

Sartorius Stedim Biotech extends PAT portfolio with innovative sensors for flow rate measurement

- **Development cooperation with em-tec, a specialist for non-invasive flow measurement**

Goettingen, March 12, 2015 – Sartorius Stedim Biotech (SSB), a leading international pharmaceutical and biotech equipment supplier, has entered into a global development cooperation agreement with the flow measurement company em-tec. This highly specialized firm provides non-invasive flow engineering solutions for blood vessels and flexible tubing. Such technology designed by em-tec is used in the biopharmaceutical industry, among other sectors, in many process steps for accurate measurement of flow rates and mass balances. In particular, this technology is used in downstream processes, such as virus inactivation, as well as in ultrafiltration and diafiltration.

As part of this cooperation, the technology base of em-tec will be extended by jointly developed single-use components, such as FlowTube. Sartorius will exclusively market these as applications and distribute them worldwide as private label products under the brand name of BioPAT®Flow.

SSB has continuously expanded its process analytics portfolio over the past years in the area of sensor technology to enable non-invasive, real-time measurement of critical process parameters, such as pH, dissolved oxygen, temperature, glucose, lactate and biomass. The new flow sensors are important new components that have been added to this portfolio. BioPAT®Flow permits precise, reproducible data to be collected on flow rates and mass balances without coming in contact with the medium during measurement.

"The sensors make our downstream unit operations even more intelligent, significantly increasing the level of automation. Integrated into our system solutions, these sensors are powerful tools for designing robust biopharmaceutical processes and further optimizing them," states Stefan Schlack, Senior Vice President of Marketing at SSB.

Dr. Hannspeter Schubert, managing director of em-tec, comments: "Sartorius Stedim Biotech is among the top global suppliers in automated bioprocess solutions and has a strong globally based sales and marketing network. We are pleased that Sartorius has opted for our basic technology of non-invasive flow rate measurement. The use of our sensors in fully integrated, automated bioprocesses represents an ideal application field and an innovative technological advance for us."

A Profile of Sartorius Stedim Biotech

Sartorius Stedim Biotech is a leading provider of cutting-edge products and services for the development, quality assurance and production processes of the biopharmaceutical industry. Its integrated solutions covering fermentation, cell cultivation, filtration, purification, fluid management and lab technologies are supporting the biopharmaceutical industry around the world to develop and produce drugs safely, timely and economically. Sartorius Stedim Biotech focuses on single-use technologies and value-added services to meet the rapidly changing technology requirements of the industry it serves. Strongly rooted in the scientific community and closely allied with customers and technology partners, the company is dedicated to its philosophy of "turning science into solutions."

Headquartered in Aubagne, France, Sartorius Stedim Biotech is listed on the Eurolist of Euronext Paris. With its own manufacturing and R&D sites in Europe, North America and Asia and a global network of sales companies, Sartorius Stedim Biotech enjoys a worldwide presence. Its key manufacturing and R&D site is in Germany. The company employs approx. 3,700 people, and in 2014 earned sales revenue of 683.5 million euros.

www.sartorius.com

A Profile of em-tec

German-based em-tec GmbH has been developing and manufacturing products at its location in Finning for the medical industry for nearly thirty years. The company meets the highest requirements and is certified according to the latest standards for medical products manufacturers (ISO13485) and quality management. Its focus is on life-sustaining devices, primarily in the field of cardiac surgery, with developments such as heart-lung machines and cardiac support systems. One of the company's core competences is in the field of non-invasive flow measurement using the ultrasound transit time principle. Based on this technology, em-tec offers products and components for medical and non-medical uses, such as for cardiovascular surgery, for use in laboratories and bioprocesses and in other industrial applications in which flexible tubing is used. This strongly growing company is a part of the Blue Cap Group and earns annual sales revenue of approximately 8 million euros as well as employs 50 people.

www.em-tec.de

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