



Electrical ferry made in Divinycell cruises the Stockholm archipelago

The world has now around half a million plug-in electric cars on the roads and electric propulsion is slowly spreading into other types of transportation. One of them is electric boats. Stockholm ferry operator Ballerina has introduced a new, electrically propelled passenger ferry, built in composite material, that runs smoothly, comfortably and with essentially none of the noise that accompanies combustion-engined vessels.

Desperately seeking silence

Silent, clean and cost-effective operations are now key priorities for the marine transportation industry. Driven by ever tighter environmental regulations, the civil marine industry aims to reduce both emissions and noise nuisance while increasing efficiency. One interesting area is electric propulsion and many designers are integrating new concepts in ship architecture with cutting-edge battery technologies.

An electrically powered ferry

The Stockholm ferry operator Ballerina recently introduced its first battery-powered boat featuring a high-tech marine battery system from Saft. M/S Sjövägen, as the boat is called, carries foot passengers and cyclists between 10 stops on a 50-minute route of the waterways of Stockholm.

It operates throughout the year, completing eight round trips per day. The batteries are fully charged during the ferry's overnight stay in the harbor with two partial charging sessions during the course of the day.

Lightweight composite construction

This unique vessel was developed, designed and produced by Faaborg Vaerft together with Principia North A/S and Wilhelmsen Technical Solution and built in Diab's *Divinycell H*. We use sandwich composite mainly for the hull, topsides and wheelhouse, said Jan Ulrich Mortensen, Managing Director at Faaborg Vaerft. It is a great solution due to its strength, noise reduction and isolation properties. M/S Sjövägen is ice-reinforced, equipped with double propeller system, 2 x 160 kW electrical engines for propulsion, 500 kWh battery bank, electrohydraulic steering system, electrical bow thruster and communication and navigation equipment. It is designed for two-men operation and carries up to 150 people, 15 bikes, six wheelchairs and eight strollers.

Extensive experience in sandwich composites

Faaborg Vaerft has more than 40 years of experience building vessels in sandwich composite material and they have been using Diab products for more than 30 years. Our cooperation with Diab functions very well and we feel that Diab provides great service and assistance, said Jan Ulrich Mortensen.

For more information about Faaborg Vaerft, visit their website www.faaborg-vaerft.dk