

Hydrogen is now.

H-TEC SYSTEMS

LARGE
SCALE.
MAX
OUTPUT.

H-TEC SYSTEMS
High Efficiency
Electrolyzers

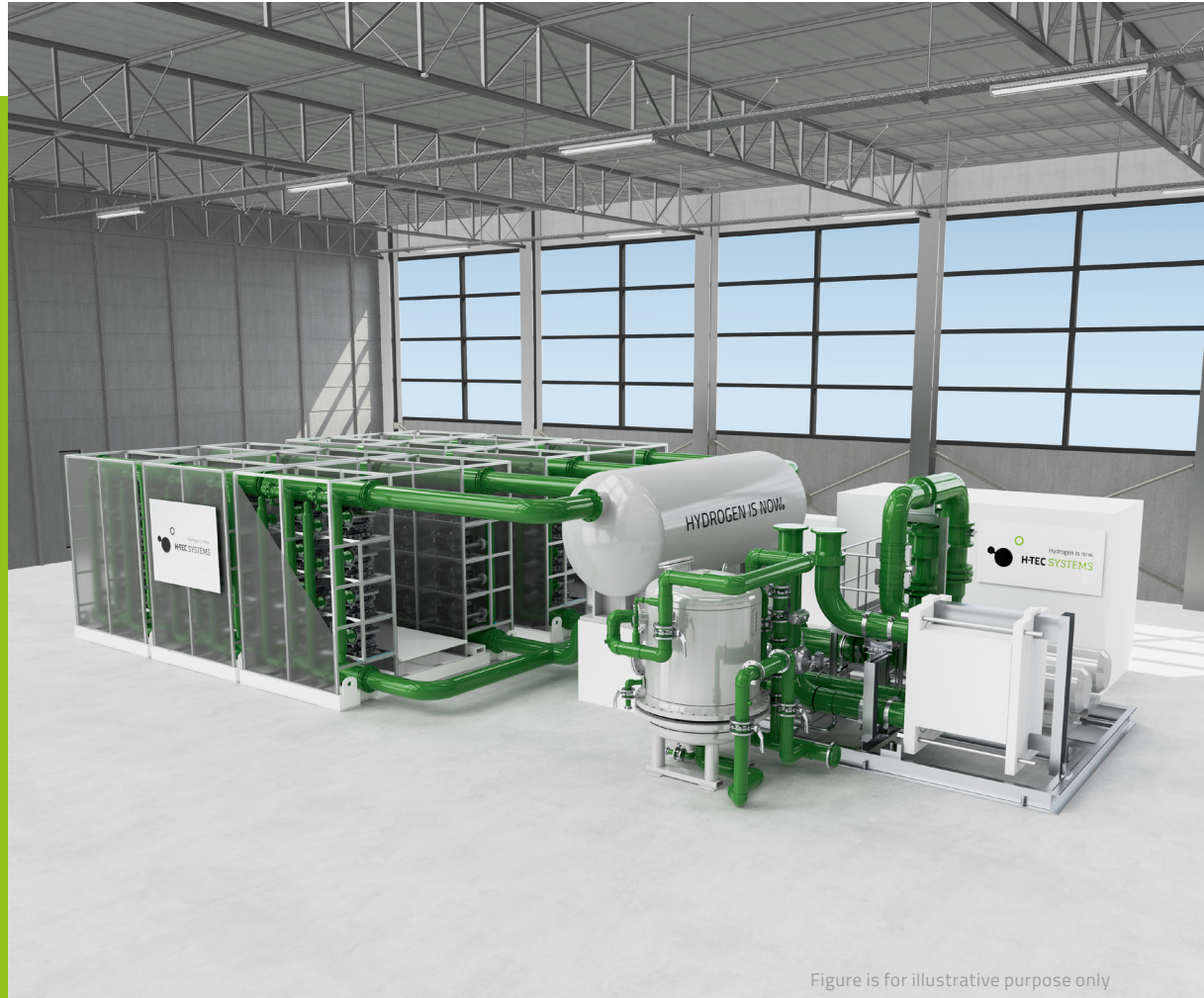


Figure is for illustrative purpose only

H-TEC SYSTEMS PEM Electrolyzer **Modular Hydrogen Platform (MHP)**

EN

PEM electrolyzers for a sustainable energy system – H-TEC SYSTEMS Modular Hydrogen Platform (MHP)

Modular, skid-mounted, ready-to-install: The H-TEC SYSTEMS Modular Hydrogen Platform (MHP) is a scalable platform for industrial production of green hydrogen based on PEM technology. 10 MW blocks can be combined to multi-MW systems serving projects with an electrolysis capacity of 10 to more than 100 MW. The system is ready for indoor installation on pre-assembled skids. It is equipped with integrated process

water treatment and electrical power supply. Optionally, the system can be supplemented with fresh water and hydrogen treatment, as well as process heat recovery or oxygen utilization, as required. The H-TEC SYSTEMS MHP electrolyzer stands out with its unrivalled system efficiency, high availability and proven maintenance concept, which results in low hydrogen production costs and stable safe operation.

10 MW Block

H₂ production nominal	4600 kg / d 2130 Nm ³ / h
Energy consumption ¹	4.6 kWh/Nm ³ H ₂ 51 kWh/kg
System efficiency ¹	77%
Performance class	10 MW
H₂ production modulation range	213 – 2130 Nm ³ /h 10 – 100 %
H₂ purity including optional hydrogen purification	3.0 or 5.0 (meets ISO 14687:2019 Table 2)
H₂ purity without optional hydrogen purification	Water saturated at 65°C and 30 bar (g)
H₂ output pressure	30 bar (g)
Load change	30 s (Minimal load to nominal load)
H₂O required quality, including optional fresh water treatment	TrinkwV 2020 EU Directive 2020/2184-EU
H₂O required quality, without optional fresh water treatment	DI water (fully desalinated)
DI water consumption nominal	1850 kg / h
Dimensions LxWxH (indoor)	ca. 10 x 24 x 4.5 m
Temperature (indoor)	+5°C to +40°C

Technical changes reserved

¹ Battery limit for the efficiency: stacks and converters; standard conditions: BoL (Begin of Life), 15°C, 30 bar (g) H₂ transfer pressure, 2000 Nm³/h, based on Higher Heating Value (HHV).

We are the fuel of the global energy transition

As a technological pioneer, we have been playing a decisive role in shaping hydrogen technology for over 25 years. We believe that mobility, production, and consumption are possible without emissions. To achieve this, H-TEC SYSTEMS

builds on cooperation with visionary customers and partners, and the power of our parent company MAN Energy Solutions. Together, we are making hydrogen production green and the CO₂-neutral transformation of all sectors a reality.