



H-TEC Series-ME: ME 450/1400\*

## READY. SET. SUPPLY.

PEM Electrolyser – The connecting link for sector integration and the decentralised production of hydrogen.



## INNOVATIVE PRODUCTS

for your supply of hydrogen.

The ME 450/1400 PEM Electrolyser belongs to H-TEC's Series-ME and is currently the most powerful electrolyser for decentralized applications in the megawatt class product range. New designs of the stack and the system allow the H-TEC electrolysers to achieve a very good price-performance ratio, with minimal

production costs for hydrogen. Apart from that, the design of H-TEC's Series-ME offers many advantages. Its compact construction makes its transport, connection and use possible almost anywhere. Thanks to heat extraction, electrolysers made by H-TEC achieve an overall efficiency of up to 95 %.

Parameter	ME 450/1400	
H <sub>2</sub> nominal production	450 kg d <sup>-1</sup>	210 Nm³ h <sup>-1</sup>
H <sub>2</sub> production range	25–210 Nm³ h <sup>-1</sup>	
H <sub>2</sub> purity	3.0, with adsorption drying: 5.0	
Nominal energy consumption	4.9 kWh Nm <sup>-3</sup>	
Nominal load	1 MW	
Electrolyser power	0.2-1.4 MW	
Nominal system efficiency	74%	
Load change	Partial load to nominal load = 30 s	
Heat extraction	max. 65 °C outlet temperature and 55 °C return temperature	
Operating pressure H <sub>2</sub>	unpressurised – 30 bar	
Operating pressure O <sub>2</sub>	unpressurised	
Feed water quality	Drinking water, nominal 350 kg h <sup>-1</sup>	
Grid connection	Voltage: 3x 400 V/ 50 Hz + N + PE in accordance with IEC 60038. Connected load: 2 MVA	
Dimensions	40' container, approx ca. 12 m x 3 m x 3.5 m	
Weight	approx. 25 t	
Ambient temperature	-15 °C to +35 °C	

## **ABOUT US**

H-TEC SYSTEMS was founded in 1997 and has more than 20 years of experience in the research and development of hydrogen technology. At sites in Schleswig-Holstein and Bavaria in Germany, PEM stacks and electrolysers are produced in the megawatt class for use in industry where hydrogen is required or the quality of an electrical supply has to be refined.

Since 2010, H-TEC SYSTEMS has been a member of the GP JOULE group, which integrates hydrogen-based energy storage equipment into intelligent operating and usage concepts for renewable energies. By using H-TEC electrolysers it is already today possible to couple the electrical power, heating and mobility sectors.