CASE STORY

For 52 Turkish coaster fleet owners, Alfa Laval and PureBallast technology became the clear choice

Ballast water management rules have meant new challenges for the shipping industry. The learning curve has been especially steep for owners of smaller fleets, who may not have the resources to thoroughly evaluate all potential solutions on the market. In Turkey, a group of 52 shipowners overcame this by coming together in a systematic effort to gather information on ballast water treatment. After an extensive investigation into all available technologies, they unanimously decided to place their trust in Alfa Laval and Alfa Laval PureBallast 3.

A Turkish coaster vessel with a recently installed Alfa Laval PureBallast 3

“Alfa Laval was far and away the leader when it came to expertise on ballast water management.”

– Murat Er, leader of the Turkish shipowner group’s technical committee

The Turkish ballast water treatment group initially grew out of informal conversations between members of the local shipping community. As new ballast water regulations began coming into force, some shipowners found that they shared a sense of confusion about what the new rules and the required investment would mean for their businesses.

“Ship operators in Turkey are really old family friends,” explains shipowner Murat Er, who oversaw the group’s evaluation process. “Our fathers and grandfathers knew one another, and some of us are even neighbours as well. We started as friends just talking on the weekends about these new technical challenges, and the organization just created itself.”

“I had been telling people that this is a very involved, very technical process,” adds Cihan Ergenç, the owner of supermax tankers who was the first to install ballast water treatment systems for series of newbuilds. “I said you need to plan on two years for everything: selecting a supplier, making preparations for planning and approvals, logistics, and finally installation. They thought I was joking, but once they looked into things, they came back to me and said ‘This is serious! There is a lot to learn!’”

From an original group of around seven (Murat Er, Hüseyin Konan, Rasim Akar, Arif Uzuner, Sinan Atasoy, Muammer Yağcı, Cihan Ergenç), they developed into a formal organization of 52 shipowners, many with fleets of around 1-5 vessels. A smaller technical working committee, led by Murat Er, carefully studied the issues, technologies and suppliers, sharing their findings with the larger group. While the group included a handful of tanker fleets, the majority of ships were smaller coastal bulk ships, or “coasters”.

A structured approach to narrow it down

Based on a preliminary assessment of the available types of ballast water treatment solutions, the group decided to focus on two technologies: electrochlorination (EC) systems and systems based on ultraviolet (UV) disinfection. From there, they conducted a detailed evaluation of three EC systems and twelve UV systems, all from separate manufacturers.

The group developed a structured decision process based on 50 parameters. These included technical details related to system performance and regulatory compliance, as well as supplier capabilities such as installation support, crew training and long-term service possibilities. The approach developed into a very transparent and democratic process. Results were tracked in a spreadsheet shared with all stakeholders, including the suppliers themselves, thereby creating learning opportunities for all involved.

“Managing this process turned into a big responsibility,” says Murat Er. “Over eight months, we held 45 meetings with the fifteen suppliers. The shortest meeting was six hours! We quickly learned so much that we could see some suppliers were not very knowledgeable about ballast water treatment challenges or even related details about their own technologies.”

“We ruled out EC technologies and suppliers very early,” Cihan Ergenç emphasizes. “The key to ballast water management is protecting the environment. EC systems produce chlorine, which not only would end up damaging our pipes and our ballast tanks, but eventually you put it back into the ocean. We determined these systems would be a disaster for our ships and bad for the environment.”

PureBallast 3 Compact Flex answers space and flexibility concerns. Ideal for most vessels, it arrives as loose components for complete installation freedom, and is available for flows from 32–1000 m^3/h.

One supplier stands out

Murat Er notes that while the shipowners were not particularly close to any one supplier at the start of their search, the difference of Alfa Laval emerged clearly as the process progressed. After narrowing it down to just four options, the group gathered for a big final meeting after several months of work and voted unanimously to choose Alfa Laval's Pureballast 3.

"Alfa Laval was far and away the leader when it came to expertise on ballast water management," Murat Er says. "With coasters, we're travelling mostly in shallower waters, which often means dirtier waters. We had to be absolutely confident in the equipment, and we saw significant technical advantages with PureBallast 3 compared to the other designs we looked at."

Alfa Laval's service and support proved an equally critical factor for the Turkish group, with the global company's well-established presence in Turkey offering strong reassurance to the shipowners. For many smaller fleets, crew operation of ballast water treatment technologies can often be one important challenge, and the group therefore saw Alfa Laval's training capabilities as especially helpful. To that end, Alfa Laval also opened a regional PureBallast crew training centre in Istanbul the fall of 2019.

"When we opened the crates, we really got the feeling that this is premium equipment from a professional supplier." – Murat Er

As Cihan Ergenç mentions, however, the decisive factor ultimately came down to long-term reliability. “This isn’t a one-year issue,” he says. “We had to ask: what will happen 10 years from now? We know of several companies that are already out of the ballast water treatment business. We had to think about access to spare parts and service. We know Alfa Laval will be there when we need them.”

Already, members of the group have been grateful for the experience and knowledge Alfa Laval has provided during complicated retrofit projects. In particular, they highlight the help they received in aligning installation and commissioning with their existing IOPP certification schedules.

“My fleet has now completed our first retrofit installation at a local shipyard,” says Murat Er. “When we opened the crates, we really got the feeling that this is premium equipment from a professional supplier. Everything went extremely smoothly. Alfa Laval met all of their responsibilities perfectly, and it only took 22 days to install the PureBallast 3 system.”

52 heads are better than one

After learning so much about ballast water treatment, what advice would the Turkish group offer to owners of similarly sized fleets around the world?

“Through this collective work, we gained collective knowledge,” says Cihan Ergenç. “It has been a success story for all involved and brought us shipowners even closer together. It was hard work, but I recommend all shipowners around the world go through this learning process because it has been valuable both commercially and for our community.”

“We learned that this decision is really about building a long-term relationship,” Murat Er concludes. “The equipment will be on board until the last day of the ship’s life, and so the partnership is going to last as long as your ship does. You have to ask yourself: who do I want for that relationship? After doing this work, I know that I want it to be Alfa Laval.”

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– Cihan Ergenç, group member and owner of a supermax tanker fleet

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

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