

# Business Development of Bioprocess Solutions

Business performance reflects temporarily weaker market environment after the pandemic

Temporary decline in sales and earnings

Moderate recovery in order intake since the end of the third quarter

Division sales  
**€2,678.2m**  
In constant FX: -17.6%

Order intake  
**€2,404.1m**  
In constant FX: -21.1%

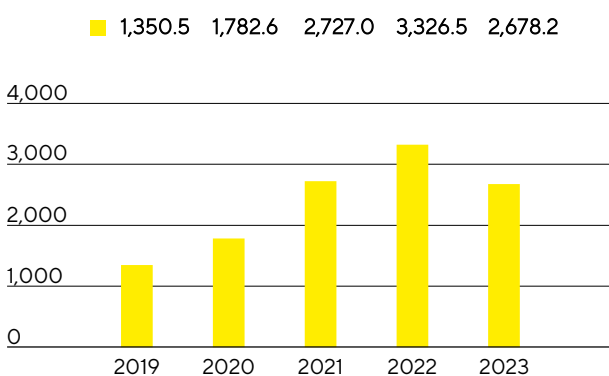
Underlying EBITDA margin  
**29.2%**  
-6.5 percentage points



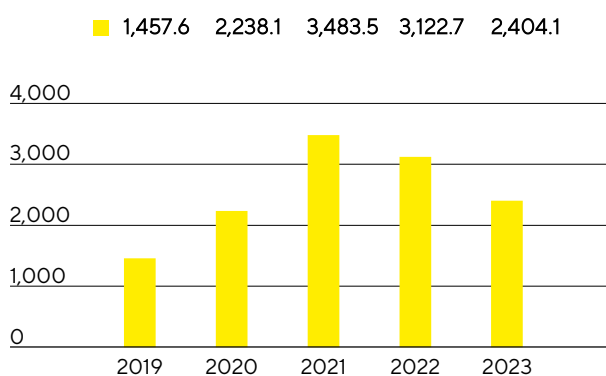
## Sales Revenue and Order Intake

Following the exceptionally high growth in 2020 to 2022 due to the pandemic, the Bioprocess Solutions division recorded softer customer demand in the reporting year, as anticipated. In particular, the longer and more pronounced than originally expected reduction in customer inventories following the end of the pandemic impacted business development and led to lower demand for consumables, such as sterile single-use bags and filters. Other industry-wide factors also had a dampening effect, such as relatively low production levels, the largely discontinued business with Russian customers, and an overall muted investment activity on the part of customers, primarily in China and the USA. Sales revenue fell by 17.6% to €2,678.2million (reported: -19.5%). This includes around 2 percentage points of non-organic growth from acquisitions. Excluding the Covid-19-related business, the decline stood slightly above 12% in constant currencies.

**Sales Revenue 2019 to 2023**  
€ in millions



**Order Intake 2019 to 2023**  
€ in millions



### Sales Revenue and Order Intake

€ in millions	2023	2022	in % reported	in % cc <sup>1</sup>
Sales revenue	2,678.2	3,326.5	-19.5	-17.6
Order intake	2,404.1	3,122.7	-23.0	-21.1

<sup>1</sup> In constant currencies.

In view of the normalization of demand and a high prior-year base due to the pandemic, sales revenue declined in all regions. In the EMEA region, which accounted for around 39% of the division's sales, revenues fell by 16.8% to €1,042.2million compared to the previous year, which was significantly influenced by business with vaccine manufacturers. In the Americas region, sales amounted to €1,047.8million (-13.3%) against the backdrop of low investment activity by customers in the USA. The region's share of divisional sales was 39%. The Asia-Pacific region, which accounted for 22% of the division's sales, performed significantly weaker due to a marked reluctance to invest on the part of pharmaceutical customers, mainly in China. At €588.2million, sales were down 25.1% on the previous year. (All growth rates for the regional development are in constant currencies unless otherwise stated.)

The temporarily weaker market environment was even more clearly reflected in order intake, which decreased by 21.1% to €2,404.1million (reported: -23.0%). In line with progress made by customers in reducing their

inventories, business began to recover at the end of the third quarter, so that order intake was slightly above sales revenue in the fourth quarter.

#### Sales by Region

€ in millions	2023	2022	in % reported	in % cc <sup>2</sup>
EMEA	1,042.2	1,260.5	-17.3	-16.8
Americas	1,047.8	1,240.8	-15.6	-13.3
Asia   Pacific	588.2	825.2	-28.7	-25.1

## Earnings

Mainly as a result of the lower volume development, underlying EBITDA decreased by 34.2% to €782.3 million, resulting in a margin of 29.2% (previous year: 35.7%). Negative product mix effects also had a dampening effect, as the reduction in inventories on the customer side particularly affected demand for higher-margin consumables and led to a lower share of such products in total sales. Price effects on the procurement and customer sides largely offset each other.

