

Case Study

Aerosol and Liquid Product Manufacturing & Blending

Focus:

A North American leader in aerosol and liquid product manufacturing, that specializes in formulating, blending and packaging over 2500 private-labelled products.

Challenge:

Frequent cylinder change-out was becoming inefficient and too expensive.

Solution:

They purchased two sets of 64-01 Membrane Air Dryers and HPZA-3500 Zero Air Generators.

Impact:

The lab is running more efficiently with reliable, on-demand gas generation. They are thrilled with the system's performance and are happy with the cost savings it has brought them.



Project Name: Aerosol and liquid product manufacturing and blending

Location: Ontario, Canada

Summary

The manufacturer was looking for a solution to streamline their operations and reduce costs by eliminating the use of gas cylinders in their labs and implementing on-site gas generation instead.

Challenge

They were frustrated with zero air gas cylinder delivery and wanted to become independent of the supply chain and manage their gas supply on-site.

Over time cylinders became more expensive, troublesome to manage, and were hindering safety and lab efficiency. It was indicated that they were spending over \$25k annually on nearly 130 zero air cylinders per lab and were looking for ways to reduce costs.

Solution

Parker installed two zero air generators to supply GC's in both of their manufacturing sites. In addition, we cleaned up their on-site compressed air source that was lacking proper drying technology by installing two membrane air dryers ahead of the zero air generators. This configuration not only saved the customer money with a lower-cost offering but eliminated the hassle and delivery cost of dealing with gas cylinder companies.

The Parker HPZA Zero Air generator series allowed the customer to maximize efficiency and also deliver UHP zero air. The manufacturer is happy with the performance of their new system and is enjoying the convenience of on-site gas generation.

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Zero Air Generators

Produce UHP Zero Air from lab house compressed air supply

- Easy installation and operation
- Gas purity below 0.05 ppm Total Hydrocarbon Content (as methane)
- 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

Applications

- Oxidant/support gas for GC with FID, FPD and NPD detectors
- Support gas for Total Hydrocarbon Analyzers
- Source and exhaust pump gas for LC/MS instruments

Membrane Air Dryers 64-01, 02, & 03

The Parker 64-01, 64-02, and 64-10 Membrane Air Dryers will supply oil and particulate-free dry compressed air to dewpoints as low as -40°F, and at flow rates of up to 25 SCFM.

- Dry air for hazardous areas •
- No electricity required low operating costs
- No refrigerants or freons environmentally sound
- Explosion proof
- No moving parts or motors silent operation

The membrane air dryers are engineered for easy installation, operation, and long term reliability. They incorporate the highest efficiency membrane available, offering low cost operation and minimal maintenance. The dryers are lightweight, compact, can be easily installed on an existing air line and require no electrical connections, making them ideal for remote and point-of-use installations or those in hazardous areas.

If oxygen is not a concern, the air dryer is ideal for all laboratory applications requiring ultra-dry, purified compressed gas.

Water vapor quickly permeates the membrane, and is released harmlessly to atmosphere. Air flows along the membrane fiber as a separate product stream.



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