Supplying Gases to a Growing Life Sciences Hub

Middlesex Gases & Technologies, Inc.

A CryoGas International Distributor Profile

The Massachusetts Biotechnology Council (MassBio) (massbio.org), a not-for-profit organization that represents and provides services and support for the Massachusetts biotechnology industry, is the nation's oldest biotechnology trade association. According to MassBio's "Industry Snapshot 2014," there were 14 IPOs (initial public offerings) in Massachusetts through July of 2014, which set an annual record in IPOs for Massachusetts biotech companies. Boston is also home to the top five NIH-funded (National Institute of Health) independent research hospitals and Massachusetts' non-profits, like Harvard University Medical School and the University of Massachusetts Medical School. The area is also known for its investment community active in the life science sector and for its lab incubator space for start-ups. These factors make metropolitan Boston one of the nation's largest and fastest growing hubs for life sciences and a great market for gases and the related equipment that are in demand at these companies and institutions.

Ron Perry Director of Sales & Marketing for Middlesex Gases & Technologies, Inc. which has headquarters in Everett, Massachusetts, has been following the emergence of life science businesses in greater Boston carefully for 20 years. "Middlesex continues to see steady growth from the life sciences industries. By recognizing early on that we needed to shift our marketing focus and begin targeting the emerging biotechnology markets in our region, Middlesex has been able to stay ahead and meet the demands of our customers. As new research companies continue to emerge, Middlesex's sales team can offer a complete turnkey solution for all their gas and equipment requirements. Early in 2015, Middlesex purchased its sixth bulk trailer, which gives us even greater capability to meet the demands of our customers needing larger capacity bulk



Middlesex Gases & Technologies Headquarters

tanks. The new transport will be the largest in our fleet and will be operational by the second quarter of 2015."

As a premier supplier of specialty gases, cryogenics, microbulk, and bulk gases in New England, Middlesex Gases has focused on becoming the technical resource for biotechnology and life science companies. With three specialty gas locations, the company has dedicated resources for biotechnology and life science companies and is able to deliver a level of service, expertise, and product quality uncommon in New England. From start-ups to Fortune 100 companies, Middlesex Gases offers customized solutions for all applications.

Critical to doing business in the life sciences industry, as explained in the Sudhir Brahmbhatt's article on page 22 of this issue, is proper accreditation. On August 23, 2010, Middlesex Gases & Technologies was accredited with ISO/IEC 17025:2005, an International Standard designed for the accreditation of Testing and Calibration Laboratories. It includes quality management system requirements along with technical requirements to ensure that each laboratory is equipped to perform particular tests and calibration activities.

Middlesex Gases was assessed by Perry Johnson Laboratory Accreditation (PJLA), an "Accreditation Body" (AB) meeting International Laboratory Accreditation Corporation (ILAC) standards. Perry Johnson Laboratory Accreditation, Inc. is a private organization offering third-party accreditation services for testing and calibration laboratories. ILAC is the peak ISO 17025 accreditation body and has recognized other peer ABs. These ABs mutually recognize each other's accredited labs.

This accreditation gives Middlesex Gases a competitive advantage in the marketplace with international recognition. "The biotech, life sciences, and pharmaceutical marketplace is one in which the expectation of quality standards by its supplier is high and rightfully so. Companies within the arena comply with strict regulations for quality control and expect no less from their suppliers. We have always taken pride in our product quality and recognized the importance of this need by our customers. By taking the extra steps to become ISO:17025 accredited, Middlesex differentiates itself within the marketplace and further demonstrates to its customers that product quality is at the forefront of our mission statement," explains Steve Powell. Specialty Gas Sales for Middlesex.

Accreditation is a demonstration of a well-established quality management system producing reliable and competent test and calibration results. In order to provide state-of-the-art products, the analytical capabilities of the supplier have to be up to the task. Middlesex Gases has a full specialty gas laboratory located in its Everett facility. Additionally, the company has testing capabilities at its other fill

locations. With its ISO/IEC 17025 accreditation, Middlesex is able to generate certified standards, primary standards, and complex mixes.

This expertise is critical to the serving the life sciences market as Middlesex Gases Specialty Gas Lab Manager Michael Pulli says, "Being an ISO:17025 accredited lab not only ensures that the specific gas blends requested by our customers are as accurate as possible, but also gives Middlesex the tools it needs to keep our equipment operating at peak level at all times. The requirements handed down from our assessors at Perry Johnson Labs keep Middlesex Gases' quality assurance at the forefront of daily activity. From performing regularly scheduled calibration checks to detecting and diagnosing potential problems with our analyzers, being ISO:17025 accredited helps us maintain complete confidence in the equipment that we use."

The next generation of gas services is at Middlesex Gases now. Middlesex Gases prides itself on bringing new technology and safety improvements to its customers. Recently the company added microbulk argon and CO₂ as well as dry ice to its product offerings.

Middlesex Gases' product lines include specialty gases, high purity, ultra high purity, and research grades; cryogenic gases; micro bulk; bulk; and specialty gas equipment, regulators, manifolds, cryo-freezers, and generators. The Middlesex staff is fully trained in specialty gases, applications, and equipment.

Cryogenic preservation equipment and services represent another group of products Middlesex offers to the growing biotech industry in New England. This group





Switching from liquid cylinders (left) to microbulk tanks (right) can save customers space and eliminate the handling of cylinders.

includes cryogenic freezers, shippers, and refrigerators; a Cryo-Freezer Preventative Maintenance Program, with full time service; Cryo-Freezer Consolidation expertise, including a full time Cryo-Preservation Specialist; cryogenic switchover systems; and cryogenic keep fill system, via satellite.

"One of the major concerns in Bio/Life Science is storage space inside the labs; it continues to be an on-going challenge for our client base", explains Ron Perry. "Our customers constantly struggle to manage their cell storage areas. Middlesex recognized early on the need to provide Cryogenic Storage Solutions to our customers. Our team of experts help design central depository locations utilizing the limited space the customer has in their labs. By working with our installation team, our sales force can provide the perfect solution

for customer needs. Cryogenic Storage Solutions was one of our largest growth areas for Middlesex in 2014."

At the end of 2014 Middlesex added CO₂ filling capabilities to its Plainville plant. Plainville, Massachusetts is about 40 miles from Boston, and the Middlesex plant there now has the ability to fill nitrogen, argon, oxygen, CO₂, propane, and propylene. This plant location is critical moving ahead as the life science and biotech markets expand outside of the Boston city limits.

The Middlesex applications, solutions, and facility expansions discussed above, all contributed to making 2014 a year in which the company achieved all of its sales goals and had its best year.

Kicking of 2015, Middlesex has introduced its new website, *www.middlesexgases.com*, which focuses on providing solutions for the bio-pharmaceutical and life sciences market.

"We anticipate another strong year as we look ahead in 2015. Preliminary indications through market surveys appear to be suggesting a 5-7 percent growth for 2015," says Ron Perry. "We have assembled the right group to lead us to achieve our goals — our people are our strength. Middlesex will continue to focus on emerging markets and continue to build and strengthen its core values. We will continue to invest in technology, training, and marketing."

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For more information on Middlesex
Gases and Technologies visit www.
middlesexgases.com



Middlesex recently added 3600 sq. ft. to its Plainville operation.