

Morphic Accagen

Your partner for integrated systems engineering, electrochemical and hydrogen applications.

Accagen is a leader in the manufacture of highly-efficient, high-pressure hydrogen generators. The company is focused on cost reduction in electrolytic hydrogen generation while adhering to strict security and equipment reliability standards.

In terms of improving performance and reducing equipment costs,

Accagen's technology works to benefit the global industrial market – in particular, the emerging market for hydrogen-based energy systems for automotive, stationary and mobile applications.

Accagen provides individual components for energy storage systems as well as designs and delivers complete solutions for

hydrogen generation, energy storage and electrical or thermal power generation from hydrogen.

Accagen works with selected partners to offer the most advanced technical equipment for wind and solar generators, hydrogen storage systems, dispensers, fuel cells, combustion engines and turbines.



Hydrogen Generators for Industrial Use

Industrial users of hydrogen require safe, economical solutions that provide a reliable gas supply to their applications. Accagen offers the most efficient electrolyzers in terms of electrical energy

consumption. Accagen's electrolyzers are capable of generating gas at extremely high pressure directly from the electrolysis process without using a compressor. Accagen's philosophy is to

provide safe, reliable equipment for continuous operation year after year. We deliver standard as well as custom-designed solutions in a short time.

On-Site Generator Systems

Up to 1000 NM³/H

Key Features

PRESSURE Industrial applications that require pressurized hydrogen benefit from Accagen generators, which work at high pressure (6-200 bar) without gas compressors. Rather than using a low-pressure electrolyser combined with a gas compressor, high-pressure electrolysis through an Accagen generator is more efficient because of its reduced size, lower energy consumption and lower maintenance costs.

PURITY Hydrogen produced by electrolysis is intrinsically free of hydrocarbon contaminants. Accagen equipment delivers hydrogen gas at a purity greater

than 99.999% and dew point less than -65 oC.

OXYGEN Electrolysis-based hydrogen gas generators can easily be configured to deliver pure, high-pressure oxygen for applications that require both gases.

PLUG-AND-PLAY INSTALLATION Accagen generators are fully tested in factory before delivery. The compact generators are comprised of few parts to make on-site installation fast and easy.

SAFETY All Accagen equipment is subject to rigorous testing and analysis procedures to warrant maximum safety and compliance with European Directives, ATEX (94/9/CE) and PED (97/23/CE).

RELIABILITY Accagen generators are designed for a 20-year plant

lifetime. They can be equipped with high-reliability packs for applications that require 8,700 hours/year at optimal operation with only one brief annual halt for maintenance.

AUTOMATION Fully-automatic, unattended operation is available at no additional cost. The generators can be controlled by touch screen or remotely through RS-232 and Ethernet (both wired and GSM). Integration into existing SCADA systems can easily be implemented.

COST Accagen has invested extensive resources in the selection of the most advanced materials and components to improve efficiency and reduce maintenance needs. Accagen customers invest in high-quality generators to gain a competitive advantage through lower ownership costs.

Hydrogen Generators for Renewable Energy Systems

The intermittent nature of renewable energy sources necessitates the storage of large energy quantities to warrant a continuous power supply, especially in off-grid applications. Hydrogen is the

principal medium for energy storage.

Key advantages of Accagen hydrogen generators are:

- High efficiency
- Reliability
- Adaptive input power capability
- Unattended operation
- Stand alone, off-grid
- Longevity