from Japan to the global outlets of "Don Quijote," Japan's largest discount store chain under PPIH's management.

Additionally, beyond facilitating the transportation of commodities across two distinct temperature zones, this innovative container incorporates CA functions designed to extend the shelf life of fruits and vegetables. This enhancement promises to revolutionize the logistics landscape by offering a more efficient means of transporting goods in smaller quantities, thereby

mitigating inventory risks and driving down costs, CO2 emissions, and food waste.

According to a statement, a fordable partition has been incorporated within the container, dividing it into separate temperature zones. The section adjacent to the reefer unit accommodates both chilled and frozen temperatures, ensuring cargo remains within the range of -30°C to +30°C, mirroring standard refrigerated containers.

In the other compartment, a thermal fan circulates cold air from the ceiling to maintain cargo temperatures between -5°C and +30°C. The placement of the partition can be customized according to the customer's specifications, and when not in use, it can be stowed in the ceiling, transforming the container into a conventional refrigerated unit.

PPIH presently operates 43 stores across six Asian nations, including its speciality outlet "DON DON DONKI," which predominantly features Japanese goods. The challenge of maintaining the freshness of Japanese fruits and vegetables during ocean transit has been an ongoing concern, particularly given their popularity at each store. Additionally, the need to optimize container loading efficiency and reduce transportation costs, especially for countries like Thailand and Malaysia with lower store volumes, has become imperative.

Through the utilization of the dual-temperature refrigerated CA container, ONE, PPIH, and NAX Japan aim to streamline container loading by consolidating smaller quantities of diverse perishable items into a single container. This strategy not only targets a reduction in overall transportation expenses but also ensures the preservation of freshness and quality throughout the shipment. NAX Japan, in collaboration with ONE, serves as a logistics partner in the export of perishable goods.

The development and trial shipments of the dual-temperature refrigerated container have received support from a subsidy project initiated by the Ministry of Agriculture, Forestry, and Fisheries in Japan during the Fiscal Year of 2022.

ONE, PPIH, and NAX Japan remain committed to advancing this trial initiative, to foster more consistent exports of Japanese agricultural products and bolster their global promotion efforts.

