

The background of the left side of the page is a close-up, blue-tinted photograph of a glass pipette. A single drop of liquid is suspended at the tip of the pipette, about to fall into a glass dish below. The lighting creates soft reflections on the glass surfaces.

Case Study

How one company keeps up with Cell Culture Media demand despite filtration supply chain issues.

“If media filtration is delayed, so is the final product – leaving those growing cultures at risk of limited supply of media and production slowdowns.”

A well-known cancer research institute in the United States was not unlike any other cell culture manufacturer whose business is intensifying with current demand fueled by biotechnology research and product development. The pressure for more product is daily, yet filtration supplies necessary to make sterile cell culture media was threatened for this operation. Having always worked with one of the top suppliers in the industry, this media production group was, for the first time, in a very precarious situation when their supplier took nine months to deliver filters that are critical for making safe products.

When filter delivery is too slow, what options exist?

When time is of the essence, viable options are few – but, as we have all learned through a pandemic, thinking differently and adapting will lead to new solutions.

In the case of this cancer research group, options included:

1. Developing a new filtration process with products that are more readily available
2. Researching equivalents from the current vendor with hopes that those products may ship faster
3. Order more products and keep a larger inventory
4. Be open to a new vendor that has equivalent products that are available in the near future

The first option would have created another time delay as it would involve researching filtration technology never used at this location, testing of products, and, if they were successful, training of staff. Speed to market would have been hindered with this approach. The second option was wishful thinking, since their current vendor was pressed on all sides by major global operations involved with vaccine development. Their best lead time for any filter was not acceptable.

Academic institutions are very cost sensitive. Since option three was purely a budget issue, it was a non-starter.

The fourth option took precedence over the others even though it would involve researching and trusting a new vendor. If it worked, it had the long-term advantage of diversifying their supplier chain and not being caught in this predicament again.

Solving the problem with an equivalent filter and a new vendor

After deciding to search for a new supplier, Critical Process Filtration was one of three vendors sought

out by the cancer center's scientific staff and awarded the business.

The criteria established for the new filters (in priority order) was performance, delivery and price. This cell culture media facility supplies multiple types of media products to over 70 R&D and hospital labs on campus.



Critical Process Filtration's SPS Mini-Capsule in use for Cell Culture Media Filtration

About 10% of the CCM produced in their operation includes fetal bovine serum. It was important to find filters that handled fluid with and without FBS, which has substance properties very different from the other media ingredients.

The customer was currently using a sterilizing PVDF capsule filter from a major manufacturer. It worked well, but would be unavailable for close to 9 months. The CPF alternative worked just as well and shipped in time for the next project.

Critical Process Filtration provided a 0.22-micron, single layer PES mini-capsule filter for evaluation (SPS Filter). When tested with the serum, the SPS filter, designed for fast flow and low pressure drops proved to be inadequate due to the contents of the serum. However, it was successful with the serum-free media.

The second and final choice, was the HPPS Mini-Capsule Filter with an integrated particle prefilter. Testing performed by the customer proved to reach the same results as the current vendor and the cell culture media facility was able to resume filtration at 30L per filter.



Critical Process Filtration Single Use Capsule Devices

Vendor diversification – pros & cons

Change isn't always easy. But when vendor diversification improves efficiency, saves time and works within your budget it can be very assuring.

This cancer research institute was in a difficult situation. They relied upon Critical Process Filtration for insight they lacked and the fast service they needed. CPF's filtration experts determined product equivalency and solved a delivery issue that impacted their entire business. Staying with the same vendor for many years brings comfort and assurance to your staff – our customers feel that way, too. But in this day and age, vendor diversification is the key to working with global supply issues and learning new ways to manage filtration projects.

How can CPF deliver shorter lead times than the larger manufacturers?

We are often asked this question and the answer is simple – a single focused business model and a proprietary manufacturing process.

Many of the large filter suppliers have multiple business units with a diversified portfolio – it's a more complex model. They are also the same companies that built the filtration industry with the science, research and development that filtration suppliers and end-users have benefited from for decades.

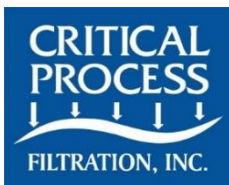
Critical Process Filtration manufactures premium products and provides responsive technical support so customers get the right filter every time. We deliver shorter lead times by assembling products to order in our proprietary production process. We too, are impacted by supply chain fluctuations, but our flexible manufacturing processes enable us to deliver in weeks, rather than months.

There are many CPF products that compare to legacy products in the pharmaceutical and biotechnology arena giving buyers options they can rely upon and trust with their filtration operations. We have been manufacturing process filters for over 20 years and leading pharma/bio corporations use our products today.

To learn more about how Critical Process Filtration can support your filtration operation [contact us](#) today.

“In a time where supply issues are at a critical point, Critical Process came through for us when we were in a desperate situation. They were extremely knowledgeable and worked fast to have us up and running without facing any down time. We are very thankful for all their help.”

Sharon, Scientific Assistant at the Institute



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