

ELECTROLYSER

H₂/O
production

**KOH FILTER AND
CIRCULATING PUMP
WITH COOLER**

filtering of
impurities in H₂

H₂/O SEPARATOR

Separation of
hydrogen and
oxygen

**GAS / LIQUID
SEPARATOR**

Separation of
gas / liquid

WATER TREATMENT

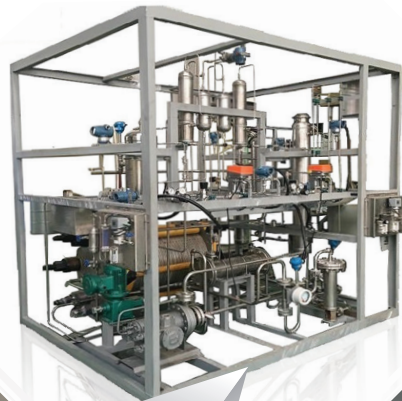
modification of
input techno-
logical water for
process of H₂O
electrolysis

**COOLING WATER
SYSTEM**

cooling of
process of
electrolysis H₂
and pressurized
gas

CONTROL SYSTEM

control and
monitoring of
production
process based
on industrial
PLC



H₂ PRODUCTION PLANT

Alkaline /PEM electrolysis method

- ▶ Produced based on your demand
- ▶ **MODULAR, MOVABLE*, MODERN** solution of storage of your energy from renewable energy sources
- ▶ With combination of photovoltaic system, the way for energy independence

**based on capacity*

- ▶ **HPU Hydrogen Power Unit**
- ▶ **Standardized size range**
- ▶ Pressure **electrolyser** output 30 bar
- ▶ **DC Power consumption** 4.6 kW/ 1 Nm³
- ▶ **H₂ purity** 99.99% (after cleaning/drying)
- ▶ **Fittings**



H ₂ PRODUCTION				H ₂ DISTRIBUTION	
ALKALINE ELECTROLYSER		PEM ELECTROLYSER		COMPRESSOR / STORAGE / REFUELLING STATION	
SMALL (Containerized)	PLANT (Modular)	SMALL (Containerized)	PLANT (Modular)	LARGE (Containerized)	SMALL (Modular)
5 – 100 Nm ³ /h	100 – 2000 Nm ³ /h	1 – 100 Nm ³ /h	100 – 400 Nm ³ /h	200-1000 kg/day	20-100 kg/day
25 – 500 Nm ³ /h	0.5 – 10 MW	5 – 500 KW	0.5 – 2 MW	1.5 – 45 – 85 MPa	1.5 – 45 MPa

- ⚡ 1. "Grid" electricity
- ⚡ 2. "Green" electricity
- 🔥 3. HPU heat/ Factory process gases
- O 4. HPU oxygen/ Factory process gases
- H₂ 5. Hydrogen
- 🔥 6. Heat
- 🔥 ⚡ 7. Fuel Cell/ electricity and heating unit

■ **ELECTROLYSIS MODE**
■ **FUEL CELL MODE**