



## **MEECO's Heritage**

Since 1948, MEECO has produced durable, high-quality gas analyzers for industry. Chief among our customers are natural and industrial gas producers and their distributors, utilities, chemical and petrochemical companies and the makers and users of ultra-high-purity gas. Headquartered in Warrington, PA, MEECO was founded by Dr. Gustav Bergson, a Harvard-trained physicist. He produced equipment to measure such disparate elements as color, radio frequencies, the micro vapor pressure of jet fuels and oxygen in gases. By the 1950's, an arrangement with E.I. DuPont DeNemours enabled MEECO to pioneer instruments that measure trace moisture in solids, natural gas, and industrial specialty gases. As such, the electrolytic method is presently MEECO's core technology.

### **Moisture Analyzers and Natural Gas**

At first, moisture analyzers were mainly used to measure H<sub>2</sub>O in fluorocarbons. They came into wider use when experts in the natural gas industry found that monitoring moisture in gas pipelines helped avert corrosion, compressor breakdowns, and freeze-ups caused by large pressure drops. In response to the need for on-site pipeline testing, MEECO created a portable moisture analyzer for field technicians. Tennessee Gas bought the first of these units in 1959. Since then, MEECO has sold over 10,000 portable units to the "Southwest Oil Patch". In addition, natural gas utilities depend on continuous, accurate moisture readings because gas prices are based on BTU ratios, which are in turn affected by moisture levels.

### **MEECO Enters a New Era**

The market for moisture analysis technology expanded further as utilities, industrial gas manufacturers, and other industries began using the instruments. Electric utilities such as PECO (the Exelon unit long known as the Philadelphia Electric Company) must eliminate moisture in their instrument air systems to avoid corrosion. Industrial gas manufacturers, such as Praxair and Air Liquide,

must monitor moisture content to meet industry specifications for pure, dry gas. Likewise, semiconductor manufacturers must control moisture down in the high-purity gases used to assure IC quality.

## **MEECO Markets Diversify and Grow Worldwide**

In 1983, Lisa Bergson took over the business from her father. By then, moisture analyzers were the company's primary business. After instituting new quality and service procedures, she focused the company on product development, on-going technical innovation, global expansion, market diversification, and progressive management and manufacturing practices. By the late 1980s, her management team successfully diversified the company into a leading purveyor of moisture analyzers for the emerging semiconductor market worldwide.

## **MEECO Stands for Cutting Edge Innovation**

MEECO's growth derives from constant innovation. In 1987, it launched the world's first ppb moisture analyzer for ultra-pure electronic gases used in the semiconductor industry. It came to dominate the market. Thereafter, in early 1991, MEECO rolled out several state-of-the-art analyzers. These comprised the Turbo™, for online, low ppb moisture monitoring; the L'eau Pro™, the world's first commercially available, low ppb moisture generator; and the Accupoint™, also a first. The Accupoint, a transducer for industrial and natural gas, allowed multi-point readings using an electrolytic sensor, a capability never before available.

By 1995, MEECO was ready with the Turbo 2™, capable of detecting down to one ppb and lower, and the WaterBoy™, an inexpensive easy-to-use, new portable for the natural and industrial gas industries. And, in 1997, another product outpouring occurred with the advent of the Tracer™, the first low-cost, modular ppb moisture analyzer; the [NastyBoy™](#), an innovative design for moisture in chlorine; the Accupoint LP, a transmitter for measuring moisture at low pressures; and the UHP Sprite™, a very simple, inexpensive go/no-go device for tracking moisture breakthroughs on the ultra-high-purity gas lines.

By 1999, MEECO introduced the [WaterBoy 2™](#), [Accupoint 2™](#) and [Accupoint LP 2™](#), updated versions of their microprocessor-driven predecessors. A fourth device, the [IceMan™](#), designed in collaboration with DuPont, measures moisture in Freon substitutes, a growing market. Further, MEECO launched a

line of percent humidity devices, the Aquatek™ series, for demanding industrial environments.

MEECO introduced the [Aquavolt™](#) and [Aquavolt+™](#) in late 2001. Prized for their robust technology and simplicity of use, these rack-mount instruments are highly valued in their second decade of service in online moisture monitoring. The AquaVolt is used primarily for industrial gases and instrument air. The AquaVolt+, with a lower detection limit of 35 ppbV, is chiefly found in scientific labs, specialty gas applications and semiconductor gas qualification.

The Tracer 2™, an update of our flagship model, was introduced in 2005. It pairs 0.5 parts-per-billion (ppb) moisture detection with improved speed of response.

In 2010, MEECO launched the [M-i™](#) online mini moisture monitor. Designed for use directly on the gas supply line, the M-i measures an ideal range of 0.5 ppm to 1000 ppm (parts-per-million). A breakthrough in mini-sensors, the M-i packs high-powered clean technology into a small, innovative, and affordable package. Utilizing MEECO's accurate and linear electrolytic technology, the M-i guarantees peace of mind with no-drift analysis. In 2012, the company introduced its [MedOx™](#) instrument, designed specifically for medical oxygen handled by gas suppliers, hospitals and the aviation industry.

## **Longevity, Loyalty and the Secret of MEECO's Success**

Ms. Bergson explains MEECO's remarkable endurance by pointing to its adaptability and to the exceptional contributions of its staff. MEECO's employees work as a team in a freewheeling, entrepreneurial environment that encourages the sharing of ideas and solutions. Ms. Bergson describes her experience with MEECO as "unusual, almost like starting a new company." At the same time, she stresses, "My father left a great foundation: excellent products, many loyal customers, and virtually no debt. Now we embrace the challenge of leading MEECO into the future."