



# *Sartorius Expands in Aubagne*

Find out more about the new 90,000 square-meter campus in southern France built for automation, smart manufacturing, and sustainability

the  
**Medicine Maker** x **SARTORIUS**







# Meet the Experts

## René Fáber

René has been CEO of Sartorius Stedim Biotech SA and a member of the Executive Board of Sartorius AG since 2019. He joined Sartorius in 2002. As Vice President, he held various management positions in R&D, Marketing for Filtration and Fermentation Technologies, as well as in Key Account Management. In his most recent position, he was responsible for the entire R&D unit of the Bioprocess Solutions Division. René studied chemistry in Bratislava, Slovakia, and earned his PhD in polymer chemistry at the Technical University of Munich in Germany.

*“Sartorius are enablers. We are supporters of our customers’ goals. And every technology we work on is aimed at either speeding up process development or making manufacturing more efficient. That is really the foundation of our innovation strategy.”*

## Torsten G. Müller

Torsten has served as CIO at Sartorius in Göttingen since 2018. In this role, he has transformed IT from a mere infrastructure provider into a strategic partner and enabler for digital projects. He drives AI innovations and fosters a digital corporate culture. Since 2024, he has also been responsible for business processes and, since May 2025, has taken on the role of Head of Operations. He is committed to integrating IT and processes to achieve efficiency

improvements and synergies that support the company’s ambitious growth goals.

*“My involvement in this project has primarily been to define and implement the technology and business process landscape for production and logistics to ensure the alignment of our factory-of-the-future initiatives. This project in Aubagne integrates IT, Business Processes, and Operations, enabling us to fully leverage the site’s digital and operational capabilities while delivering significant business value to our customers and supporting our ambitious growth.”*

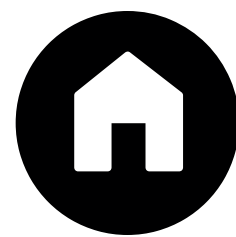
## Louis Villain

Louis Villain is the Head of the Business Area for Fluid Management and Bioreactor Technologies at Sartorius. He joined Sartorius in 2009. Prior to his current role, he was heading the consumable Product Management and Product Development within Separation Technologies. His career at Sartorius also includes leading R&D Membrane Technologies and managing Merger & Acquisition and strategic corporate projects within Business Development. He holds a PhD in Technical Chemistry from the University of Hannover in Germany.

*“Product management and product development will be brought together into one space at Aubagne, which creates tremendous potential for collaboration. There are simply more opportunities to work side by side, to interact informally, and to move faster on ideas.”*







## Building the Next Chapter of Biopharma

*Why is Sartorius investing in Aubagne? It's all about helping customers to be more agile by providing them with a reliable supply of state-of-the-art single-use technologies.*

Drug developers need partners that they can rely on for the long-term. Developing a new biologic drug takes, on average, 10 years, and the journey is filled with hurdles and challenges. Once a therapy makes it to market, the priority shifts to stable, long-term supply. At this point, customers need to trust their supplier, whether for single-use assemblies or other critical components – to deliver consistently for commercial manufacturing. This is a huge responsibility – and one that Sartorius takes very seriously.







## Building the Next Chapter of Biopharma

With biopharma drug developers increasingly working with more complex drug modalities, including RNA and cell and gene therapies, the demand for flexible single-use manufacturing solutions has never been greater. Joachim Kreuzburg, Chairman at Sartorius Stedim Biotech, describes the situation as an incredible “new chapter” for the biopharma industry, characterized by biologics that can provide enormous benefits to patients with severe diseases – and even cures. “These innovations also require a new chapter in the innovation of bioprocessing tools, including single use. Single-use manufacturing has become a standard in our industry; a platform that allows our customers to be faster, flexible, and more sustainable in how they work.”

At Sartorius, the ambition is to make the manufacture of single-use systems even more efficient and productive, so that a greater number of drug candidates can benefit from these technologies. As part of this, the company is investing to ensure it has the capacity to support the growth of the industry. On June 17, 2025, Sartorius celebrated the completion of a multi-year expansion project at its Aubagne facility in France.

The expansion has nearly doubled the site’s cleanroom space to 9,000 square meters, enabling automated production of 2D and 3D single-use bags. There has also been investment in logistics with a 12,000 square-meter high-bay logistics center, equipped with state-of-the-art autonomous forklifts, mobile robots, and a goods-to-person logistics system. The center is due to be fully operational by fall 2025.

Already operational at the site is a new 1,900 square-meter cross-functional space that includes development labs for fluid management and cell culture technologies, as well as an application

lab for working closely with customers. Sartorius experts can sit down with clients to explore product development, discuss process improvements, and work through application challenges together.

