

FLOXAL™ H₂

Hydrogen on-site production



FLOXAL™ Solutions

FLOXAL™ Solutions cover the supply of gas generated at your site - using plants invested, operated, and maintained by Air Liquide - meeting your demand specifications of purity, pressure and flow rate, with full back-up and guaranteed performance.

Three molecules are made available under the **FLOXAL™** offer: nitrogen, oxygen and hydrogen. For each molecule, various generation technologies are used to ensure satisfaction of your gas needs at the required specifications at a competitive price.

FLOXAL™ H₂

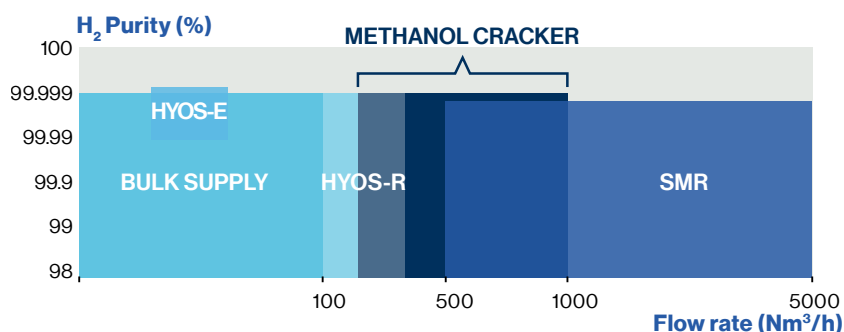
Because you need hydrogen supply adapted to your unique process requirements we propose a full range of state of the art plants built to a standard design thus ensuring safety, reliability, and cost efficiency.

We guarantee continuous supply of gas, worry-free, so that you can focus on your business. Full gas availability is ensured through tele-monitored performance tracking supported by a network of alarm response centres and qualified service technicians as well as auxiliary bulk back-up storage on your premises.

Markets & Applications

Chemical | Glass | Metals | Refining | Energy |
Poly-Silicon | Food
Heat treatment | Sintering | Cooling |
Hydrogenation | Processing

On-site hydrogen portfolio



On-site hydrogen product line

Product	HYOS-E	HYOS-R	MeOH Cracker	SMR
Technology	Water electrolysis	Compact steam methane reformer	Methanol cracking	Steam methane reformer
H ₂ purity	Up to 99.99998%	99.9999%	99.9999%	99.9999%
Flow Range (Nm ³ /h)	10 – 60	270 (10k)	250 – 1000	>500
Pressure (barg)	10	20	10 – 16	Per design
Key feature	High purity	Compact, low cost and high efficiency	Low investment with high flexibility	Customized design
Main application	Hydrogenation, deoxidization, energy	Hydrogenation, deoxidization, energy	Hydrogenation, deoxidization	Hydrogenation, deoxidization
Primary markets	Electronics, edible oil, fine chemical, pharma, metal processing, heat treatment	Galvanizing, float glass, optical fiber, LED, poly-Si, edible oil	Chemical, optical fiber, poly-Si, source of bulk H ₂	Chemical, optical fiber, LED, poly-Si, source of bulk H ₂

HYOS-R product line delivers the FLOXAL™ promise: peace-of-mind at best-in-class total cost of ownership.

HYOS-R

Compact and innovative H₂ generator with Steam Methane Reforming (SMR) process for high purity.

BENEFITS

- Compact and skid mounted design with small footprint
- Simplified design for easy and lower cost installation
- Capacity extension by multi-units
- Safety improved with less H₂ storage and logistic
- Energy efficient process for high purity
- Automated operation with uninterrupted gas supply

Contact us

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