

## Analytical Lab & Training Institute

### Focus:

The customer is the premier hands-on HPLC and GC training center in the United States. Over the last 25 years, they have hosted 12,000 scientists from every major pharmaceutical, chemical and petroleum company in the United States, as well as most government run labs.

### Problem:

The customer needed a solution that would supply enough hydrogen directly to 13 FIDs for continuous operation.

### Solution:

One Parker H2PEMPD hydrogen generator was purchased that was able to supply hydrogen gas to all 13 of the laboratory's 13 FIDs.

### Impact:

Most of the analytical lab and training institute's customers are gas chromatographers and look to the customer to recommend alternatives to helium and industry best practices for their own laboratories.



**Project Name:** Analytical Lab & Training Institute

**Location:** Mid-Western United States

### Summary

More than a decade ago, the customer primarily used helium gas in its analytical lab and training institute until learning about the benefits of onsite laboratory gas generation. Upon being introduced to the Parker laboratory gas generator product offering, the customer converted its facility from using helium gas cylinder tanks to an onsite installation of a Parker hydrogen generator.

### Challenge

Many gas chromatographers still use helium gas in their laboratory operations today and are becoming more and more frustrated with increasingly steep prices and unreliable delivery of helium gas cylinders. Unaware that hydrogen is a viable, practical and cost-effective alternative to helium, these scientists need to be educated on how to convert their laboratories from using helium to hydrogen gas.

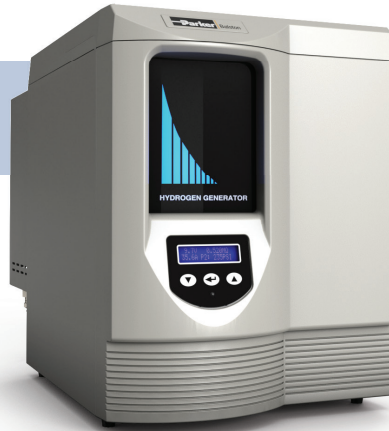
### Solution

The customer ultimately chose Parker hydrogen generators for their unmatched quality, durability and trusted reputation. End-users are introduced to the safety, reliability and ease-of-use of the Parker hydrogen gas generator during their hands-on training courses. Today the analytical lab and training institute has three Parker laboratory generators in continuous operation and recommends them as the gold standard of onsite laboratory gas generating solutions.

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 used extensively 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.

