

On Site Hydrogen Generation Systems

GASTEC®

On-site production of hydrogen gas for industrial & energy applications

Benefits

- ✓ Economical - saves 20 to 30% over cylinders gas cost
- ✓ Convenient - reduced cylinder handling
- ✓ Environmentally friendly
- ✓ Safe - reduced combustible gas inventory
- ✓ Improves productivity

Features

- ✓ High energy efficiency
- ✓ Proven safety features
- ✓ Rugged & durable design
- ✓ Easy to install & maintain
- ✓ Gas on demand technology
- ✓ Reliable, continuous round the clock operations
- ✓ User friendly, fully automated controls

Applications

- ✓ Forming gas for semiconductor fabrication.
- ✓ Argon purification
- ✓ Cooling gas for power generator
- ✓ Hydrogenation
- ✓ Annealing atmosphere in metal processing

H₂

High Pressure Electrolyser

GasTec high pressure electrolyser generates hydrogen from electrolysis of water at pressures up to 30 bar.

GasTec's unique high pressure design contributes to a lower cost of investment and operation by eliminating hydrogen compressor for most applications.

Gas On Demand

GasTec's hydrogen on demand technology automatically adjust gas production rate according to process requirement. This helps reduce energy consumption and improve plant reliability

Fully Automated Design

The equipment is designed for 24/7 operation with minimal operator supervision

Energy Efficient

Hydrogen generation cost < 4.9 kWh / Nm³ of hydrogen.

Safe

The electrolyser is designed in meet applicable ASME/ANSI, NEC/IEC & NFPA codes

Easy Installation

The equipment is fully skid mounted, factory pre-tested to minimize site installation time & cost.

Factory Backed Warranty & Service

Our equipment comes with a 12 month factory backed warranty and is supported by an extensive network of distributors & local service centers.



Hydrogen Generator

Specifications

No.	Item	series model unit	FDQ5			FDQ10			FDQ20		
			FDQ-2/5.0	FDQ-5/5.0	FDQ-6/5.0	FDQ-8/5.0	FDQ-10/5.0	FDQ-15/5.0	FDQ-20/5.0	FDQ-24/5.0	FDQ-30/5.0
1	H ₂ capacity	Nm ³ /h	2	5	6	8	10	15	20	24	30
2	O ₂ capacity	Nm ³ /h	1	2.5	3	4	5	7.5	10	12	15
3	H ₂ purity	% (v/v)	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9
4	O ₂ purity	% (v/v)	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5
5	H ₂ humidity	g/m ³ H ₂	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4
6	Work pressure*	MPa	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
7	H ₂ & O ₂ differential pressure	mmH ₂ O	±50	±50	±50	±50	±50	±50	±50	±50	±50
8	Current	A	550	550	550	920	920	920	1670	1670	1670
9	Voltage	V	~18	~42	~50	~38	~50	~74	~54	~66	~82
10	Work temp.	°C	90	90	90	90	90	90	90	90	90
11	Power consumption (DC)	kw · h/m ³ H ₂	≤4.9	≤4.9	≤4.9	≤4.8	≤4.8	≤4.8	≤4.7	≤4.7	≤4.7

No.	Item	series model unit	FDQ40			FDQ100			FDQ200						
			FDQ-40/5.0	FDQ-50/5.0	FDQ-60/5.0	FDQ-80/3.0	FDQ-100/3.0	FDQ-125/3.0	FDQ-150/3.0	FDQ-175/3.0	FDQ-200/3.0	FDQ-250/3.0	FDQ-300/3.0	FDQ-350/3.0	FDQ-400/3.0
1	H ₂ capacity	Nm ³ /h	40	50	60	80	100	125	150	175	200	250	300	350	400
2	O ₂ capacity	Nm ³ /h	20	25	30	40	50	60.5	75	87.5	100	125	150	175	200
3	H ₂ purity	% (v/v)	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9	≥99.9
4	O ₂ purity	% (v/v)	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5	≥99.5
5	H ₂ humidity	g/m ³ H ₂	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4	≤4
6	Work pressure*	MPa	5.0	5.0	5.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
7	H ₂ & O ₂ differential pressure	mmH ₂ O	±50	±50	±50	±50	±50	±50	±50	±50	±50	±50	±50	±50	±50
8	Current	A	2480	2480	2480	4600	4600	4600	6600	6600	6600	6600	6600	6600	6600
9	Voltage	V	~74	~94	~110	~76	~98	~122	~102	~122	~138	~170	~206	~242	~274
10	Work temp.	°C	90	90	90	90	90	90	90	90	90	90	90	90	90
11	Power consumption (DC)	kw · h/m ³ H ₂	≤4.6	≤4.6	≤4.6	≤4.5	≤4.5	≤4.5	≤4.4	≤4.4	≤4.4	≤4.4	≤4.4	≤4.4	≤4.4

GAS TEC[®]
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