

# UNDERtheCAP

A Newsletter on issues and products for environmental analysis professionals, courtesy of



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## Product Spotlight Special Report

# QEC debuts its largest-ever product line expansion

## QUALITY ASSURED CHROMATOGRAPHY

QEC's latest product line addition, Quality Assured Chromatography, is a vastly expanded selection of autosampler vials, caps and septa incorporating the latest innovations for the analytical laboratory market.

With QEC's Quality Assured Chromatography, new material options, improved designs, and unique processing methods combine to improve product quality and process efficiency in the laboratory. Some highlights of the new line of products include:

**Advanced Injection Port Septa** - a unique septum with a hole in the center. This design has been tested to 1000 injections at 400°C inlet temperature, is low bleed, and minimizes the potential for coring.

**Natural Silicone Septa** - use of non-pigmented PTFE and silicone layers reduces potential contamination caused by the autosampler septa. Initial testing shows a significant improvement over other currently available septum constructs.

**Quality Assured Bonded PTFE Septa** - straight PTFE septa is often used for critical HPLC methods where contamination caused by the silicone layer cannot be tolerated. The PTFE layer, if not bonded, has a tendency to fall out during transport and use, increasing sample preparation time. Use of a bonded PTFE septum prevents liner fallout and increases process efficiency.

QEC's Quality Assured Chromatography is your assurance of unsurpassed septa and cap liner sealing integrity. QEC's wide choice of materials (both upper and lower barriers as well as elastomers), thicknesses and durometer measurement offer you the ideal combinations for your various sealing applications. And our unique adhesive-free bonding process means

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Call toll free **1-800-255-3950** or visit **[www.qecusa.com](http://www.qecusa.com)**

# QEC expands Pittcon presence

In 2009 QEC expanded our Pittcon exhibit space by 50 percent to accommodate a comparable increase in the size and scope of our product offerings.

This year QEC debuted our vastly expanded line of high-tech caps, septa and vials for autosamplers under the name **Quality Assured Chromatography** (see our Product Spotlight Special Report for more information). In addition, the full line of QEC products was also on display, including all of our Custom-Preserved products.

QEC has exhibited at world-famous Pittcon each of the past 14 years. It is an integral part of our marketing program, and a demonstration of our commitment to the present and future of the analytical laboratory industry.

Pittcon is the world's largest and most comprehensive forum on laboratory science and instrumentation. Because of its scope and reputation, Pittcon is always an excellent venue to debut new products and product improvements.

Hospitality and professionalism are essential to our Pittcon presence. From our Jelly Belly® Vials to our product displays to our cordial booth staff, QEC always makes an impression at this most important event for the analytical industry.



## A word from the president...



**James L. Hern, PhD.**

## **Real growth earns real rewards**

QEC has once again scored a major success with a nearly 50 percent increase in its product offerings, mainly as the result of the expansion of our chromatography line. We are also adding new Custom Preserved products and other items when our new, larger catalog debuts this autumn.

This expansion in our offerings is due to our established principle of listening to our customers and responding to their needs. Our business strategy is very simple and direct— Listen to your customers; add the products they want; reduce products not in demand; and continue to innovate. It is especially gratifying in these difficult times to say that, because of our straightforward approach, QEC is a strong partner for our customers and we continue to grow every day.

Although we are happy with our success, we are not at all satisfied. We pledge that our customers will receive even better service, more cost effectiveness, and new levels of quality, along with a greater than ever product line. That's why we continue to request your feedback. Let us know your thoughts, your ideas, and your problems.

QEC is eager to continue leading the way with the newest of products, the most innovative service programs, and to collaborate with you in a continuing crusade for excellence.

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# Quality Assured Chromatography

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that septa and cap liners will stay put and provide an environment with no possibility of adhesive contamination. Quality Assured means a consistent seal that keeps its promises time and again, improving your results and lowering your overall cost of operation.

## Gas Chromatography

**GC Septa:** Depending on the analysis, standard organic-based septa, such as butyl or natural rubber, may be used; or silicone septa may be required if the vial needs to be re-sealed or temperatures above 100°C are realized. GC septa consist of a rubber layer and either one or two PTFE layers which act as the main barrier. Because samples used in GC work can be volatile at room temperatures, it is important to choose the right GC septa for your application. Choosing the wrong septa could lead to compromised test results.



## Headspace Chromatography

**Headspace Septa:** Low extractable levels and excellent re-sealing characteristics are but two of the demands placed on Headspace Septa. For standard analyses or in the presence of ketones, straight butyl or butyl/PTFE septa may be used; however, if the vial needs to be re-sealed or is subjected to temperatures over 100°C, silicone/PTFE septa are recommended.

## High Performance Liquid Chromatography

**HPLC Septa:** Liquid Chromatography (LC), HPLC, and LC-MS require a slightly different septa design. Because the sample is less volatile, straight PTFE septa or pre-slit silicone/PTFE septa designs may be used. A straight PTFE septum (preferably

bonded into the cap) offers excellent solvent resistance and chemical compatibility, but does not re-seal upon puncturing. Pre-slit silicone/PTFE septa prevent needle coring, offer moderate re-sealing, and provide for excellent sample-draw reproducibility. Non-pigment silicones and PTFEs reduce the potential for contamination.

