

# ADVANCING cutting-edge PLASTICS AND MEMBRANE solutions

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Cell culture inserts

SABEU was established in 1958 by Karl-Heinz and Gertrud Sander-Beuermann from a former farmhouse in Elvershausen, Lower Saxony.

Many firsts have been achieved as the business has grown continuously over the past six decades, resulting in it becoming a leader in offering expertise in injection molding, mold construction and filter membrane manufacturing in its modern facilities.

Today, SABEU's filter membranes and plastic components have many uses and applications, specifically within the life sciences, medical, packaging and industrial fields.

"What sets SABEU apart from other suppliers is our technological expertise in developing and assembling membranes into fully integrated plastic devices," said Marketing Manager, Lukas Müller. "With our expertise and experience in filtration mem-

branes and plastics processing, we cover complex parts of the value chain and provide real customer benefits."

SABEU is headquartered in Northeim, Germany, and operates two manufacturing plants; one dedicated to membrane production in Radeberg, and the second focusing on mold manufacturing, injection molding and assembly in a clean room environment in Northeim. SABEU is part of the global Altenloh, Brinck & Co group and certified to ISO 9001:2015 and 13485:2016.

## High-quality portfolio

At the heart of SABEU is an excellent brand portfolio comprising cellQART® with Cell Culture Inserts for the Life Sciences sector, FLUXX® with four product groups in Packaging, and TRAKETCH®, which are ion-track etched membranes.

As the OEM-partner, SABEU can tailor-make products to clients' demands and to the same high-quality standards - whether it's the packaging of hazardous goods, catering to electronics or automotive requests, or clients in the life sciences/medical fields.

## Cell culture inserts from plastics and membranes

SABEU's expertise is demonstrated in the 2020 launch of its cellQART® cell culture products. Since 1958, SABEU has focused on manufacturing and quality excellence in supplying to reputable brands rather than directly selling these to end-





FLUXX portfolio

users. But during the pandemic, many cell culture laboratories were challenged with an increased workload and supply issues regarding cell culture disposables. Many quickly turned to SABEU as a source of such articles and components for their drug discovery units.

“Faced with this massive demand, we launched the cellQART® brand to provide an advantage to end-users seeking the highest quality at affordable cost while retaining flexibility in enabling scientists’ innovation with customised solutions,” detailed Dennis Benkmann, CEO of SABEU.

A diverse team of cell biologists, polymer chemists and engineers is committed to enable 100% reproducibility for experiments during drug discoveries. This is achieved by the unique ability to control all critical-to-quality parameters of the disposable solution under one roof and decades of experience in this particular field.

Mr Benkmann emphasised each section of the membrane must have the same pore size and distribution, be appropriately coated, and evenly and stably welded to the plastic part. If any single element is defective, it could lead to a repetition of the experiment with avoidable cost and effort.



Vented caps

### Packaging with the X-tra

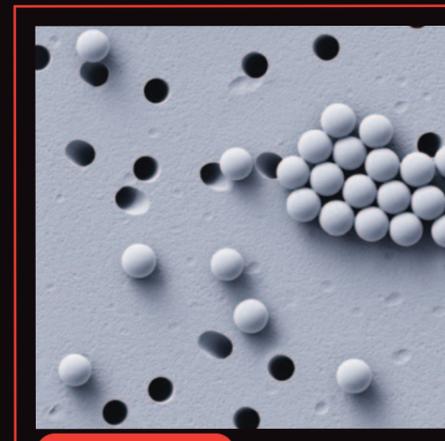
Within the packaging sector, SABEU manufactures products under the FLUXX® brand. It is presently pursuing ambitious targets in this sector, which focuses on venting, dosing and closing applications.

Dispensing taps, degassing solutions (such as inserts, caps and membranes) and screw caps are product groups within a portfolio that complement quality, durability, convenience, food conformity and price competitiveness.

