

Press release 11 April 2018

Viking Grace transforms into a sailing ship on 12 April

Viking Line starts collaboration with the winds of the Baltic Sea. The M/S Viking Grace is the first passenger ship in the world equipped with a rotor sail for the utilisation of wind power. Developed by the Finnish company Norsepower Oy Ltd, the Rotor Sail Solution will cut fuel consumption and reduce emissions by up to 900 tonnes annually. Viking Line will operate the *Viking Grace* on wind-assisted voyages between Turku (Finland) and Stockholm (Sweden) from April 12th 2018.

The cylindrical rotor sail installed on M/S Viking Grace is 24 m in height and 4 m in diameter and it uses the Magnus effect for propulsion. As the rotor is spinning, the passing air will flow with a lower pressure on one side than the opposite side. The propulsion force created by this pressure difference will drive the vessel forward. The rotor sail operation is automated and the system will shut down in response to any disadvantageous changes in the direction or force of the wind. The rotor sail will reduce the vessel's carbon dioxide emissions by up to 900 tonnes per year, depending on the wind conditions.

The use of wind power reflects the green values cherished by Viking Line. The sea and the archipelago nature are close to the heart of the shipping company based in the Aland Islands, as well as a fundamental prerequisite for its business. Operational since 2013, the Viking Grace is among the most ecological passenger ships in the world: it is fuelled with Liquefied Natural Gas (LNG) and has very low emissions and noise levels. Thanks to the new rotor sail, she will be ever more environmentally-safe when passing through the archipelago of Turku.

"This is a great day for us. As an Åland shipping company, we rely on the sea for our livelihood so it's of prime importance for us to promote the well-being of the marine sea. We want to pioneer the use of solutions that reduce the environmental load. Based in Finland, Norsepower has developed a world-class mechanical rotor sail solution that will reduce fuel consumption. We are proud of the fact that our Viking Grace will be the first passenger ship in the world to benefit from this innovative solution", explains **Jan Hanses**, CEO of Viking Line.

The Finnish cleantech company, Norsepower Oy Ltd, has developed its rotor sail solution for five years. The initial idea of a rotor sail was brought about already a century ago, but along with the tightening environmental requirements and advanced material and technological solutions, the idea has recently become highly topical and interesting. Norsepower is years ahead of other actors in the development work.

"For Norsepower, it's an honour to be able to make the M/S Viking Grace even more environmentally-friendly by means of our novel rotor sail technology. The last traditional windjammers in the world were owned and operated by shipping companies based in Åland, so it's fitting that Åland-based Viking Line should be a forerunner in launching modern auxiliary sail technology. Viking Line and Norsepower's organisations have collaborated in an excellent manner in retrofitting the rotor sail solution on the Viking Grace, and the completion of this project is a great moment for all those involved", says **Tuomas Riski**, CEO of Norsepower.





In addition to the Norsepower rotor sail solution installed onboard the M/S Viking Grace, Viking Line will utilise wind propulsion also in the company's new vessel, which is due to be operational in 2020. Built in China, the passenger ship will be equipped with two mechanical rotor sails supplied by Norsepower, thus doubling the wind power potential.

Video:

https://drive.google.com/file/d/1JTIFalcOfezZendpbEsThYL0MyXQRsHL/view?usp=sharing

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