## Advanced Injection Port Septa

All high performing injection port septa are typically manufactured of silicone and molded to ensure proper fit, are conditioned for lower bleed even under high temperatures, and are designed to minimize coring (shedding of particles into the port liner).

**For an advance look** at our complete line of Quality Assured Chromatography products, go to [www.qecusa.com](http://www.qecusa.com) and click the "sneak preview" button on the home page. QEC's new catalog, to be published this fall, will contain a full listing of our new chromatography line as well as other major additions to QEC's product line.



## What's a cap without a place to put it?



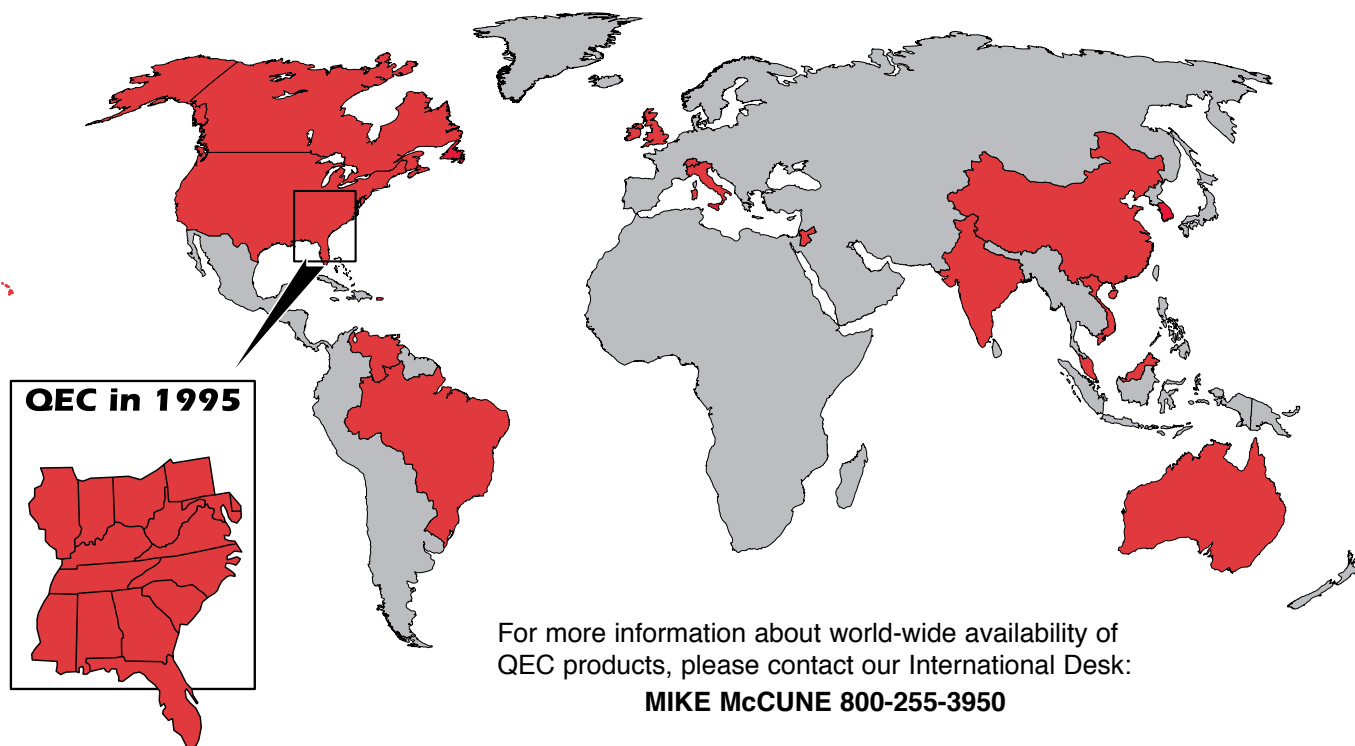
QEC compliments its impressive lineup of chromatography septa and closures with an equally impressive line of glass vials. Our Quality Assured Chromatography vials are precision manufactured with superior quality borosilicate clear glass Type 1, Class A or 51A amber glass.

Designed for use in a variety of instruments and applications, they meet industry standards and offer an exacting fit with our matching closures: 8-425 screw caps, 9mm screw caps, 10-425 screw caps, 13-425 screw caps, 11mm aluminum crimp seals, 11mm snap caps, and 20mm aluminum seals for headspace vials.

QEC offers a full line of vials, many featuring a write-on patch with graduations at 0.5, 1.0 and 1.5mL. Our recently expanded lineup also includes a wide selection of Headspace vials; flat and rounded bottom in sizes 20mL, 10mL and 6mL. Micro-inserts (not shown in photo) are available for most of our 2mL vials.

Call toll free **1-800-255-3950** or visit **[www.qecusa.com](http://www.qecusa.com)**

# The red spreads... QEC expands global market



For more information about world-wide availability of QEC products, please contact our International Desk:

**MIKE McCUNE 800-255-3950**

**Call toll free 1-800-255-3950 or visit [www.qecusa.com](http://www.qecusa.com)**

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## QEC

Quality Environmental Containers

P.O. Box 1160, Beaver, WV 25813

## QEC Express

**Next Day Service**  
**No Expedite Charges\*!**

Orders for in-stock QEC products received by 3:00pm ET can be at your lab or job site in the continental United States the next day. Tell your customer service rep you need **QEC Express™** service and your order will be processed and shipped that day.

\*Freight company charges will apply.