

## Press release

Stuttgart, September 5, 2022

## MAHLE develops technologies for clean shipping

- At the SMM trade fair in Hamburg, MAHLE is showing technologies for climate-neutral electric ships.
- Components for the fuel cell peripherals make zero-emissions vessels possible, with the use of hydrogen.
- MAHLE's decades of experience in fuel cell technology allows for its rapid implementation in marine applications.

Motorized passenger and freight ships began operating 200 years ago. Now, new technologies are paving the way for a climate-neutral future. At SMM in Hamburg, a specialized trade fair for the maritime industry, the MAHLE technology group displays its thermal management solutions for fuel cell peripherals used in all classes of electrically-driven vessels (September 6–9 2022, hall A3, booth 218). Using hydrogen produced in a climate-neutral manner, they are able to operate with zero emissions. Thanks to over ten years of experience as a series supplier for fuel cell technology used on the roads, MAHLE can quickly adapt these technologies for marine applications.

"Fuel cells are opening the door for a new era in shipping. Vessels driven with this technology are not only cleaner, but they also operate more quietly and with less vibration than ships driven by diesel and heavy fuel oil. This also makes them attractive for ferries and yachts," says Markus Hübsch, Director of Industrial Thermal Management at MAHLE.

In particular, thermal management, i.e. the cooling of the sensitive and expensive fuel cell, requires a profound understanding of this technology and the necessary expertise to realise such complex cooling concepts. That is why the company's experience in thermal, but also air and liquid management, as well as mechatronics and electronics, is combined in its in-house hydrogen test centre in Stuttgart, among other things.



A prerequisite for the broad application of fuel cell technology is the ample availability of cleanly-produced hydrogen. MAHLE therefore joined the Hydrogen Council in 2020, a worldwide initiative of leading industrial companies involved in energy and transport that seeks to establish hydrogen as an essential element of the global energy transition.

The German-based technology group brings with it the necessary core competencies for the development and industrialization of custom-designed solutions, acquired throughout its more than 100 years of history. MAHLE not only represents fuel cell technologies for passenger cars and commercial vehicles, but is also working on the usage of hydrogen in stationary applications, for example in the area of energy supply, and as fuel for combustion engines.



Expertise: At the hydrogen testing center in Stuttgart, MAHLE is testing robust and efficient fuel cell solutions.

Source: MAHLE



Thanks to over ten years of experience as a series supplier for fuel cell technologies used on the roads, MAHLE is able to quickly adapt these technologies for marine applications.

Source: Dominic Fraser

## **Contacts in MAHLE Corporate Communications:**

Ruben Danisch

Spokesperson, Product/Technologies

Phone: +49 711 501-12199

E-mail: ruben.danisch@mahle.com

Christopher Rimmele Spokesperson, Aftermarket Phone: +49 711 501-12374

E-mail: christopher.rimmele@mahle.com



## **About MAHLE**

MAHLE is a leading international development partner and supplier to the automotive industry with customers in the passenger car and commercial vehicle sectors. The technology group, which was founded in 1920, is working on the climate-neutral mobility of tomorrow with a focus on the strategic fields of electromobility and thermal management as well as other technology fields to reduce CO2 emissions, for example fuel cells and highly efficient combustion engines that can also run on e-fuels or hydrogen. Currently the share of MAHLE sales earned independently from the internal combustion engine for passenger cars amounts to more than 60 percent and is to increase to 75 per cent by 2030. Half of all the vehicles in the world now contain MAHLE components.

In 2021, MAHLE generated sales of approx. EUR 11 billion and is represented in over 30 countries with more than 71,000 employees in 160 production locations and 12 major research and development centers. (Last revised: 2021-12-31)

#weshapefuturemobility