

# Arctic Passion News

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### Dear Reader,

You are holding the fresh issue of our bi-annual magazine where we aim to keep you updated on our customer projects as well as the latest technical developments in the field of icebreaking vessels.

### For decades, Aker Arctic has focused

on the design and construction of icebreaking vessels. Many complex systems, that are not common to typical open water vessels, are needed to ensure these vessels can operate efficiently and independently.

For example, icebreaking vessels need sophisticated propulsion systems for increased manoeuvrability, special paint and heeling systems to reduce the friction between the hull and the ice and advanced heating and insulation systems to withstand the cold environment.

Additionally, there are essential services such as ice model testing and full-scale ice testing (sea trials in ice) to verify the performance of the vessel. These trials include scientific measurements of ice properties, assessing the vessel's technical performance and understanding the practical operation of the ship in ice.

### An exceptional number of ice trials

were held during the past winter season in both the Baltic Sea and the Russian Arctic, many of them performed by us. You can read about them in this issue. We have several articles to tell you about the technology used in ice trials and how measurements are completed.

Full-scale ice trials are one of the final stages of the design of an icebreaker. At Aker Arctic, we provide services for all aspects of the design and construction phases of an icebreaking vessel. We believe in an integrated design approach where communication between key stakeholders is continuous and open.

### Design work is an evolving process,

where information and decisions from previous phases are crucial. Communication and continuity are important parts of a successful, high-quality design, where errors are minimized. This helps mitigate the risk of delays and cost overruns for the builder and ship owners. We strive for continuous, long-term partnerships in the overall ship acquisition and building process. The ice trials you will read about in this issue are the outcome of our collaborations, where all parties, including the designers, the builders and, finally, the satisfied owners, benefit.

Sincerely,

*Reko-Antti Suojanen*  
Managing Director

