

PRESS RELEASE

H-TEC SYSTEMS supplies PEM electrolyzer to Hydrogen Lab Bremerhaven

Augsburg | November 14, 2023

H-TEC SYSTEMS has announced the delivery of its ME450 PEM electrolyzer to the Hydrogen Lab Bremerhaven (HLB), a research project at the Fraunhofer Institute for Wind Energy Systems IWES. General contractor for the project is Wenger Engineering GmbH. The one megawatt ME450 PEM electrolyzer from H-TEC SYSTEMS is part of a test field which focuses on researching the interaction of wind turbines with electrolytic hydrogen production. The electricity required for the electrolysis process is provided by an on-site wind turbine installation.

HLB offers a highly innovative test infrastructure that allows scientists to investigate the interaction between a wind turbine facility and an electrolyzer under real-life conditions. PEM electrolysis is ideal for this as this technology can deal particularly well with fluctuating energy sources such as wind energy.

"The Hydrogen Lab Bremerhaven is an essential element for the research and further development of large electrolyzers and fuel cells. As general contractor and planner, we are very pleased that the collaboration between Wenger Engineering and H-TEC SYSTEMS went smoothly and are looking forward to seeing the research results from this worldwide unique test environment," said Dr. David Wenger, Managing Director of Wenger Engineering.

"The hydrogen infrastructure project at the Hydrogen Lab Bremerhaven will make a significant contribution to the development and integration of hydrogen technology and further advance the vision of a low-carbon future. The successful commissioning of our electrolyzer marks a decisive step towards the realization of a sustainable hydrogen economy. We are delighted about being part of this exciting project," explained Robin v. Plettenberg, CEO of H-TEC SYSTEMS.

H-TEC SYSTEMS GmbH



Hydrogen in off-shore production

The integration of renewable energy sources into electricity generation poses major challenges for existing electricity networks because they were previously geared towards the operation of centralized large-scale producers. A promising way to increase the security of supply in decentralized power grids is to produce green hydrogen. Hereby, smoothing out peaks in supply and demand can be significantly optimized by generating and subsequently converting hydrogen back into electricity.

A key focus of the research work carried out at HLB is on the deep cross-sector integration of electrolysis which includes the use of by-products as well as the utilization of reconversion technologies for off-grid and grid-supporting applications. These studies contribute to integrating hydrogen technologies into the national and international energy and economic system along with accelerating the production of green hydrogen.

In addition to the PEM electrolyzer from H-TEC SYSTEMS, the project will include other test components – including a hydrogen cogeneration plant, a fuel cell for converting the hydrogen produced back into electricity, four trailer filling stations and hydrogen delivery stations, three compressors and three high-pressure storage units. The project is funded by the European Regional Development Fund (ERDF) and the Federal State of Bremen with 16 million euros.





About H-TEC SYSTEMS

H-TEC SYSTEMS stands for innovation, sustainability and a green future. As a technological pioneer, the company develops and manufactures innovative PEM electrolyzers and electrolysis stacks which facilitate the cost-effective, efficient, and reliable production of green hydrogen. H-TEC SYSTEMS' vision is clearly defined: to use its electrolyzers to avoid producing 1% of global greenhouse gas emissions thus making a significant contribution to climate protection.

H-TEC SYSTEMS has been active in the hydrogen industry for over twenty-five years and operates at two locations in Germany. As part of MAN Energy Solutions, the company combines the strengths of an independent, flexible structure with the industrial experience and customer access of MAN ES along with expertise in series production and supply chain management of the Volkswagen Group thereby providing the key technology for the Power-to-X value chain.

Further information: <u>www.h-tec.com</u>

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