



Moen Marin
A PART OF SCALEAQ

Zero and low emission Maritime Solutions



VESSELS



EQUIPMENT



DIGITAL



FINANCE



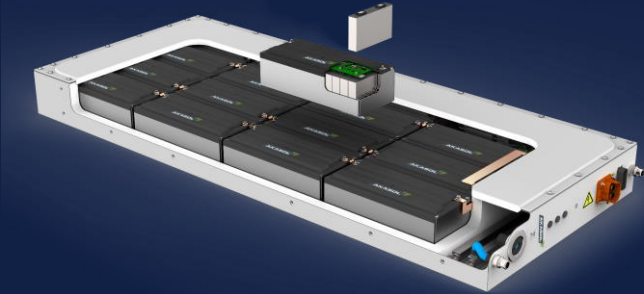
Moen Marin's Battery hybrid history

- Delivered first battery hybrid 1375m vessel in 2019
- Serial Hybrid, diesel-elektrisk in transit – 100% electric
- Reduces fuel consumption with up to 70% compared to diesel mechanic vessel
- Moen Marin have 20+ vessels under construction with battery hybrid driveline
- Expect over 70% of all production to be battery hybrid in 2022
- What started as an evolution is now a revolution

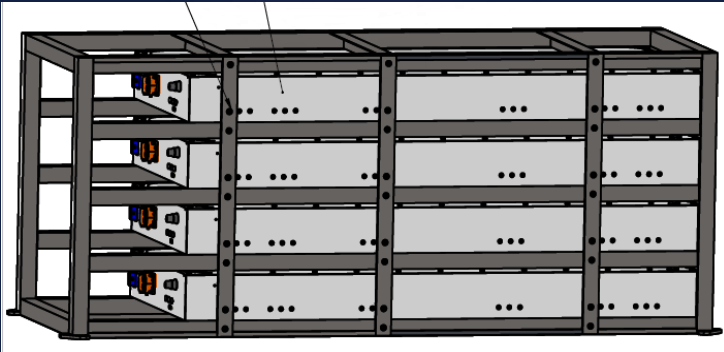
Focus On Efficiency

- State of the art equipment in all spectre of the driveline
- Renowned and used in other heavy industries
- Water cooled, compact and maintenance free life cycle
- High efficiency – most kW output pr kW input
- A system philosophy with safety first
- MOEN IAS smart energy management
 - Optimalisation of energy consumption

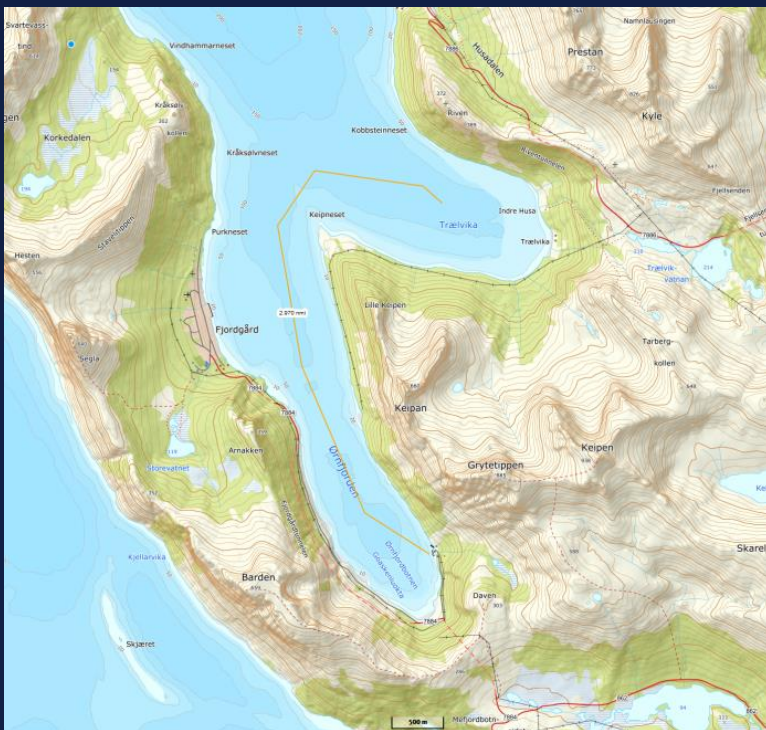
AKAZEM Batterisystem



- 33kWH pr modul, 15 submoduler
- Safety functions down to each battery cell
- Stainless steel IP67
- Water cooled
- Used by Volvo buss, truck and heavy industry
- Flexible installation
- Maintenance free life cycle



EDEL



eBOX – Powerbank for retrofit

- From 66kWh, up to desired effect
- 100% electric
- Supplies heat, lights and hydraulic power
- Flexible installation
- Can be fitted to any vessel





HybridPower

Barges

eCONT – Retrofit for barges and mobile infrastructure



- Can be installed on barges or land bases as an option to areas with low infrastructure
- Prepared for DC-DC charging of hybrid vessels or eBOX.
- Power from 100kWh to desired effect
- Container based stand alone unit



Benefits?

