

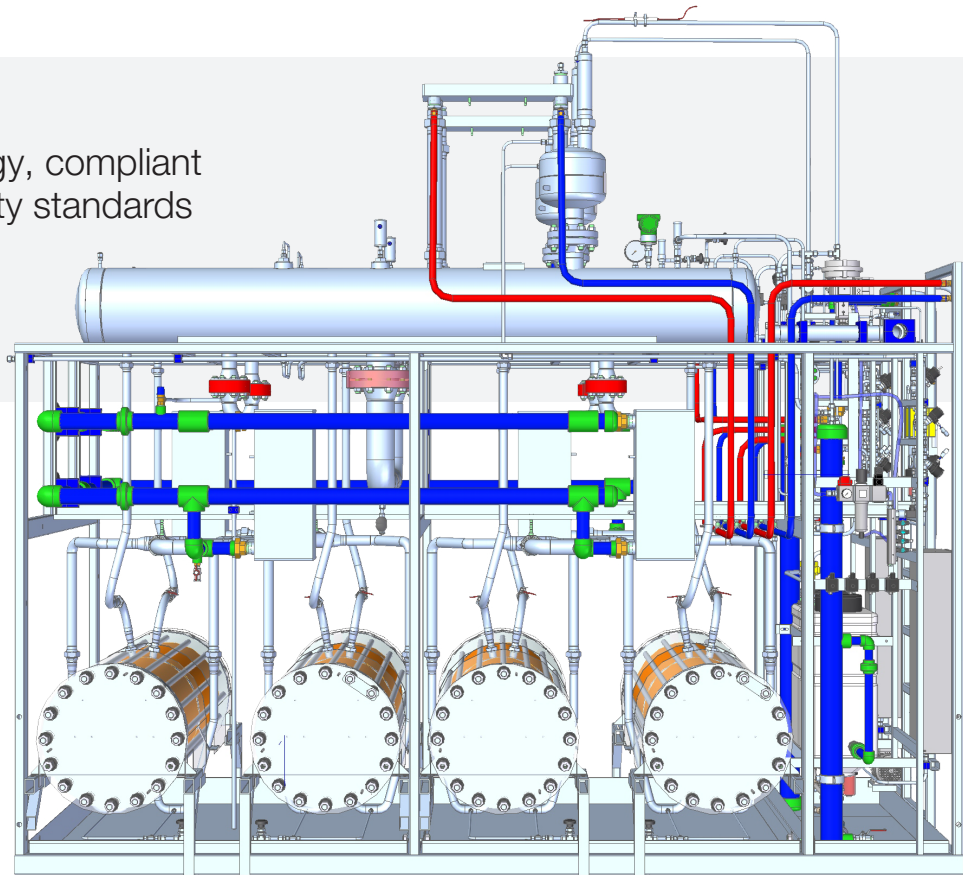


HySTAT® ALKALINE ELECTROLYZERS

HySTAT® is Cummins' globally proven modular alkaline electrolyzer system designed for easy on-site installation inside or out, with simple interconnectivity to scale up, and an unrivaled record for reliability, low maintenance and on-site safety. Recommended for projects between 60 - 140 Nm³/h.

Proven technology, compliant with highest safety standards

Turnkey solution



FEATURES

	HySTAT® - 60	HySTAT® - 70
Technology	Alkaline	
Hydrogen production	60 Nm ³ /h (130 kg/day)	70 Nm ³ /h (160 kg/day)
H ₂ delivery pressure	10 bar _g (145 psig) without a compressor	
H ₂ quality max impurities	99.998% O ₂ < 2 ppm, N ₂ < 12 ppm (higher purities optional); Atm. Dew point: -75°C	

TECHNICAL SPECIFICATIONS

	HySTAT® - 60	HySTAT® - 70
Operating range	40-100% (optional 12-100%)	
System specific consumption*	55-60 kWh/kg	
Utilities required to operate the plant	Electrical power, potable water, nitrogen for purging requirements	
Rectifier input and efficiency	3 X 400 VAC ± 10% 50/60 Hz	
Installed power	550 kVA	675 kVA
Potable water consumption	Scope of supply includes a water treatment plant with reverse osmosis that requires 1.2 to 2 L/Nm ³ [13 to 17 L/kg of H ₂] (varies depending potable water quality) to produce 0.8 L/Nm ³ of demin water for the electrolysis process	
Total footprint (including maintenance area)	15.5 m x 5.8 m (~ 89 m ²)	
Product setup	Outdoor (40ft ISO container) / Indoor (skidded setup)	
Installation environment	Outdoors -20°C to 40°C / -4°F to 104°F	

*System specific consumption considers: the standard scope of supply refers to the outdoor version of this product (refer to BOS and BOP tables); 100% Load capacity; Beginning Of Life; 1% increase per annum (at ≥8500 hours operation); Range for indoor and outdoor setup

STACK AND BALANCE-OF-STACK (BOS)

	Outdoor	Indoor
Cell stacks and gas generation system	■	■
Power rectifiers	■	■
Control panel	■	■
Water quality monitoring system	■	■

BALANCE-OF-PLANT (BOP)

	Outdoor	Indoor
Rectifier cooling	■	■
Gas cooling	■	■
Electrolysis cooling	■	■
Water purification system	■	■
Instrument air compressor	■	■
Hydrogen purification system	■	■

Applicable Codes and Standards Pressure Equipment Directive 2014/68/EU, Low Voltage Directive 2014/35/EU, Machinery Directive 2006/42/EC, Electro-Magnetic Compatibility 2014/30/EU, ATEX Directive 2014/34/EU, IEC 61511, IEC 61508, IEC 60079-10-1, NFPA 2, NFPA 497, National Electrical Code (NEC), ANSI/NFPA 70, ASME B31.3-2016, ASME Boiler and Pressure Vessel Code 2017, CSA C22.1 and C22.2, CSA B51 2019, CAN/BNQ 1784-000/2007. Other jurisdictions available on request.

The content of this document may contain technical inaccuracies or typographical errors. Cummins reserves the right to make changes or updates at any time without prior notice. Copying or distributing in whole or in part of the content without consent of Cummins is not allowed.



cummins.com

Bulletin 5676514 Produced in the U.K. 6/21
©2021 Hydrogenics Corporation