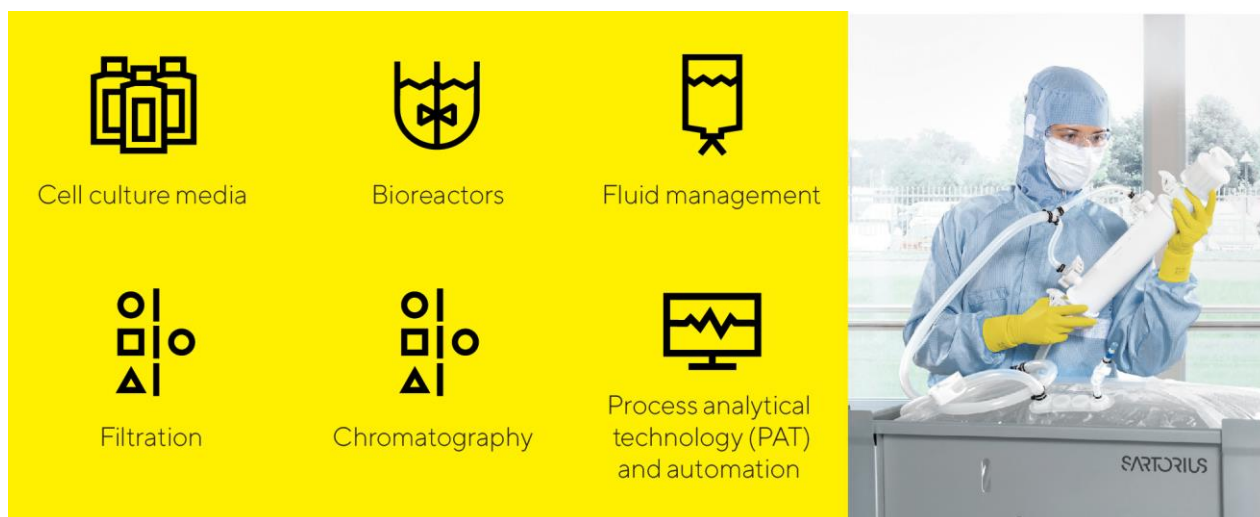
#### Underlying EBITDA and EBITDA Margin

	2023	2022
Underlying EBITDA in millions of €	782.3	1,188.4
Underlying EBITDA margin in %	29.2	35.7

In the year under review, the Bioprocess Solutions division recorded extraordinary items of -€103.5 million compared to -€46.5 million in the previous year. These items predominantly consisted of expenses in connection with the most recent acquisitions as well as expenses for various corporate projects and structuring measures.

## Products and Sales

The Bioprocess Solutions Division markets products and services for the entire value chain in biopharmaceutical production and preceding process development. The division's portfolio includes cell lines, cell culture media, bioreactors, a wide range of products for separation, purification, and concentration, and products and systems for storage and transportation of intermediate and finished biological products.



As a result of the acquisition of the French company Polyplus, Sartorius has significantly expanded the product portfolio of its Bioprocess Solutions Division in the area of cell and gene therapies. Polyplus develops and produces high-quality, GMP-compliant transfection as well as DNA and RNA delivery reagents and plasmid DNA. These components are success-critical in the manufacture of viral vectors used in cell and gene therapies as well as other new medical therapy methods. The solutions from Polyplus are highly complementary to the portfolio created by Sartorius in recent years, which now comprises various cell culture media, other critical raw materials, and purification technologies for the development and manufacture of advanced therapies.

In the area of filtration, the Bioprocess Solutions Division introduced a new platform for the large-scale manufacture of biopharmaceuticals, which can be preconfigured with a wide range of filter types. The platform is suitable for a large number of separation steps, from cell culture media to virus depletion to subsequent sterile filtration; it is particularly user-friendly in its handling and achieves significant cuts in production times. In addition, a high-throughput tool for clarifying and purifying monoclonal antibodies was launched; it helps customers speed up the preparation of small cell culture samples for downstream analysis in cell line development. Moreover, a system was introduced that allows single-use bags to be filled evenly at the same time, for example, with cell culture media for the manufacture of cell therapies, thus accelerating the filling process significantly.

## Sales Activities

The Bioprocess Solutions Division markets most of its product portfolio directly. Sales activities for key accounts are coordinated and supported by global key account management.

Communication with customers via on-site visits is now supplemented by digital channels: Many contacts with customers are made through digital communication tools. Videoconferencing and augmented reality are used for such direct interactions, for example, when demonstrating products, conducting training sessions,

and bringing systems into service. Another focus aimed at strengthening the sales force is on expanding the company's international presence and on continually enhancing sales efficiency, for example, with product and application training or further specialized training for employees.

## Product Development

Development activities at Sartorius essentially focus on technology areas such as membranes, which are the core component of the filter products; diverse technology platforms, such as sterile containers for fluid management in biopharmaceutical processes and sensors; and control technologies for processes such as fermentation. Additional focal areas comprise developments in materials and components that include plastics, elastomers, and intelligent polymers; expanded data analysis; cell line development; and critical media components for protein-based, viral, and so-called advanced therapies.

Product development is aimed at expanding the existing portfolio on a complementary basis and further enhancing the range of integrated complete solutions for the manufacture of biopharmaceuticals – from the early phase of development to commercial production.

The largest product development site is located in Göttingen, Germany, where a new product development building began its operations in the reporting year. Further important activities take place in France, India, the United States, and the UK, as well as in Sweden, Israel, Slovenia, and other locations in Germany.

## Production and Supply Chain Management

The Bioprocess Solutions Division has a very well developed global production network that was expanded at several sites in the reporting year. The largest production facilities are located in Germany, France, and Puerto Rico. Beyond these locations, this division also manufactures in the UK, Switzerland, Tunisia, India, the United States, China, Israel, and Slovenia. The most recent acquisition has added sites in France, Belgium, the United States, and China.

In the reporting year, Sartorius expanded its plant in Puerto Rico by adding a production facility for cell culture media. The new facility allows the company to supply, from its plant in Yauco, high-quality cell culture media in powder form, which are used in the manufacture of therapeutic proteins and other modalities. Production in Yauco is focused on customers in the Americas region.

Moreover, construction started in Freiburg im Breisgau, Germany, on a center of excellence for the development and production of quality-critical reagents for the cell and gene therapy market. The new building will increase the existing production of cytokines and growth factors and significantly expand research and development. The building is scheduled for completion in 2025, and production is expected to start in 2026.

The supply chain situation continued to ease in 2023 compared with previous years. Delivery times for most products have normalized, and the availability of electronic components and some chemical raw materials also improved over the course of the year.