

"Le Commandant Charcot, the combination of a heavy icebreaker with a luxury exploration cruise ship, was an extremely interesting engineering project. It has proven highly successful, offering safe travelling to remote areas in the Arctic, Antarctica, and Greenland," Suojanen adds.

"Aker Arctic has earned a strong reputation for its deep expertise, inspiring confidence in its ability to deliver on promises."

Model testing continues

In addition to advanced ship design projects, Aker Arctic has maintained its commitment to model testing for 56 years. The current ice basin, inaugurated in 2006, is located in the same building as the main office in Helsinki.

"The ice and the testing techniques are continually updated with the latest technology and uses state-of-the-art computers, instruments, and equipment for the model tests. For example, autonomous models were introduced some years ago," Suojanen notes.

Adapting to change

The geopolitical shift, following Russia's invasion of Ukraine in 2022, prompted Aker Arctic to cease all activities with Russian customers and projects. The company strengthened its focus on likeminded international partners through initiatives, such as the ICE Pact signed by Canada, Finland, and the United States in November 2024.

Mika Hovilainen, managing director since 2024, emphasises the company's forward-looking vision: "We will continue to advance our expertise and leadership in the icebreaking sector by developing solutions that utilise our extensive experience and meet customer expectations."

Today, Aker Arctic is the only organisation in the world specialising exclusively in icebreaking vessels. With a team of 56 employees and a turnover of over €15M (2024), it continues to lead in innovation and technological advancements. ■

A journey of growth



The Aker Arctic team on a trip to Åland in 2016.

Ann-Cristin Forsén, Kirsi Rosenström, and Sami Saarinen have been with Aker Arctic since the beginning, witnessing its transformation from a small model testing firm with 12 employees to an international engineering company with a staff of 56 from eight different countries.

Ann-Cristin Forsén joined the ice model testing laboratory in 1982 and has worked in all three ice laboratories (WIMB, WARC, and Aker Arctic's current laboratory). She started as a trainee, preparing ice for tests, measuring ice properties, and equipping models

before progressing to conducting tests herself. She has dedicated her entire career to model testing, as she has enjoyed the diversity of tasks, opportunities to expand her skills, and limited desk work.

"Model testing was very different in the early 1980s," she recalls. "The first tests were conducted using an integrator, which generated a graph that we then calibrated. Reports were handwritten in pencil and later typed by our secretary."

Establishing the new company

Kirsi Rosenström joined the finance department at Kvaerner Masa-Yards Helsinki New Shipyard in 2003. Amid turbulent times at the shipyard, she learned about the development of Aker Arctic and approached Mikko Niini, who was tasked with establishing the new company.

Rosenström became responsible of setting up the company's financial and accounting systems, which she continues to manage today, alongside the human resources function. As the workforce has expanded, her HR responsibilities have grown significantly over the years.

A wide range of responsibilities

In 2000, Sami Saarinen joined the ice laboratory, then known as the Masa-Yards Arctic Research Centre (MARC). Over the years, he has taken on a variety of roles, starting with model testing, before moving on to hull strength calculations, customer support for large projects, and developing solutions to meet client needs. More recently, he has been consulting on major development projects.

In addition to his core responsibilities, Saarinen began participating in Arctic ice expeditions and full-scale ice trials early in his career.

"My first longer expedition was to the Barents Sea in 2005 with Göran Wilkman, who was in charge of the ice laboratory at that time. During this trip we assessed ice conditions, measured ice thicknesses, and analysed environmental factors for international oil companies," he recalls.

Memorable ice expeditions

Since then, Saarinen has participated in numerous expeditions, many of which have lasted several weeks. While he has enjoyed each one, two stand out: his two-month voyage to Antarctica in 2019 onboard a research icebreaker, and a reconnaissance mission to Baffin Island in northern Canada in 2007, where he conducted aerial surveys to identify icebergs.

"The ice in Antarctica is vastly different from Arctic ice, but with our innovation, the double-acting ship (DASTM) hull, the research icebreaker was able to navigate the heavy ice stern-first, Saarinen says."

"On Baffin Island we encountered an extreme blizzard. It was impossible to see anything from the hotel room window due to snow piling outside and all flights were cancelled. Yet, venturing outside, I was amazed to see a local man casually driving past on a snowmobile, wearing only a cap and no gloves. The blizzard didn't bother him," he adds.



Sami Saarinen on a reconnaissance mission to Baffin Island in northern Canada in 2007.

Balancing work with fun events

Rosenström, Saarinen, and Forsén agree that working at Aker Arctic has always been a blend of hard work and enjoyable experiences. Their roles have evolved continually, presenting new interesting challenges that have fostered their personal growth and motivation to stay with the company.

The entire team has travelled extensively, participated in sport events, and enjoyed social activities such as restaurant dinners, wine tastings, and cooking classes. Rosenström recalls particularly memorable trips to Murmansk, Norway, Vyborg, St. Petersburg, Tallinn, and Åland, where they had the pleasure of meeting customers and learning about their history.

Forsén and Saarinen highlight the company's long tradition of participating in rowing competitions at Sulkaiva and Kulosaari every summer for 30 years. Aker Arctic even had its own rowing club and church boat, which was maintained every spring, with practice sessions twice a week during the ice-free season.

Continuous growth

Rosenström notes that Aker Arctic has hosted many distinguished visitors, which has been a great honour. She also reflects on the company's continuous growth over the past two decades.

"When the building was completed, the ice model testing staff and designers from Helsinki Shipyard moved in, doubling our workforce. Initially designed for 25 persons, our facility now accommodates 56, and space is becoming increasingly scarce," she observes.

Saarinen and Forsén share a final anecdote from their last day at the old model testing laboratory before relocating to Vuosaari:

"As the building was set to be demolished, we decided to have a paintball game and conduct an oil spill recovery test in model-scale. It turned out to be a rather messy affair." ■