

**PRESS RELEASE** 

# H-TEC SYSTEMS presents a modular hydrogen electrolyzer for large-scale projects of 10 MW upwards

10 MW blocks of the Modular Hydrogen Platform (MHP) can be combined into systems with an electrolysis performance of 100 MW and more. The overall system efficiency of 77 percent along with high system availability thus result in low hydrogen costs.

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Demand for large-scale hydrogen projects from industry is steadily increasing. As a pioneer in the industry and specialist in PEM electrolysis systems, H-TEC SYSTEMS has duly recognized the growing need and, through its new Modular Hydrogen Platform (MHP), has realized a scalable system for the industrial production of green hydrogen. The standardized blocks each have an electrolysis performance of 10 MW and can be combined into systems with an electrolysis power output of 100 MW and more. The H-TEC SYSTEMS MHP electrolyzer offers an outstanding system efficiency, high availability and proven maintenance concept. The new system ensures exceptionally low hydrogen production costs as well as stable operation.

## Modular concept simplifies scaling and reduces costs

The highly standardized 10 MW blocks from H-TEC SYSTEMS are based on the tried and tested S450 stack technology which has already proven itself in the market.

The new system is designed for particularly easy indoor installation by means of pre-assembled skids. Each 10 MW block is equipped with integrated process water treatment and an electric power supply. In addition, the system can be supplemented with fresh water and hydrogen treatment equipment as well as process heat recovery or oxygen utilization as and when required.

One of the most important features of the MHP is the high system efficiency of 77 percent (<51kWh/kg) at 30 bar pressure which is far above the standard values.

#### H-TEC SYSTEMS GmbH



### Redundancy concept guarantees system reliability

Aside from the efficiency aspect, the system availability of an electrolyzer plays a decisive role. It is here that the MHP offers a unique redundancy concept. In the event of a stack failure within a 10 MW block as well as scheduled maintenance or inspections, a defined part of the installation can be shut down while the rest of the electrolyzer continues to operate. Through this concept, the systems can achieve almost full performance even in the event of a fault which represents crucial added value for customers based in the renewable energy and industrial sectors.

Furthermore, the system is looked after by experts from H-TEC SYSTEMS using a comprehensive maintenance service program.

### The fuel driving the energy transition

With its groundbreaking efficiency and availability, the MHP is the ideal solution for large-scale hydrogen production. It uses advanced materials and technologies in order to minimize energy consumption and maximize hydrogen output. This aspect, combined with the advanced redundancy concept, leads to low hydrogen costs.

"H-TEC SYSTEMS has been a leading manufacturer of electrolyzers for years and we are extremely pleased to be able to bring our experience and expertise now also to the large-scale facility market", explains Jonas Wahl, Director Product Management at H-TEC SYSTEMS. "For the strategic conceptualization of the Modular Hydrogen Platform, we focused on two areas that are of crucial relevance for our customers: efficiency and availability. As a result, our new PEM electrolyzer is the most efficient on the market to date. Through our all-encompassing range of services, we ensure our customers a high level of system availability over the entire life cycle. In this way, the production costs of hydrogen can be significantly reduced. We are confident that the Modular Hydrogen Platform will improve the way hydrogen is made and play a key role in the transition to clean energy."

# Product availability and information

The Modular Hydrogen Platform (MHP) can now be ordered by customers in the European region.

At the "Hydrogen Tech World" and "World Hydrogen" trade shows, interested parties can learn from H-TEC SYSTEMS experts about the functions and possible uses of the MHP along with other solutions.



"Hydrogen Tech World" from 4th-5th April in Essen – Stand F.07
Presentation: "Accelerating the adoption of hydrogen: Reducing the levelized cost of hydrogen by going large scale" with Gregor Ziemann on 4th April at 11:15 am

"World Hydrogen" from 9th-11th May in Rotterdam – Stand B.61
Presentation: "Master the energy transition with a new product derivative of H-TEC SYSTEMS" with Jonas Wahl, on10th May at 11:00 am

The <u>product data sheet</u>, which is available to download, provides additional technical information.

#### **About H-TEC SYSTEMS**

**H-TEC SYSTEMS** develops and produces innovative PEM electrolyzers and electrolysis stacks. With their technology, green hydrogen can be produced economically, efficiently and flexibly. The hydrogen specialists work at two locations in Germany for a successful energy transition across all sectors and have shaped the hydrogen economy as a technological pioneer for over twenty-five years. As part of the MAN Energy Solutions Group, H-TEC SYSTEMS supplies the key technology for the power-to-X value chain.

Further information: www.h-tec.com

#### PRESS CONTACT | H-TEC SYSTEMS GmbH

**Emily Proell,** Director Marketing & Communications: e.proell(at)h-tec.com I +49 (0) 821 507697-559 **Jessica Kuska**, Communications Manager: j.kuska(at)h-tec.com | +49 (0) 821 507697-146

GlobalCom PR Network
Wibke Sonderkamp:
wibke(at)gcpr.net I +49 (89) 360 363-40
Caroline Hannig-Sachon:
caroline(at)gcpr.net I +49 (89) 360 363-42