

CASE STUDY

April 2021

Zanardi partner with Deman in Tasmania

Deman Tasmania have been associated with Mecc Alte in Australia for a number of years and when they looked to design and build a new DC generator, it was apparent that Zanardi's new direct drive PMG, along with the new Sices hybrid controller could offer them a solution.

Zanardi are part of the Mecc Alte Group, which has specialized in producing alternators since 1947 and continue to grow its portfolio with customised power solutions.



Our 10kW DC marine generator, working every day on live aboard vessel "LeMaris"

Deman Tasmania have been building reliable marine generator sets for many years, and previously had been commissioned to build a DC generator solution for a tourism cruise vessel that required quiet, cost-effective and energy efficient refrigeration.

This new Deman developed solution needed to provide direct drive, variable speed, controllable for varied battery types and combine multiple energy inputs, management of the charging and output requirements for a hybrid system and be adaptable for marine, land, industrial and domestic solutions.

The DC solution was fitted into the customer's working test bed, a 16-meter cruising Ketch, French built Amel Super Maramu and developed a working software profile and the required system to support a fully controlled Hybrid System. The Sices controller worked brilliantly. All monitoring of the vessels electrical system is routed through the controller and reliance on various battery monitors that were existing are redundant with the level of accuracy and control the HS315 offers.



SV LeMaris

The main PMG genset is powered by a 2-cylinder diesel engine with electronic governing and combine DC inputs from Solar, an alternator on the main engine, wind turbine, and when on shore power AC from the shore supply via a combination charger/inverter. All this feeds into a large battery rack of Carbon Foam Batteries with partial state of charge technology.



David Duffin, Managing Director from Deman Tasmania said, “With many live hours of operation aboard the vessel the owners are delighted with its low fuel consumption, quiet operation and level of control. We are now confident to commercialise the design for marine and telecom installations.”

Ross Sheils, General Manager of Mecc Alte Australia said: “It is great that we can support our customers with new solutions and continue our partnership.”