René Fáber, CEO of Sartorius Stedim Biotech, says: “We’re investing not just in products, but in the experience of working with Sartorius; how easy it is, how responsive we are, and how well we help our customers to navigate complexity. Our brand promise is simplifying progress. Biologics are incredibly complex, as are patient needs. If we can reduce complexity through our products, our systems, or how customers interact with us, then it adds real value.”

Aubagne is already a center of excellence for single-use systems – and the birthplace of Stedim S.A. However, it also offers numerous other advantages. Aubagne is located close to Marseille, one of Europe’s largest ports. Sea freight is an efficient and sustainable way to transport products – and Marseille is also home to CMA CGM, a major global shipping company. Beyond logistics, Marseille and the surrounding region are strong scientific hubs, particularly in gene therapy. There’s a major engineering school located in the area, as well as universities like Aix-Marseille, which have strong reputations in biotech and engineering.

Talent is an important asset for Sartorius, so the new campus hasn’t just been designed for manufacturing innovation, it has also been designed for employees. At the heart of the expanded campus is a modern office building that includes a conference center, gym, and restaurant.

The site also reflects the company’s deep commitment to sustainability, meeting ISO 14001 standards and certified by ISCC Plus and HQE “Excellent.” Renewable materials are used where possible for plastic components, plastic welding processes

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are fully electric, 85 percent of production waste is recycled, 100 percent of purchased electricity comes from renewable sources, and there is a 2,000 square-meter conservation system that collects rainwater. Permeable areas have been designed to allow rainwater to penetrate the soil and promote diversity.

At 90,000 square meters and supporting more than 1,100 employees, the Aubagne site is now the largest Sartorius facility in France. Just 15 years ago, the idea of using plastic bags in a pharmaceutical facility was met with skepticism. Today, single use has transformed how the industry thinks about rapid, flexible manufacturing. With its expanded capabilities and increased automation, the Aubagne site is now poised to support the next wave of complexity in biologics.







## Investing in the Future of Single-Use

*Sartorius wants to help deliver transformational changes in how biologics are manufactured. The investment at Aubagne fully prepares the company to support the future of single-use technologies.*

An interview with René Fáber, CEO of Sartorius Stedim Biotech

**How does biopharma drug development continue to advance? And what does this mean for Sartorius?**

Our role is to support customers through our tools and technologies. First, we help accelerate the development of manufacturing processes, so that promising therapies can get to market as quickly as possible. Second, once these therapies are in production, we help make those processes as efficient as possible, keeping manufacturing costs low so that medicines can be made more accessible and affordable.







## Investing in the Future of Single-Use

Single-use systems have been truly transformative for the biopharma industry. Instead of relying on large, inflexible, stainless-steel facilities that are expensive and time-consuming to build, single use offers faster setup and turnaround times, reduced capital investment, and greater manufacturing flexibility. Sartorius was a pioneer in the single-use space, especially following our acquisition of Stedim in France back in 2007.

Right now, science is progressing at an extraordinary pace. Around 30 or 40 years ago, the big breakthrough was monoclonal antibodies, but in the last decade we've seen a shift to newer modalities, including cell and gene therapies, and RNA. These new therapies demand much more from a manufacturing perspective. And they require a higher level of innovation from partners like Sartorius. It is critical that we keep up with the rapid scientific progress by investing in our own capabilities.

### Why did Sartorius invest in Aubagne?

Aubagne is where it all began. Stedim was the birthplace of single-use innovation and Aubagne has become a center of excellence in this area. We are investing heavily at the site to expand our R&D, manufacturing, and logistics capabilities. Essentially, we are doubling the cleanroom and logistics space, and tripling our R&D capacity. This is a strategic move to keep pushing the boundaries of what we can offer to customers, in terms of both innovation and operational capacity.

The next level of innovation in single use is to propel these technologies even further in terms of efficiency and adaptability. This is where concepts such as continuous manufacturing come in. Continuous processing is a key innovation pathway that

allows single-use technologies to be applied across a broader range of drug types, including newer modalities. This makes single-use technology even more versatile and valuable for our customers.

As well as continuing to develop innovative new products, we are advancing our manufacturing capabilities by adopting more automated and digitalized production processes. We are also digitalizing how we collaborate with customers, including how we design single-use systems together. Ultimately, it's about improving our service level and ensuring we're ready to meet the evolving needs of the industry – today and tomorrow.

### What role has sustainability played in this new expansion?

Helping customers to develop and manufacture medicines faster and more efficiently directly supports one of the United Nations' Sustainable Development Goals: improving health and well-being for more people.