Reduces fuel consumption

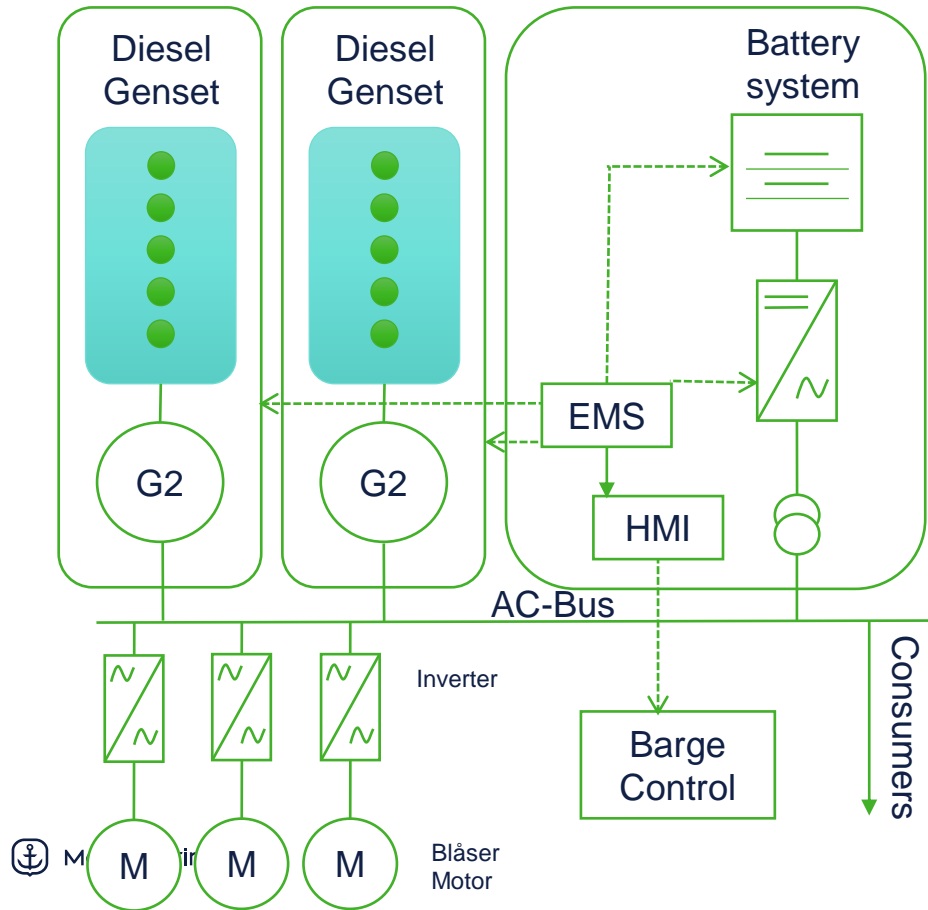
- Reduced with 20-45%
- Reduced emissions

Maintenance

- Approx. 75% less running hours for the generators
- Running on optimal load

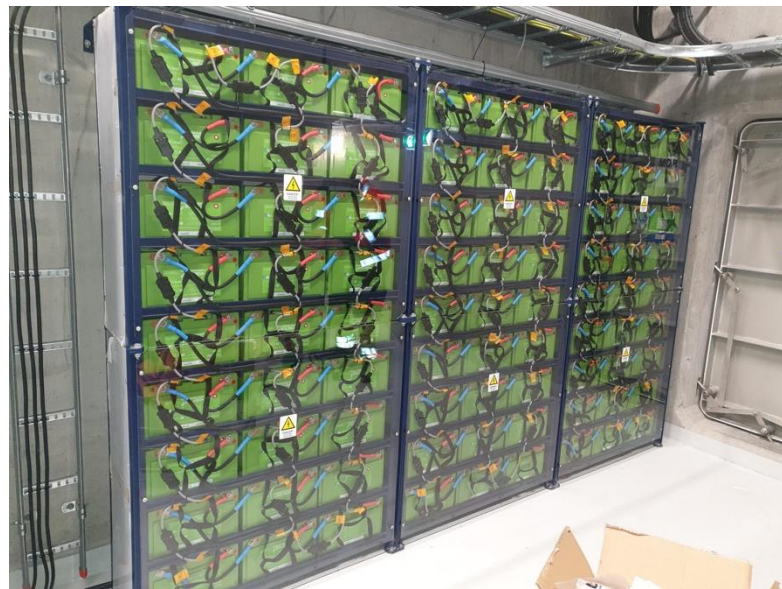


Systemløsning



System components

- Battery system (150 kWh)
- Hybrid Power Switchboard
- Transformer





MOEN MARIN
ZERO EMISSION



ZERO EMISSION - H2

Part of PILOT-E consortium to develop and build Hydrogen fueled service vessel

System philosophy similar to diesel-battery hybrid.
Diesel genset out – fuel cell in.

Locally produced Hydrogen fueling local hydrogen driven service vessel





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