



Measuring trace oxygen in gas cylinders

Summary

High purity and ultra-high purity gas suppliers need to provide cylinder gases with certificates that state oxygen contents.

Application

Gas providers need to provide cylinders of their product to their customers with known amounts of oxygen. These gases are typically inert (nitrogen, argon, helium, etc.).

Challenge

The challenge is that the oxygen measurement needs to be fast enough to show the trace levels of oxygen without consuming significant amounts of the gas.

Solution

The Panametrics CGA351 utilizes a zirconium oxide sensor, the fastest technology available to measure trace oxygen in clean (inert, non-combustible) gases. The only sample system requirements are that the analyzer be mounted as close to the cylinder rack as possible and that the gas is regulated to atmospheric pressure.

Benefits:

The advantages of using the Panametrics zirconium oxide sensor are:

- Batch measurement of the cylinder gas with minimal consumption of the product and with quick response
- The sensor can be calibrated in minutes
- The rugged design means many years of service.



Application specifications

Oxygen content range:	0 to 100 ppmv in non-combustible gases
Operating temperature:	20°C (68°F)
Operating pressure:	Regulated to 14.7 psia (101.3 kPa)