Sustainability is inherently built into our business model because single-use technologies offer sustainability advantages. Compared to traditional stainless-steel systems, single-use manufacturing uses far less energy and water, and requires fewer chemicals for cleaning. The systems are more efficient, and the physical footprint of facilities can be much smaller.

Now, we are evaluating how single-use technologies can be even more sustainable, starting with the materials themselves. These are primarily plastic-based products, so we're investing in ways to increase the use of recycled and recyclable raw materials. We're also designing systems that allow our customers to use less material overall.

*“This network is designed with resilience in mind. We have manufacturing capabilities in all major regions so that we can stay close to our customers.”*

### How is Sartorius expanding globally?

Aubagne is one of our key sites, but there are more than 20 other facilities around the world in the Sartorius Stedim Biotech network. This network is designed with resilience in mind. We have manufacturing capabilities in all major regions so that we can stay close to our customers. As well as expanding in Europe, we are investing in the US and Asia. In fact, the largest single investment project we currently have underway is in South Korea. The facility will produce single-use products, like those made in Aubagne, as well as filters and cell culture media.

Building a resilient, globally distributed manufacturing network is a major focus for us – and this is highly important for our customers as well.







# At the Forefront of Manufacturing Innovation

*Automation and digitalization represent the foundation for building more efficient, agile, and customer-centric operations. At Sartorius, we always strive to remain at the tech forefront on a global level.*

By **Torsten G. Müller**

The site in Aubagne fits with our strategic vision to modernize operations and support long-term growth in the healthcare and biopharma sectors. With rising global demand for single-use solutions, it was important to significantly scale up both capacities, and ensure we could respond flexibly to demand fluctuations. Key to that goal was implementing automation and digitalization.

We brought IT, business processes, and operations under one roof to break down traditional silos and accelerate transformation across the value chain. The advantages: unified decision-making and execution that allow faster implementation of digital solutions. Aubagne is now our most modern facility globally.







# At the Forefront of Manufacturing Innovation

## Robots, AI, and more

Everything at the Aubagne site is highly customized, with the level of automation driven by the specific needs of the products we manufacture. Our robotic production lines are five times faster than traditional lines; we have increased production capacity by 100 percent and reduced manufacturing time by 75 percent. We use camera-based dimensional and particulate inspection, ionized air film cleaning, and fully automated transfer between workstations – all designed to maintain cleanroom integrity and minimize human contact. Each line features full batch-level traceability, and we’re leveraging AI-driven quality control to detect defects in real time.

Quality inspection used to involve people sitting for hours in front of bright screens, manually looking for particles or defects. Implementing automated vision systems and pattern recognition powered by machine learning is a huge improvement in both working conditions and process reliability. The machine learning routines have been developed in-house, which means that when we need to adapt or expand the system – such as for new products or inspection criteria – we can do it quickly without relying on external vendors.

On the logistics side, the inventory warehouse is fully automated to streamline inventory flows, support just-in-time delivery, and increase supply chain resilience. We’ve introduced autonomous mobile robots to enhance material flow optimization and integrated everything with SAP’s Extended Warehouse Management system: SAP S/4HANA.

We implemented SAP S/4HANA and completed a full cloud migration in less than 12 months. According to SAP’s CEO, Christian Klein, Sartorius is the first company in the world to complete such a transition in this way. SAP is so excited about our

work that we are planning to deliver a joint keynote in the future. The cloud-based infrastructure has also given us the groundwork for integrating AI into SAP-driven processes, especially in production.

Moreover, we continue to elevate our digital transformation journey. We plan to roll out a standardized Manufacturing Execution System across our manufacturing sites worldwide and are working to harness the power of advanced analytics, predictive maintenance, and the Internet of Things to create smart, connected operations. We are also pioneering the creation of digital twins for our production processes, ensuring continuous improvement and setting new standards. Having a digital replica of our shop floor systems allows us to optimize production lines much more efficiently, saving time and costs. We’ll be looking to leverage digital twins even more in the future.

## Benefits for people and the planet

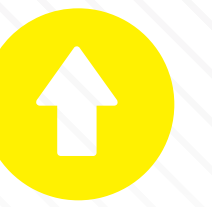
We are digitalizing not for complexity’s sake, but to deliver tangible benefits for our customers: faster response times, reliable delivery performance, greater transparency throughout the supply chain, and superior product quality, batch after batch. Equally important, digitalization also brings significant benefits for our teams on the shopfloor. By reducing repetitive and physically demanding tasks, we improve ergonomics, safety, and job satisfaction. Digitalization at Sartorius means empowering our employees by building a workplace where technology supports performance and offers our employees opportunities for professional and personal development.