Optimal venting is realised with the FLUXX® Degassing Inserts, which can be pressed in several closures or other devices. They are fitted with water and oil repellent membranes guaranteeing that gaseous substances can escape, so there is no pressure build-up or drop in pressure in the many containers it is suitable for. One advantage is the patented drip-off edge, ensuring the membrane remains gas permeable.

For unique dosing, FLUXX® Dispensing Taps can be used for decanting liquids, offer superior leak-tightness and are renowned for use with bottles, canisters and drums.

“There is a wide range of products to fit customer needs as the design includes a supporting drip-off edge and convenient lever,”



Filter membranes

Kevin Eckert, Head of Sales Packaging, added. Dispensing taps can be especially applied to liquid food, hygiene and care products, cleaning agents, agrochemicals, petrochemicals and other hazardous substances.

FLUXX® also offers reliable closing products – vented and screw caps – as SABEU considers the product it manufactures as arguably the most crucial element when storing or transporting liquids.

Sales Manager for the Americas, Jennifer Hughes, reasoned: “We may have something that may not seem particularly important, but is vital. Customers can feel secure and confident that they protect the integrity of the substance, while transporting, storing and moving liquids are also safe for the environment and humans. There are no leaks, dripping, swelling or shrinking. We have a significant responsibility, and take great pride and ownership in that.”

### Filter membranes for life sciences & medical

For the company’s unique TRAKETCH® technology, SABEU’s membranes are ultra-thin plastic films bombarded with accelerated heavy ions, chemically etched and then further processed. The diameter of the resulting pore channels can be determined with micrometre accuracy and precisely processed in clean-room manufacturing.

“As it’s an in-line process, these filter membranes are 100% quality controlled throughout the whole production. That is

“SABEU will continue to expand, increasing and automating production, and developing and growing its portfolio. When our customers ask for more, we are prepared to deliver and exceed their expectations”



Self-adhesive membrane pads

unique!” said Andreas Hogrebe, Business Development Life Sciences. “TRAKETCH® fits perfectly within the life sciences/medical niches.”

They can be utilised, for example, in rapid microbiology tests by using the membrane filter method: all microorganisms in a 100ml sample solution are concentrated and retained 100% on the membrane surface. The detection of microorganisms is performed directly on the membrane by adding a fluorescent dye which can only penetrate through the intact cell walls. To ensure adequate measurement of the emitted fluorescence after stimulation by a laser, the membrane should have a low fluorescent background.

“SABEU stains this membrane in deep black to quench the fluorescence in defined ranges of wavelengths,” Dr Hogrebe explained.

TRAKETCH® technology can also be utilised in pap smear tests in cytology for an ideal detection of malignant cells and many more applications.

### Venting with TRAKETCH® Membranes

SABEU’s TRAKETCH® PET 0.2 VENT Membrane is also valuable for sterile venting, for example where cell culture containers need to be protected against microorganisms while living microorganisms need to be protected against outside contamination.

TRAKETCH® PET 0.2 VENT meets these requirements in several respects. First, this filter membrane provides a reliable barrier against even the smallest microorganisms, both in liquid and in air. Second, the VENT Membrane keeps out liquids thanks to its super-hydrophobic surface, which is PFOA-free, of course.

TRAKETCH® Membranes are biocompatible according to USP Class VI and stable against all sterilisation methods, including gamma irradiation. Their extremely smooth surface causes liquids to form droplets and run off the membrane, so keeping the membrane dry and ensuring the necessary sterile venting.

### New! Off-the-shelf self-adhesive membrane pads for venting

SABEU’s solutions are also used in a wide array of sensitive electronic components required to be protected from external impacts, such as dust, liquids and temperature fluctuations. They protect the housings or components of sensitive electronic products.

Self-adhesive pressure compensation vents can be used for example for mobile electronics, lighting systems, outdoor electronic systems, medical devices and sensor technology applications with integrated microporous TRAKETCH® Filter Membranes, which have a uniform pore distribution.

These membrane pads are available for venting in six standard sizes, operational within a wide range of membrane parameters and adhesives, and offer excellent adhesion to aluminium, steel and other materials.

[www.sabeu.com](http://www.sabeu.com)