

Calibration gases

The precision genre



Gasco Affiliates

Founded in 1996, Gasco Affiliates, LLC is a leading producer of precision calibration gas, equipment and accessories. The company employs proprietary procedures to create the highest quality grades of pure gases, gas mixtures – single gas, complex four-gas and highly reactive gas mixtures – cylinders and accessories for a wide range of applications. Gasco products meet or exceed all safety equipment industry specifications and are available exclusively through safety distributors worldwide. For more information, visit www.gascogas.com

The umbrella term ‘calibration gas’ is used to denote an exact amount of precision mixed gas; these gases often find application in very specific environments that frequently demand great accuracy and consistent measurement. Consequently, this month’s gas report looks to Gasco Affiliates, LLC, a specialist calibration gas company, for an informed insight into this precise science.

Calibration gases serve numerous applications and are commonplace across a range of sectors, from petrochemicals to pharmaceuticals. The Florida based solution provider highlighted just some of this vast scope. Tom Hanway, President of Gasco commented, “Gas detection instrumentation is used in almost any safety application. Therefore, calibration gas will also be required in these safety applications. Common applications for calibration gases include, pulp and paper mills, refineries, petrochemical plants, pharmaceutical facilities, semiconductor fabrication facilities, city governments and the national defence department.”

Nevertheless, all calibration gases share a universal purpose. They verify the accuracy and correct operability of a gas-measuring instrument to detect specific toxic or combustible gases. As Hanway pointed out, “The only way to determine if an instrument is in good working order is to test it with calibration gas.”

An ever-evolving art

Since calibration gases can vary from simple mixtures such as ammonia to far more complex compounds, as seen in multi-gas monitors, there is a constant need for adaptive technology. Gasco’s President explained, “The nuances and techniques of cylinder preparation and the mixing of a precise amount of gases into portable cylinders have evolved with the development of

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various proprietary innovations over the years.”

Perhaps most pertinently to this eco-themed edition of **gasworld**, is the very recent sector revolution that has seen attention turn to environmentally minded solutions. This is an arena of particular interest to the North American calibration specialists. “At Gasco, we have recognised a trend towards environmentally friendly calibration gas solutions.” Hanway expanded, “Traditionally, the industry has relied on non-refillable cylinders that are DOT-approved for only a single shipment. However, in 2006, Gasco developed and introduced the EcoSmart cylinder, which is DOT-approved to be refilled. EcoSmart is a tremendous option for companies that are concerned about sustainability and recognize the benefit and convenience of refilling a cylinder.”

The company went on to outline just how it has dealt with the challenges of this new wave of ‘eco-calibration’, Hanway elaborated, “Gasco has continued to meet market demand for environmentally friendly options as we introduce new product innovations. Gasco is providing more gas in standard-size disposable cylinders with the new 44- and 66-liter cylinders available exclusively through Gasco. Additionally, both the 44- and 66-liter cylinders are also available as EcoSmart refillable cylinders... as we say at Gasco, EcoSmart gives you a choice: refill versus landfill.”

Initiatives such as these refillable cylinders are seeing increasing uptake; especially among companies which place ‘green’ thinking high on the corporate agenda. But growth isn’t just green, it is also location orientated – as the North American Company President attested, “Overseas is a particular growth area for calibration gas, as many developing countries begin to implement up-to-date safety regulations.”

Undoubtedly with calibration gases straddling such variable applications, expansion and innovation are just the name of the game among this industrial gas group. Hanway concluded by emphasising this inherent, market driven momentum: “Ultimately, the market demands superior and safe solutions to meet evolving needs for precision calibration gas.” □