Beyond automation and digitalization, the new site reflects a strong commitment to sustainability. Some big companies globally are moving away from ESG commitments, but Sartorius remains

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deeply committed. Our Göttingen and Aubagne sites were designed from the start with sustainability in mind. At Aubagne, plastic welding processes are fully electric, and 85 percent of our production waste is recycled – often for reuse in the automotive or urban infrastructure sectors. We’ve received ISCC PLUS certification, reinforcing our focus on circular economy models. We also monitor energy performance in real time and have invested in solar energy and hydraulic transparency to reduce our environmental footprint. In addition, we’ve reengineered operator workstations to reduce physical strain, increasing safety and job quality.

In short, the site brings together industrial excellence, environmental responsibility, and digital innovation to better serve our customers.







## Flexible Solutions for Complex Needs

*Single-use systems are now widely accepted and adopted across the biopharma industry, but they must evolve further to support emerging modalities.*

By Louis Villain, Head of Fluid Management and Bioreactor Technologies

Sartorius has been a pioneer in single use from the earliest days of the technology, with Aubagne being a historic center of excellence. The expansion now brings product development and product management teams even closer, providing more opportunities to work alongside customers and rapidly advance new ideas. As well as new labs, cleanrooms, and warehousing, the expansion includes an application center that will allow us to bring customers directly into the heart of innovation. Co-developing products with customers will ensure that our solutions are truly aligned with the industry's ever-changing needs.







## Flexible Solutions for Complex Needs

### An industry-leading portfolio

Sartorius offers one of the industry's most comprehensive and advanced single-use technology portfolios, encompassing everything from filtration, chromatography, single-use storage, mixing bags, and transfer technologies, to sophisticated bioreactor systems such as our Biostat STR® bioreactor and Ambr® bioreactor platforms.

Single use is now well established – and, indeed, has played a crucial role during the COVID-19 pandemic. It would have been impossible to ramp up manufacturing capacity as quickly as the industry did without single-use technologies. However, innovation must continue. Our customers, particularly those working with mature modalities such as monoclonal antibodies, are under increasing pressure to reduce manufacturing costs, improve productivity, and make better use of their facilities. To this end, they need smaller manufacturing footprints, greater efficiency, and higher throughput – all of which can be enabled through single use.

At the same time, diverse therapeutic modalities are becoming the norm, but require very different process platforms. In cell and gene therapy manufacture, for example, there is a huge need for aseptic, closed, and more robust processes. We're also seeing a shift toward personalized medicine, which means that the technologies we develop must be adaptable and flexible to meet a wide range of highly specific needs.

Sartorius has made acquisitions that have brought in specialized expertise, and has built a portfolio for advanced therapy applications. We are combining our expertise and portfolio with our established strengths in single-use and materials science to develop manufacturing platforms tailored to new modalities.

This means more automation, improved safety, and full utilization of our know-how in areas such as cell culture, extractables and leachables, particulates, tube welding, software, and process control.

One recent innovation at Sartorius is our end-to-end solution for handling large volumes of frozen bulk drug substances. The Celsius® FFT Platform is a comprehensive package including equipment, automation, and new consumables specifically designed for freeze-thaw applications – and all thoroughly validated. At Sartorius, we don't just focus on the bag or the consumable; we focus on everything that supports our customers in using our technologies. Customers trust us with their high-value substances, so everything must be perfect. This requires rigorous testing and validation to very specific standards.

Another area that we are innovating in is process intensification. We are adapting our single-use bioreactors and also launching innovative solutions that enable continuous manufacturing. We have launched Pionic® platform that integrates sensors, bags, and flow kits with automation to help customers move from traditional batch processing to continuous, intensified operations. It's a truly integrated system – and the team in Aubagne was instrumental for the design and development of the single-use solution.

### Building solutions together – sustainably

There's a lot of excitement within the product development and product management teams about the new buildings in Aubagne. One of the key expectations is that the new campus will really support collaboration – because the environment was built to foster teamwork and innovation. We have also designed our labs

*“We’re also seeing a shift toward personalized medicine, which means that the technologies we develop must be adaptable and flexible to meet a wide range of highly specific needs.”*

with a high level of modularity, which gives us the flexibility to adapt to different customer processes and challenges, and simulate their environments. It all adds up to a much more customer-centric approach to innovation.

Of course, sustainability has also been considered. Even though single-use technologies can significantly reduce water and energy consumption compared to traditional stainless steel facilities, many people still hold the perception that plastics are inherently worse. Our Flexsafe® film is recyclable and our Aubagne site has received ISCC PLUS certification. We are sourcing renewable, certified raw materials for our plastic components – but this is just one step on the journey. The broader goal is to create fully bio-circular products.

We look forward to hosting customers at the new site – and bringing them into our world to co-create solutions.

