

PRESS RELEASE



Rotterdam, 19 Mei 2015

Imtech Marine wins contract to supply electric & hybrid propulsion system to third CMAL ferry

Imtech Marine has been awarded a third contract to supply the electric & hybrid propulsion system for a hybrid ferry operated by Caledonian Maritime Assets Ltd (CMAL) of Scotland.

Ferguson Marine, the Glasgow-based yard which built the first two CMAL diesel electric, hybrid seagoing ferries, launched a tender last year and Imtech Marine was given the contract in late February.

Remote fuel monitoring

For the third hybrid ferry, Imtech Marine will, next to the diesel-electric and Li-Ion battery hybrid propulsion system, additionally carry out the electrical installation. The third CMAL vessel will also have an Imtech Marine remote control monitoring system, whereby the owner can track fuel usage in real time.

Designed to reduce fuel, noise and emissions, the first CMAL ferry delivered - which used a lithium battery system, diesel generators and electric propulsion supplied by Imtech Marine - has proven to achieve fuel savings of 38%.

Fuel savings

These substantial savings come from using shore-charged energy (28%), whereby the batteries are charged overnight with locally produced wind energy. Then savings of a further 10% are due to smart load control via the Imtech Marine Energy Management System. The EMS controls the fuel optimisation by preventing a second generator starting up during the complete working day (adaptive control) and it also controls the load sharing between the diesel generator and batteries based on a "market" control strategy, which matches the energy supply to demand (peak shaving).

Energy dashboard

The Energy Management System will also provide essential performance feedback to the captain through Imtech Marine's energy dashboard. The web based remote monitoring system will provide feedback about the current and historic performance and maintenance values to the fleet owner.

Mischa Kyanin of Imtech Marine, says: "Originally we estimated the propulsion system would result in savings around the 20% level but this result of 38% exceeded all expectations. We are proud of the system's proven performance."

The third CMAL ferry is due to be delivered in April 2016 but Imtech Marine will deliver its system by December this year. CMAL's first two vessels, the MV Hallaig and MV Lochinvar, operate between the Isle of Skye and Raasay and between Tarbert (Loch Fyne) and Portavadie respectively.

CMAL operates 30 ferries on the west coast of Scotland to 18 islands. Late November 2013 marked the maiden voyage for the MV HALLAIG. MV LOCHINVAR was officially handed over to CalMac Ferries Ltd on 6 May 2014.

Note for the editorial board:

For more specific information please contact Imtech Marine, Annet Boers, Manager Global Marketing & Communications; annet.boers@imtechmarine.com.

Profile Imtech Marine

Imtech Marine (headquarters in Rotterdam) is a leading company in the global maritime market, operating as a full-service provider and system integrator of tailor-made, innovative and sustainable technology solutions covering the whole ship. Imtech Marine specialises in automation (platform and engine room), navigation, communication and connectivity solutions, propulsion systems, power generation and distribution, HVAC (heating, ventilation and air conditioning), ship motion control, information technology, entertainment and port services. Imtech Marine provides innovative systems and reliable maintenance services around the world during the full lifetime of the ship. The company employs approx. 2,400 staff at almost 100 offices in 30 countries, based along shipping routes and close to shipbuilding centres.

About Ferguson Marine

With over 110 years of history, Ferguson Marine is renowned worldwide for delivering engineering services across a range of industry sectors. Whilst best known for our ship building capability, the company has delivered tailored solutions to support applications



in materials handling, fluids distribution, system hydraulics, power distribution and management, and civil engineering.

About CMAL

Caledonian Maritime Assets Limited owns the ferries, ports and harbours and infrastructure necessary for vital ferry services serving the West coast of Scotland and the Clyde Estuary.

Caledonian Maritime Assets Limited is wholly owned by the Scottish Government with Scottish Ministers the sole shareholders. The Caledonian Maritime Assets Limited Board have an executive



management team and supporting staff at headquarters in Port Glasgow.

Caledonian Maritime Assets Limited aims to provide efficient, cost-effective and safe ferries, harbours and port infrastructure for operators, communities and users in and around Scotland.

Downloads

- Press release as word document
- Visual with Press Release

Caption with visual: "The keel of the third hybrid ferry at Ferguson Marine Engineering"