

Praxair Selects Baseline-MOCON's New BevAlert Gas Analyzer To Improve Detection Sensitivity Of CO₂ Impurities

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Lyons, CO — Praxair, Inc. has upgraded its carbon dioxide (CO₂) gas analysis with the installation of multiple BevAlert™ Model 8900 at its plants across North America and select international locations.

The BevAlert Model 8900 new gas chromatograph, from Baseline-MOCON, Inc., a subsidiary of MOCON monitors trace impurities in CO₂ (and other gases) while setting new standards for analytical sensitivity. The analyzer also eliminates the need for multiple instruments.

In the past, two separate units have been required to test CO₂ for the presence of acetaldehyde and BTEX (benzene, toluene, ethyl benzene and xylene) contaminants. The testing is used by the food and beverage industry and specialty gas manufacturers to monitor aromatic hydrocarbons and acetaldehyde in the CO₂.

Greg Sweeney, Praxair's director of carbon dioxide, points out that beverage bottlers and breweries are continually asking for more stringent quality analysis — down to parts per billion (PPB) in certain circumstances. As the leader in the carbonation field, it was important that the Praxair avail itself of the latest technology.



Close-up of tubing/piping (sample gasses, carrier gasses, vent lines, etc.) entering the quality assurance hut

"The new analyzer gives us the ability to measure those components more accurately, down to the PPB levels required by our customers," he says.

"Previously, the only way to test for acetaldehyde in the CO₂ was by manually testing samples, or by using multiple pieces of equipment. That requires time and labor and generally slows down the process," Sweeney says.

The BevAlert Model 8900 is the first analyzer that can detect the presence of both acetaldehyde and BTEX via one unit vs. what traditionally has required two separate pieces of instrumentation. The new unit allows plant operators to significantly reduce capital outlay for this type of instrumentation, while at the same time being able to detect even smaller amounts of a wider range of gases.



Carbon dioxide is piped into the quality assurance building from the purification plant. From there it is pumped into the waiting tanker.

At the core of the BevAlert Model 8900 is a state-of-the-art photoionization detector (PID) which is used as the sensing element. Baseline-MOCON's application chemists have been able to create a PID detector-based unit which not only combines analysis which formerly required two units, but also provides the ability to look at the various compounds with a greater sensitivity than previous methods. Other advantages include easy access (behind the hinged front panel) of the PID detector for service and maintenance.

"This technology enables continuous online analysis with one unit. It allows us to make our process easier to monitor. We can draw data at anytime, because it is online and in real time," Sweeney says.



BevAlert's digital display provides easy-to-read status of sample.

"Increasingly, bottlers are mandating to CO₂ gas suppliers that such analysis is done to help insure a higher quality product," says Bob Forsberg, president, Baseline-MOCON. "Our unit provides data to help meet those quality objectives."

The BevAlert Model 8900 is ideal for a wide variety of beverage applications (water, carbonated drinks, beer, etc.), as well as quick frozen foods. Customization options are also available for indoor or outdoor air quality analysis, oil and gas exploration and other trace impurities in specialty gases.



Gas samples enter the BevAlert analyzer via rear tubing. Unit transmits continuous data to Praxair.

Praxair, Inc. is the largest industrial gases company in North and South America, and one of the largest worldwide, with 2006 sales of \$8.3 billion. The company produces, sells and distributes atmospheric and process gases, and high-performance surface coatings. Praxair products, services and technologies bring productivity and environmental benefits to a wide variety of industries, including aerospace, chemicals, food and beverage, electronics, energy, healthcare, manufacturing, metals and others. More information on Praxair is available on the Internet at www.praxair.com.

Baseline-MOCON, Inc., first established in 1969 as Baseline Industries Incorporated, was acquired by MOCON in 2001. Baseline-MOCON is known as an industry leader in the development and manufacture of gas analyzers. Baseline analyzers employ several principals of gas analysis including gas chromatography, continuous monitors and piD-TECH Plug-In Photoionization Sensors.

The product line also includes a variety of complimentary products such as multipoint samplers, calibration systems, sample conditioners, support gas generators, and data acquisition systems. Designed for optimum reliability, compactness and operational simplicity, Baseline products meet the growing demand for environmental, industrial hygiene and safety, mud logging during oil and gas exploration, and industrial gas analysis. For more information: <http://www.baseline-mocon.com>.

MOCON is a leading provider of instrumentation and consulting and laboratory services to medical, pharmaceutical, food and other industries worldwide. For more information: www.mocon.com.

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