

To Whom it May concern

Performance and usage of Nanol Technology Additive Power+ ML on the Ferries of the Government of Åland.

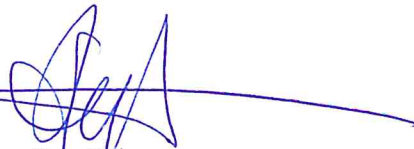
From June 2017 and until now the ferries M/S Skarven and M/S Alfågeln have been using Nanol Technology additive in the lube oil. The engines on board are Wärtsilä 2 x 9L20 and Wärtsilä 1 x 16V22.

We started with a test period on M/S Skarven from 12th June 2016 until 31st December 2016 where we used Nanol in one of the main engines to compare with the other one without the additive Nanol. During the test period in normal traffic conditions we observed a fuel oil saving of more than 3 % in the engine using Nanol.

M/S Alfågeln was drydocked in September 2019 including an overhaul of the main engine. We could clearly see less wear and tear in the main engine.

The results are to us remarkable and we have therefore expanded our agreement with Nanol technology for the next 2+2 years starting from 2019 and running on five (5) Different ferries in our archipelago traffic. This is part of our work helping to achieve our goals in minimizing the usage of fossil fuels for a sustainable future.

Mariehamn 2019-10-22



Sten Schauman

Procurement officer

Department of Infrastructure

Government of Åland

