

Case study

The Customer

PEAK Scientific is a leading nitrogen generator manufacturer and global expert in high-performance nitrogen gas generators and hydrogen gas generator systems for LC-MS, GC, GC-MS and other applications in laboratories around the world. It is one of the world's largest leading brands that make nitrogen generators from pressure swing absorption technology, nitrogen and hydrogen generators.



Background

PEAK Scientific contacted SGS as part of Servomex's trusted network of Channel Partners and one of the world's leading testing, inspection and certification companies. PEAK Scientific had previously purchased SERVOPRO 4100 analyzers for CO₂ and methane.

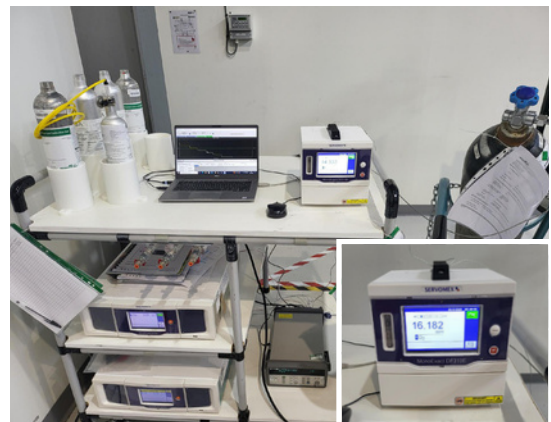
The Problem

During a site visit, SGS identified an issue with other competitor analyzers on site – the customer wasn't getting the accuracy for its oxygen measurements, with unusual readings being generated.

A very low PPM oxygen measurement was needed, and a solution was identified by SGS.

The Solution

Following recommendations of new technology to deliver the accurate, reliable measurements needed, the customer trialed the SERVOPRO MonoExact DF310E Coulometric analyzer. The trial was key to the success; over several weeks the customer worked with an SGS engineer to set up the equipment and learn how to use it to gain and analyze accurate and reliable measurements in the process.



The Results

Following the success of the trial, the customer purchased two units for use in research and development as well as in the production process as the DF310E proved it can accurately check oxygen levels in every machine in the nitrogen division.

James Clark, SGS, said: “We were delighted with the performance of the Servomex analyzers, particularly down to very low levels at 1ppm, which the customer’s existing systems couldn’t achieve.

“The non-depleting cell is also a key benefit as it’s easier to use and maintain. Being able to ‘try before you buy’ has been incredibly useful and a critical part of the process. This is particularly beneficial for smaller companies that can’t justify the big outlay cost of an analyzer without knowing what the results could be.

“Trialling the analyzer allows the customer to see first-hand the benefits, building trust that it will do what they need it to do, in this case, accurate oxygen measurements. For SGS, the Servomex brand inspires trust, and so we are confident that offering a trial will lead to results.

For the customer, installing the DF310E has solved the problem of not being able to produce accurate

oxygen measurements down to very low levels. It has also allowed them to verify the quality and control of measurements better.”

Robert Forbes, Senior Engineering Technician at PEAK Scientific said: “The customer service and support from SGS was exceptional from start to finish. Their knowledge about gas products and gas analysis helped us understand and find the best equipment for our needs, helping us future-proof any new development.

“The product itself (SERVOPRO MonoExact DF310E) was simple to set up, and the ease of use and calibration meant we didn’t have any downtime from delivery to first use. Having tried a few other gas analyzers, we found this one best suited our needs and ticks every box. The unit itself is compact and very responsive, giving great accuracy for our generator gas output.”

Moving forward, PEAK Scientific is considering using SGS and Servomex analyzers in other areas of the business, including the hydrogen division, due to the full turnkey solutions offered and the ability to trial the systems to ensure they deliver the results they need.



SERVOPRO MonoExact DF310E

The MonoExact DF310E oxygen analyzer is designed for industrial gas applications. **Designed specifically for accurate measurements of oxygen in industrial gas (IG) applications, the SERVOPRO MonoExact DF310E is a next-generation digital analyzer combining precision trace-level measurement.**

Built around the latest innovations in software and hardware - including a Coulometric digital oxygen sensor - it offers enhanced user control and a reduced cost of ownership.

- **Accurate measurements of oxygen**
- **Designed for industrial gas applications**
- **Tried and tested non-depleting digital coulometric oxygen sensor**
- **Non-depleting Paramagnetic sensor option**
- **Analogue and digital communication options**