

## Alkaline Electrolyzer For H<sub>2</sub> Fuel

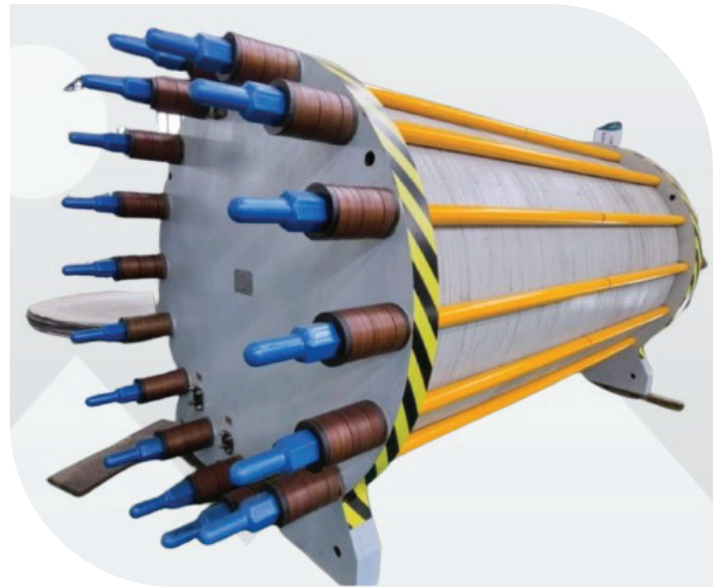


# GREENZO ENERGY

**Hydrogen:**  
The Rediscovery of the Oldest Element

# ABOUT COMPANY

Greenzo Energy is one of the world’s leading companies engaged in the design, development, manufacture, and sales of alkaline water electrolyzer systems for powering the planet with hydrogen. Greenzo Energy has a strong technical force to deliver high-quality products. The company is founded by professionals having rich experience in the field of renewable energy and manufacturing of engineering machines.



## Vision

⚡ To be a major contributor towards Net Zero Emissions by 2050.

## Mission

⚡ To be the global leader in H<sub>2</sub> generators using water electrolysis.

### Get H<sub>2</sub> Ready with Greenzo Energy Containerized Alkaline Electrolyzer Systems

OUR STATE-OF-THE-ART SOLUTIONS	YOUR BENEFITS
Compact integrated system	Minimal footprint
Distinctive cell design	Less electricity consumption
Integrated compression system	Customizable for different end-use applications
Sturdy construction	Longer lifespan
Exceptional reliability	Maximum safety
Unique electrode coating	Cost-effective
High efficiency	Energy saving
Plug-and-play	Easy to use
Long-term performance and low maintenance costs	High economic efficiency

## Quality Assurance

The electrolyzer systems comply with ISO22734 and all the other international standards conforming to an electrolyzer system.

# SPECIFICATIONS

Specifications	GEL200	GEL400	GEL1000
H <sub>2</sub> production	200 Nm <sup>3</sup> /h (427 kg/day)	400 Nm <sup>3</sup> /h (854 kg/day)	1000 Nm <sup>3</sup> /h (2135 kg/day)
O <sub>2</sub> production	100 Nm <sup>3</sup> /h	200 Nm <sup>3</sup> /h	500 Nm <sup>3</sup> /h
H <sub>2</sub> purity before purification system		99.8 %	
H <sub>2</sub> purity after purification system	99.999 % (suitable for fuel cell application)		
O <sub>2</sub> content in H <sub>2</sub>		< 2 ppm v	
H <sub>2</sub> O content in H <sub>2</sub>		< 2 ppm v	
O <sub>2</sub> purity		99.5 %	
Dew point	Up to -70 °C		
H <sub>2</sub> delivery pressure (without compression)	3-30 bar(g)		
DI water consumption	200 L/h	400 L/h	1000 L/h
Cooling water consumption	40 t/h	80 t/h	200 t/h
Water conductivity required (water quality)	< 1-5 µS/cm		
Footprint	40'x2 ISO containers	40'x1 ISO container 20'x2 ISO container	40'x1 ISO container 30'x3 ISO containers
Operating temperature	90 ± 5 °C		
Power consumption at stack (DC)	3.8-4.5 kWh/Nm <sup>3</sup>		
Inputs connections	3 phase 415 V +/- 10 % 50 Hz		
Rated total current (DC)	4600 A	7200-13400 A	17200 A
Rated total voltage (DC)	210 V	210 V	280 V
Plant power consumption (AC)	1000 kW	2000 kW	5000 kW
Primary voltage	3.3-20 kV	3.3-20 kV	3.3-33 kV
Rated power	1 MW	2 MW	5 MW
Electrical converter power factor	≥ 95 %		
Total harmonic distortion (THD)	≤ 3 %		
Production capacity dynamic range	15-100 % of flow range		
Electrolyte	25-30 % KOH solution		
Stack degradation rate	~ ≤1 %/year		
Stack expected lifetime	≥ 20 years		
Stack optimal runtime	~ 12 years		

## Note:

Specifications may vary according to the ambient temperature.

GEL 200 – 1 MW, GEL 400 – 2 MW, and GEL 1000 – 5 MW alkaline water electrolyzer systems.





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