

Advantages

● Low energy consumption

Higher current density and lower electrolysis energy consumption in a more efficient process of electrolysis with high activity electrodes and low resistance membranes.

● High adability

Wide range and fast speed of power adjustment for a higher accommodation proportion of renewable energy and better adaptability to hydrogen production applications from wind and solar energy.

● High reliability

Selected electrodes passing the 5,000 hours stress test for an annual attenuation rate of less than 1%;

Simulation for improved structure and uniformity of flow/temperature fields of electrolyzers to tackle the risk of local overheating;

New sealing waterline design of the bipolar plate to address the leakage risk caused by local creep and thinning of gaskets;

High-precision assembly process of the electrolyzers for better consistency, namely less differences among various equipment in the hydrogen production cluster, and more precise control over the cluster.

5000 HOURS

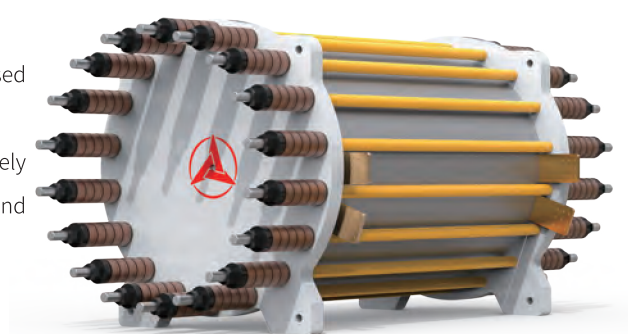
Accelerated stress test

4.3kWh/Nm³

DC power consumption

20% ~ 110%

Working load range



Technical specifications >>>

NAME	E-200	E-500	E-1000	E-1200	E-1500	E-2000
Hydrogen production capacity (Nm ³ /h)	200	500	1000	2000	1500	2000
DC power consumption (kWh/Nm ³)	≤4.3	≤4.3	≤4.3	≤4.3	≤4.4	≤4.4
Maximum operating pressure (MPa)	3.2	3.2	1.8	1.8	1.8	1.8
Operating temperature (°C)	90±5	90±5	85±5	85±5	85±5	85±5
Crude hydrogen purity	≥99.8%	≥99.8%	≥99.8%	≥99.8%	≥99.8%	≥99.8%
Hydrogen purity after purification	≥99.999%	≥99.999%	≥99.999%	≥99.999%	≥99.999%	≥99.999%
Dew point of hydrogen after purification (°C)	-70	-70	-70	-70	-70	-70
Working load range	20-110%	20-110%	20-110%	20-110%	20-110%	20-110%
Cold start time (min)	≤20	≤20	≤20	≤20	≤30	≤30
Hot start time (min)	≤3	≤3	≤3	≤3	≤5	≤5

(Cold start: the period from starting at the environment temperature to when the hydrogen and oxygen purity is qualified;

hot start: the period from starting at 50±5°C to when the hydrogen and oxygen purity is qualified.)