

We Participate Testing And Operating Of Propelled Loose Bow Tug In Saimaa Icebreaking



Can a propelled loose bow pushed by a tugboat perform as well as a big state icebreaker? Alfons Håkans' Managing Director Joakim Håkans believes so. Now the concept will be methodically tested. Illustration: ILS Oy

The idea that Alfons Håkans' Managing Director Joakim Håkans came up with some half a dozen years ago is now going to be tested on the Finnish lake of Saimaa; a tugboat breaking ice by pushing a propelled loose bow. The testing and the developing of an icebreaking loose bow with propulsion is part of the EU program WINMOS II (Winter Navigation Motorways of the Sea II). Finnish Transport Agency (FTA) awarded the building contract to Turun Korjaustelakka, in Naantali, Finland, on the bow. Transport Agency's design partner in the project is the Finnish naval architecture and marine engineering company ILS. Alfons Håkans' won the procured contract of pushing the bow which will be pushed by tug Calypso during the coming ten years. The real piece of news is not the bow, but the loose bow with propulsion, which could mean that the icebreaking capacity could match the biggest state icebreakers' performance. - The loose bow as such is not a new concept. We used a loose bow for ice breaking together with a pushing tugboat in the 1980's. But this bow was nothing else than a huge "spoon" pushed by a tugboat, Alfons Håkans Managing Director Joakim Håkans explains. The idea of an icebreaking loose bow with propulsion struck Håkans half a dozen of years ago. - I started to think if it would be possible to use the same concept, but in a larger scale. I wanted to know if a loose bow with propulsion could do the same job as the big state icebreakers. The cost of this kind of a loose bow would be some 20 percent of the cost of a big icebreaker's. And when the season is over, you just leave the bow waiting for the next season, while the pusher can work during the open water season with other jobs. This would mean huge savings. The idea behind this concept is purely one of efficiency and cost cutting, Håkans explains. Since icebreaking is about mass and power, Håkans says he immediately realized that it would be impossible to break wider ice channels and thicker ice with loose bows without propulsion. - It remains to be seen if the bow should have pushing or pulling propulsion. Håkans says that he presented the idea of the loose bow with propulsion for the ILS some years ago, and he was being convinced of that there could be something in the idea. - Their calculations showed that it seemed like I could be right. And here we are now – starting to test the concept, which I think is very interesting for future of icebreaking, Håkans says.