



Forsee Power obtains DNV certification for its Pulse 2.5 *marine battery system*

Paris, January 4, 2022 – 7:30 am CET – Forsee Power (the “Company”), the expert in smart battery systems for sustainable electromobility, now offers its Pulse 2.5 high-power battery module in a DNV-certified version for the marine sector. Widely recognized internationally, DNV certification offers the guarantee of compliant products.

DNV certification guarantees robustness and reliability within the maritime sector

Harsh weather conditions at sea require rugged batteries, with solutions compatible with water, condensation, and humidity. As a result, the guarantees in terms of design and safety required by the classification society DNV are very high. This approval allows the various players in the sector such as Forsee Power to have a guarantee on the quality and reliability of their products installed on board ships.

To validate the certification tests including safety and environmental testing, Forsee Power has made technical adaptations (LHD system, HVIL functionality), to the new "marine" Pulse 2.5 module, which the "road" module did not integrate.

A 2.5 kWh high-power extra-flat module for fast charging and hydrogen marine applications

Integrated into the high-power Pulse range, the Pulse 2.5 is an ultra-thin, fast-charging battery module for all-electric (100% batteries or hydrogen) and hybrid heavy applications. Its slim design makes it easy to fit into any electric vehicle space, even the smallest: floor, roof, and rear.

The module high-power module offers 6C continuous discharge current and 10C peak discharge current.

The pulse 2.5 "marine" is equipped with Toshiba LTO cells and a liquid cooling system designed by Forsee Power R&D team that allows to perform 15,000 cycles over more than 12 years.

The DNV-certified Pulse 2.5 module, a response to the decarbonization challenge in the maritime sector

One of the main emitters of greenhouse gas emissions, maritime transport must reduce its CO₂ emissions by at least 40% by 2030. With the DNV certification, Forsee Power can support shipyards in the electrification of their equipment (100% electric or hybrid) by offering a solution to reduce their polluting emissions.

The Nordic countries, for example, are among the markets that have made strong commitments to the electrification of their fleets while their maritime projects are strongly growing. Thus, Norway has pledged to electrify 100% of its ferry fleet for public transport by 2025, or more than 200 ferries.

In Asia, Singapore has pledged to reduce its emissions by 75% by 2040, electrifying a large part of its port inbound/outbound operations and dockside equipment.

“The market potential is very promising on a global scale and local initiatives and incentives are multiplying to encourage zero emission operations before becoming the rule. On a ferry, several MWh of batteries can be installed. There is therefore a great interest in satisfying these large volumes with products suitable for rapid charging, which is the most widespread use. Without the DNV certification, which is widely recognized in the marine world, it would be impossible for us to address these markets!” explains Sébastien Rembauville-Nicolle, VP Business Development at Forsee Power.

The EU demands efficient, fair, and clean maritime transport. The Forsee Power R&D teams have thus ensured that the DNV-certified Marine Pulse 2.5 module can be integrated into numerous marine projects internationally.

About Forsee Power

Forsee Power is a French industrial group specializing in smart battery systems for sustainable electric transport (light vehicles, trucks, buses, trains and ships). A major operator in Europe, Asia and North America, the Group designs, assembles, and supplies energy management systems based on cells that are among the most robust in the market and provides installation, commissioning and maintenance on site and remotely. Forsee Power also offers financing solutions (battery leasing) and second-life solutions for transport batteries. The Group recorded revenue from sales of EUR 62 million in 2020 and has more than 500 employees. For more information: www.forseepower.com | [@ForseePower](https://twitter.com/ForseePower)

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About DNV

DNV is the independent expert in risk management and quality assurance, operating in more than 100 countries. Through its broad experience and deep expertise DNV advances safety and sustainable performance, sets industry benchmarks, and inspires and invents solutions.

Whether assessing a new ship design, optimizing the performance of a wind farm, analyzing sensor data from a gas pipeline or certifying a food company's supply chain, DNV enables its customers and their stakeholders to manage technological and regulatory complexity with confidence.

Driven by its purpose, to safeguard life, property, and the environment, DNV helps tackle the challenges and global transformations facing its customers and the world today and is a trusted voice for many of the world's most successful and forward-thinking companies.