

MONITORING FROM FAR AND NEAR

Utilizing ship's engine data profitably



A modern monitoring system that acquires all the relevant data of a ship and makes it available for any terminal device with internet access – that was MAP Engineering's idea. In Bachmann they found a partner that provided them with the support required for this development.

MAP Engineering was founded as a successor to MAP Ltd and thus benefits from years of experience in ship automation. Their solutions have been installed on many luxury yachts, ferries and working boats. The company is still surprising the market with innovative solutions: »We are continually working on new and further developments for our products. We place particular importance here on environmental sustainability,« explains Alexander Meinardus, founder and CEO at MAP Engineering Ltd.

An idea is born

One of these new developments is the monitoring system. »Most modern engines are provided with a communication interface such as J1939 or Modbus,« explains Alexander Meinardus. »We asked ourselves whether it was possible to read this data – irrespective of engine manufacturer or type – and make it available quickly on different terminal devices.« Using the M1 automation system

from Bachmann electronic, customers can obtain marine certified components as a standard solution. »This is one reason why we have been working closely with Bachmann since the founding of the company,« explains Alexander Meinardus. »We therefore contacted Bachmann

when we started to look for a solution for our new idea.«

Step by step to success

The development team at MAP Engineering slowly and cautiously explored the new subject. »In an initial step – on the recommendation of the Bachmann experts – we connected the CAN interface of an MX220 processor module to an MTU engine,« Alexander Meinardus recalls. »And we were soon able to read signals for variables such as temperature, fuel consumption and speed without any problem.« From this initial trial came a standard box which can read the data from engine

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Founder and CEO of
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Marine automation Propulsion Engineering Limited (MAP Engineering) was founded in 2016 as the successor to MAP Ltd in Bournemouth (United Kingdom). The company develops monitoring and automation systems for shipping and places particular importance on the environmental sustainability of its solutions. Employees at MAP Engineering Ltd can draw on years of experience in the sector.

www.mapengineering.co.uk



▲ The high speed craft Typhoon Tow was equipped with a monitoring system from MAP Engineering Ltd.

manufacturers like MTU, MAN, Caterpillar, Volvo and many more. In the next step, the data had to be brought into an easily legible and user-friendly form. »For this we use M1 webMI pro,« confirms Alexander Meinardus.

This server for web visualization is installed directly on the controller. This makes it possible to turn any terminal device with internet access into a user interface. »In this way, the captain of a ship can access all relevant ship data on the

bridge, but also via his smartphone or from a computer in the office of the shipping company,« Alexander Meinardus explains. The user interface was given a modern look and feel.

»For this we redesigned elements, added new functions and increased user-friendliness,« Alexander Meinardus continued. »The user interface can naturally also be adapted to all a customer's individual requirements.



▲ **Clear display:** This provides the skipper with a view of all the relevant data.

Positive response

The initial presentations delighted the customers. »All the data of an engine is reliably provided quickly and can be viewed from any terminal device. This made a big impression on our customers,« Alexander Meinardus notes. »All the data can also be fed into the fleet management system of a shipping company. This also

increases the availability of their ships.« For MAP Engineering it's clear that they have found the right partner in Bachmann electronic. »Our systems are certified more quickly, they function reliably and we receive support whenever we put questions to the experts at Bachmann,« Alexander Meinardus sums up the benefits of the collaboration with Bachmann.



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