

gateway S E R I E S

Containerised turn-key alkaline hydrogen production systems



Modular system



Automated remote operation



Maintenance support



High purity Hydrogen



RES - Following in dynamic operation



Low CAPEX

Technical specifications

Supports enhancement with STARDUST® Technology	Optional
Hydrogen hourly production rate [Nm³/h]	200
Hydrogen daily production rate [kg/day]	432
Hydrogen pressure [barg]	30
Hydrogen purity [%] *	> 99.999%
Installed electrical power [MVA]	1.2
Stack consumption [kWh/Nm³]	4.59
System efficiency (HHV) [%]	69.4%
System efficiency (LHV) [%]	58.7%
Operating range [%]	20-100%
Electrolyte	KOH
Electrical interface	Low-Voltage substation
Tap water requirement [l/h]	328
System installation location	Outdoors (containerized)
Equipment footprint incl. maintenance zones [m²]	155
Ambient temperature range [°C] **	-30 to +40
Communication interface	OPC UA



* Target purity achievable with optional purification system

** Target temperature range available with optional extra package - Standard: +5 to +40 °C

Scope of delivery

Stack and Balance-of-Stack:

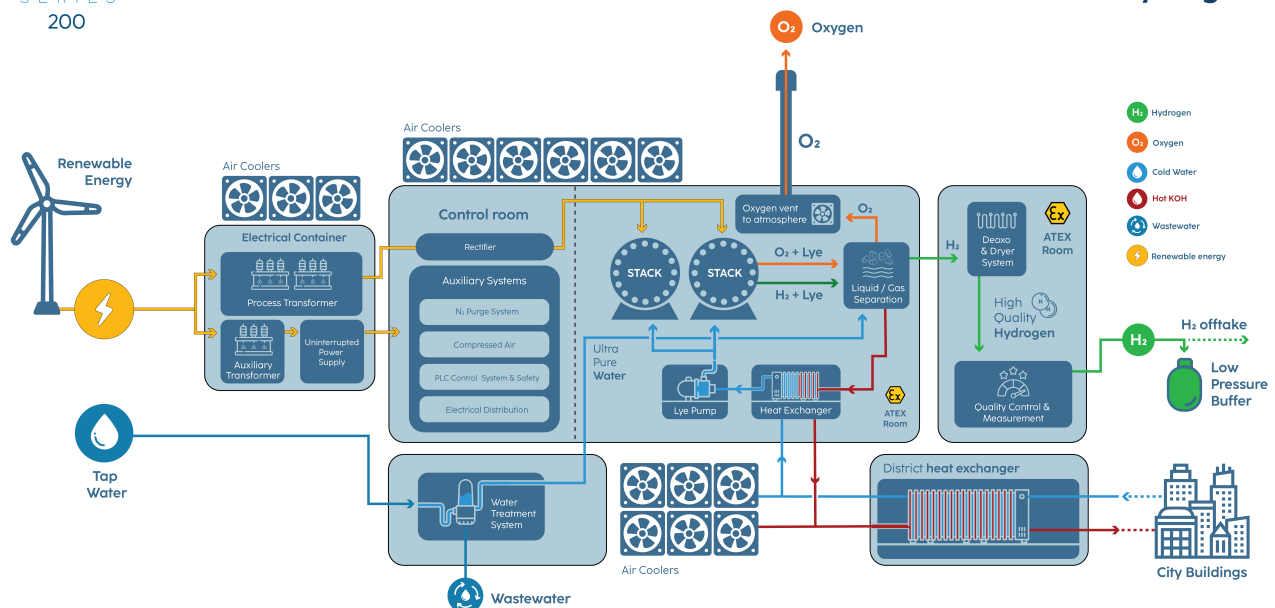
- Electrolyser stacks
- Gas separation system
- Power rectifier
- Control system
- Lye loop

Balance-of-Plant:

- Nitrogen purge system
- Safety system
- Backup power system
- Vent stacks
- System (rectifier, stack, gas) cooling

gateway
SERIES
200

stargate
hydrogen



Extended scope

- Gas purification system
- Water purification system
- Process air compressor
- Waste heat re-use system
- Low temperature package
- MV Transformer & switchgear
- Intercontainer process & Electrical connections
- Hydrogen storage system
- Compressor system (up to 1000 barg)

Certification

- Pressure Equipment Directive 2014/68/EU
- Machinery Directive 2006/42/EC
- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/30/EU
- ATEX Directive 2014/34/EU
- ISO 22734-1
- CE Certified

Disclaimer:

Stargate Hydrogen reserves the right to make changes or updates at any time without prior notice