



Training brings peace of mind in ballast water treatment and more

British Antarctic Survey, UK

Case story



British Antarctic Survey (BAS) operates in some of the world's harshest and most remote environments. When installing Alfa Laval systems on its new research vessel, the organization sent crew members for in-depth training at Alfa Laval training centres.

Part of the UK's Natural Environment Research Council, BAS delivers and enables world-leading research in harsh polar environments. For over 20 years, the organization has depended on two

vessels – RRS James Clark Ross and RRS Ernest Shackleton. Soon, however, these will be replaced by the highly advanced RRS Sir David Attenborough, built in the UK by Cammell Laird.

Alfa Laval has provided the RRS Sir David Attenborough with a range of prominent systems: high-speed separators for fuel treatment, Alfa Laval PureBilge for oily water treatment and Alfa Laval PureBallast 3 for ballast water treatment, which is a new and unfamiliar application. To ensure smooth opera-

tions in difficult conditions, BAS had Alfa Laval train crew members in all of these systems.

A demanding workplace

Besides doing a job currently handled by two vessels, the RRS Sir David Attenborough will operate in some of the world's most severe and remote marine areas. Since the vessel will be vital to polar research, logistics and subsea surveys, the crew must be able to identify and rectify any issues with the systems on board.

“Because we’re in Antarctica, getting last-minute spare parts or specialized technicians from a supplier is almost out of the question,” says Carrie-Anne Harris, Second Engineer on the RSS Sir David Attenborough. “If we or the machinery fail at some level, it can have a huge impact on things like funding for the scientific projects, or on the personnel situated at the polar research centres. As the ship will be carrying food and supplies, any problems that can’t be fixed quickly will result in major disruption and substantial cost.”

Gaining first-hand insights

“Because we have a lot of new equipment on board, it was crucial for us to get the right training,” Harris says. She notes that Alfa Laval separators and even PureBilge have been used on the older BAS research vessels, but that operating knowledge has often been passed along from crew member to crew member. When operations begin on RRS Sir David Attenborough, BAS wants not only the equipment – but also the crew’s insights – to be fresh.

“This was my first visit to Alfa Laval for training,” Harris continues. “It was really useful to be able to ask questions, as you can get a deeper understanding of why things work, not just how they work. This helps in the long run, because if you understand why a piece of equipment operates in a certain way, it makes it much easier to diagnose problems if something goes wrong.”



Skills bring security

When it comes to ballast water treatment, the equipment on RRS David Attenborough is entirely new – as is the application. When the vessel enters operation, it will be the first time crew members have had to comply with the global legislation targeting invasive species. Receiving thorough training for PureBallast 3 was therefore a high priority.

“It’s something very new that none of us had ever worked with before,” Harris explains. “Our deck officers were a little worried by the fact that they can’t pump water into the ship without putting through this system. But once we had been through the training, it became clear that the system itself is very simple and easy to use. Being able to see it and having someone talk us through it really gave us peace of mind.”

Experience matters

In general, Harris was impressed by the open dialogue between Alfa Laval trainers and the course participants. “All of our instructors were very knowledgeable and practical, and I got the impression that they’ve been with Alfa Laval for a very long time,” she says. “But it wasn’t just two days of sitting in a classroom and listening. It was very much a two-way conversation.”

What Harris and her peers appreciated most, however, was the hands-on nature of the instruction, which gave them opportunities to practise the theory in the workshop. “It’s all very nice looking at a presentation, but it’s so much more valuable to be able to touch it,” she concludes. “As engineers, we like to learn with our hands.”

Total solutions in ballast water treatment

<p>PLANNING AND SOLUTION</p> <ul style="list-style-type: none"> • Validated solution for your need • Easy integration • Simple and secure investment 	<p>PROJECT AND INSTALLATION</p> <ul style="list-style-type: none"> • Correct and on-time delivery • Time and money saved in installation • Successful start-up • Crew prepared for operation 	<p>PERFORMANCE ASSURANCE</p> <ul style="list-style-type: none"> • Confidence in proving compliance • No business interruptions • Lasting performance
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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.