Editorial

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Smooth-running ballast water treatment with Alfa Laval PureBallast 3

Dowa Line, USA, Case story

Though headquartered in Japan, Dowa Line has had operations in the Americas for over 35 years. The company is not only one of the leading Japanese cargo operators in American markets, but also an early mover in ballast water treatment with extensive experience of operating Alfa Laval PureBallast 3.

Since 1981, Dowa Line has developed contract cargo shipping services throughout North, Central and South America, including the Caribbean. The company's vessels transport grain, fertilizer, bauxite and sugar, along with a wide range of other bulk commodities.

When it comes to environmental compliance, Dowa Line is comfortable being at the forefront. This can be seen in ballast water treatment, where the company has an unusually strong base of practical experience.

Eager for operating experience

In the years prior to its ratification, many ship owners installed ballast water treatment systems to prepare for compliance with the IMO Ballast Water Management Convention. In most cases, however, the systems were not turned on until the convention's entry into force in September 2017. Dowa Line chose to be an exception, running its systems to gain operating experience before it was actually required.

In addition, Dowa Line was among the first to experience PureBallast 3, the third generation of Alfa Laval's ballast water treatment technology. Attracted by its chemical-free process and solid treatment performance, the company had been following PureBallast closely for a number of years. When PureBallast 3 was launched, making these advantages available with a much smaller footprint, Dowa Line was first in Japan to install the 1000 m³/h version.

Setting sail with PureBallast 3

Dowa Line chose PureBallast 3 for its Harmony series of vessels, which were delivered from Shin Kurushima Dockyard between April and August of 2015. Each of the 38,000 DWT newbuilds – UNITED HARMONY, NEWYORK HARMONY, CHICAGO HARMONY and BOSTON HARMONY – was equipped with a 1000 m3/h PureBallast 3 system.

"PureBallast 3 was an excellent fit for our Harmony vessels," says Shigetaka Inoue, Managing Director, Marine Technical Department, Dowa Line. "The system is very compact."

Since Dowa Line's priorities are maximizing uptime and compliance, Dowa Line did not wait to put PureBallast 3 into service. All four systems began operating directly, which has given the company several years of real-life experience.

Simple, efficient and cost-effective

The most striking thing about PureBallast 3, says Inoue, is how easy it is for the crew to use it. "It's very easy operation," he explains. "The crew member just pushes the button – and that's it. Most important for crew members is that the system is simple."

According to Inoue, PureBallast 3 works smoothly and effectively during both ballasting and deballasting. This is a contrast to Dowa Line's previously installed ballast water treatment systems, with which there have been some difficulties. Moreover, the chemical-free treatment means lower operating costs and no hassle with consumables.

"PureBallast 3 doesn't affect vessel operations or life for the crew," Inoue concludes. "It's not much trouble."

USCG approval a must

Given the areas where Dowa Line operates, of course, ease of use would mean little without U.S. Coast Guard approval. "We are operating mainly in the United States, Caribbean and South America, so we should deal with the USCG," says Inoue. "That's the reason we choose Alfa Laval."

In 2015, when Dowa Line procured its PureBallast 3 systems, no ballast water treatment solution had yet received USCG type approval. However, PureBallast had been among the first technologies approved as an Alternate Management System (AMS) under USCG regulations.

Since then, PureBallast 3 has received full USCG type approval, which Dowa Line sees as critical going forward. "First of all, Alfa Laval already has USCG type approval," he says. "That's the biggest advantage!"

More PureBallast 3 systems on the way

Based on the positive results aboard the Harmony vessels, Dowa Line has chosen to install PureBallast 3 systems on a further nine vessels to be built at Shin Kurushima Dockyard. Six of the new systems will handle 1000 m3/h, while the other three will handle 2000 m³/h. "We choose Alfa Laval because of our previous experience," says Inoue. "The PureBallast 3 system works well, our crews are happy with it and we can rely on it to comply with ballast water management regulations."

Above all, Inoue emphasizes the security in working with an established maritime supplier. "Because of their long history, they have lot of experience," he says. "Therefore, we trust Alfa Laval."