Case Study

An Industrial Chemical Supplier

Focus:
A chemical and materials supplier supporting diverse applications across a range of markets from medical to food and beverage.

Problem:
The customer was using gas cylinders and running out of storage space, and was having difficulty ensuring employees were following safety protocols.

Solution:
The customer purchased both hydrogen and zero air gas generators to supply carrier and fuel gas to their gas chromatographs.

Impact:
Safety challenges were eliminated and they no longer needed to plan ahead to order gas or schedule deliveries.

Project Name: Industrial Chemical Supplier

Location: The Carolinas

Summary

The customer was in need of a continuous gas supply onsite that was safe, reliable, and that could eliminate their dependence on cylinder gas delivery.

Challenge

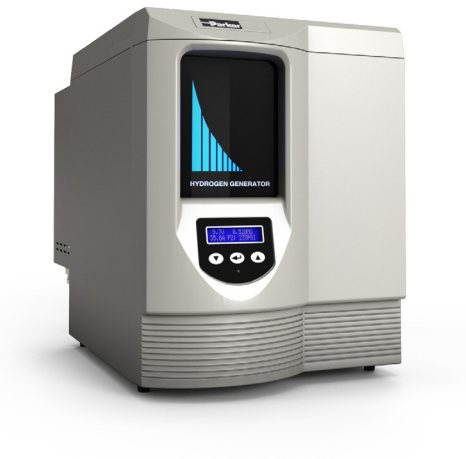
The chemical supplier was in search of a streamlined gas solution for their facility. Allocating proper, safe storage space for the gas cylinders they were using was becoming increasingly problematic. And, gas deliveries and performing regular cylinder change-outs were more and more worrisome from a safety and labor standpoint. It was crucial for them to source and implement an on-site gas generating system that would eradicate the dangers of using high-pressure gas cylinders and provide a consistent source of laboratory-grade carrier and fuel gas for their chromatographs.

Solution

The customer ultimately purchased Parker's H2PEMD and H-MD hydrogen generators, along with HPZA zero air generator. These gas generators were chosen to meet their application requirements, because they provide both a continuous supply of high-purity laboratory gas on-demand, and a more consistent baseline compared to supplied gas for Gas Chromatography. Initially the customer chose Parker gas generators because of breadth of product line and unique features, but product quality is what has made them a loyal customer for more than a decade.

Case Study

An Industrial Chemical Supplier



H2PEMD

Parker's 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.

- Ideal for fuel gas for up to 14 FID's
- Exclusive water management system and control circuitry maximize uptime
- Unique display lighting changes color for easy status checks and water level indication
- Remote control and remote monitoring capable by adding USB options board controller
- Compact - only one square foot of bench space required
- Meets NFPA 50A regulations

HPZA

Parker Zero Air Generators are systems manufactured with state-of-the art, highly reliable components engineered for easy installation, operation, and long term performance. Parker Zero Air Generators are easy to operate, there is no complicated operating procedure to learn or any labor intensive monitoring required.

- Produce UHP zero air from house compressed air (<0.05 ppm THC)
- Easy installation and operation
- Increase the accuracy of analysis and reduce the cleaning requirement of the detector
- Qualitative SMART-Display provides operational status at a glance
- Recommended and used by many GC and column manufacturers
- Typical payback period of less than 1 year
- Silent operation and minimal operator attention required
- Models available to service up to 66 FIDs

H-MD

Parker's H-MD series ultra high purity hydrogen gas generators offer the optimum combination of safe operation, reliability, performance and low cost of ownership. Using a field proven PEM cell technology, hydrogen is produced on demand from deionized water and electricity, at low pressure and with minimal stored volume. Innovative control software allows unrivaled operational safety and reliability.

- Automatic water fill option for endless operation
- Produces a continuous supply of 99.99999+% pure hydrogen gas without downstream purifiers
- Compact - only one square foot of bench space required
- Designed to run continuously 24 hours/day

CS_AGS_Industrial Chemical Supplier_062025

Parker Hannifin Corporation
Industrial Gas Filtration and Generation Division
4087 Walden Avenue
Lancaster NY 14086 USA
p: 800 343 4048
parker.com/igfg

ENGINEERING YOUR SUCCESS.