

Synthetic Biology

Focus:

The industry-leader in synthetic biology in North America committed to sustainability and manufacturing clean formulations. With over 3,000 global brands in its portfolio, this company is dedicated to innovating with consumer health and wellness at the forefront of its business model.

Problem:

As helium cylinder gas delivery is becoming more unreliable and increasingly expensive, the customer is looking to move-away from using helium gas in their operations.

Solution:

The Parker solution included two H2PEMPD hydrogen gas generators specified to achieve the customer's flow and purity requirements.

Impact:

The installation of two hydrogen gas generators allowed for redundancy within the customer's laboratory to prevent operational disruptions and ensure maximum uptime. The laboratory is now independent of bulky high-pressure cylinders, freeing up valuable floorspace, and improving the safety of its employees.



Project Name: Synthetic Biology

Location: North America

Summary

The customer was purchasing bulk helium gas in cylinders and as a result of current rising costs, poor gas quality, and reliability challenges they wanted to find a way to break-away from the bulk gas system they were dependent upon, and become more self-sufficient.

Challenge

It was important to this manufacturer that the solution was able to meet the demands of over 10 gas chromatographs with carrier-grade hydrogen. The solution also needed to improve the safety of its employees and reducing costs associated with using high-pressure cylinders. Traditionally, gases such as hydrogen and nitrogen are distributed in high-pressure cylinders and each gas comes with its own inherent risks. Pressurized cylinders can be dangerous and require careful handling, transportation, and storage to prevent damage and injury.

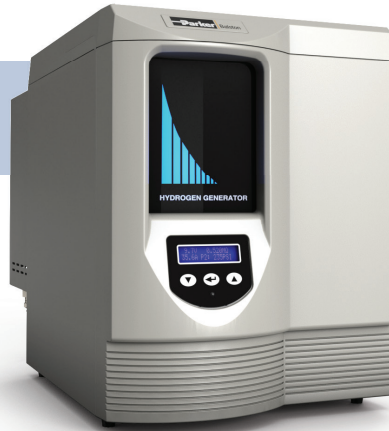
Solution

The customer purchased two Parker hydrogen gas generators known for their esteemed reputation for performance and reliability. These gas generators are programmable and equipped with a many standard features that further ensure a safe working environment such as automatic shut-off, 50+ alarms and low-pressure operation.

Known as the gold standard of the industry, the Parker hydrogen generator is an excellent source of ultra-pure, dry hydrogen for a wide range of laboratory uses. The H2PEMPD series generators are extensively used with gas chromatographs, as fuel gas for flame ionization detectors (FID), reaction gas for hall detectors, and carrier gas to ensure absolute repeatability of retention times. In high-sensitivity trace hydrocarbon analyzers and air pollution monitors, the hydrogen produced ensures the lowest possible background noise.

Fuel Gas Hydrogen Generators

Parker Fuel Gas Hydrogen Generators utilize a proton exchange membrane, which eliminates the use of liquid electrolytes with hydrogen generators. Deionized water is all that is required to generate hydrogen for weeks of continuous operation. Automatic water filling is available as an option for all fuel gas hydrogen generators. Simply connect your in-house supply of deionized water to the nitrogen generator for virtually hands-free operation.



Hydrogen Generators

Parker Hydrogen Generators are an excellent source of ultra-pure, dry hydrogen for a wide range of laboratory uses. These generators are used extensively with gas chromatographs to provide a fuel gas for Flame Ionization Detectors (FID), a reaction gas for hall detectors, and a carrier gas to ensure absolute repeatability of retention times. High sensitivity trace hydrocarbon analyzers and air pollution monitors also use hydrogen to ensure the lowest possible background noise.