

2024 IN REVIEW

Minke Marine A.L. LLC has made excellent progress since incorporating in late 2023 – though the founders have been working on the system since 2010. We are sharing a brief round-up of our 2024 highlights. You will see it has been a busy year with an **even busier and more exciting 2025 in prospect!**

Thank you for your interest in Minke Marine – Have a Happy Holiday Season.

Please feel free to reach out to us – gbbcandy@minkemarine.com

Or follow our updates at www.minkemarine.com

Minke Marine Air Lubrication System (MMALS)- Overview

The MMALS is unique in its approach to Air Lubrication. It does not use compressors or blowers and only requires two hull penetrations. The result is a very low impact installation at a small fraction of the CAP EX and OP EX of a contemporary ALS. Small scale testing (not model or tow tank testing) gave double digit returns, so though low impact and inexpensive the indication is of comparable performance to contemporary ALS. A customer commissioned pre-AiP assessment completed by DNV concluded the MMALS will bring net gains to a vessel. A full-scale installation is in process.

Approval in Principle – DNV April 2024

The initial DNV feasibility assessment was immediately followed by a formal application to DNV for Approval in Principle. DNV completed the thorough review, generally, and with a specific installation in mind. AiP was issued in April. An achievement for Minke and an important recognition/verification for this elegant, new Air Lubrication System.

Partner with Experience - 2024

The MM ALS is a very attractive concept, but it takes more than a concept. The best way to bring some engineering, fabrication and installation capability on board was to partner with a company known to MM. Aitken Marine International brings established experience and resources to our innovative new entry into the ALS market. With 35 years in the industry AMI provides much needed engineering/installation and project execution know how to Minke – we are using it already.

First Project Awarded - July 2024

After the feasibility study and subsequent AiP, MM entered serious discussion with a very proactive owner to complete a full-scale installation aboard a 50,000 DWT dry cargo vessel. It is hard to overstate the importance of this project, it provides a clear indication of the simple, robust, effective fundamentals of the system. The MMALS simply and inexpensively improves CII ratings and saves fuel every sailing day. Reducing costs and emissions, with a very short ROI.

3-D Scan Engineering and Approval – August-December 2024

The project vessel was surveyed and 3-D scanned. Approval of detailed drawings is close to complete. Fabrication of several key components is complete, with the balance to come in early 2025 – installation Q1 2025.

Additional Opportunities and Data

Survey and 3-D Scanning crews have been sent to different vessels, sizing up to Suezmax and Newcastlemax. Subsequent engineering drawings and installation renderings being reviewed with owners and different Classification Societies. We've also completed very positive ROI and NPV case studies for several installation models and trading patterns.

More IP - December 2024

Earlier in 2024 a provisional patent application was finalized and submitted for final examination. It was exciting to receive the patent, doubling the number of patents attributed to our ALS.