GEMÜ news
MAGAZINE FOR THE CUSTOMERS, PARTNERS AND FRIENDS OF THE GEMÜ GROUP
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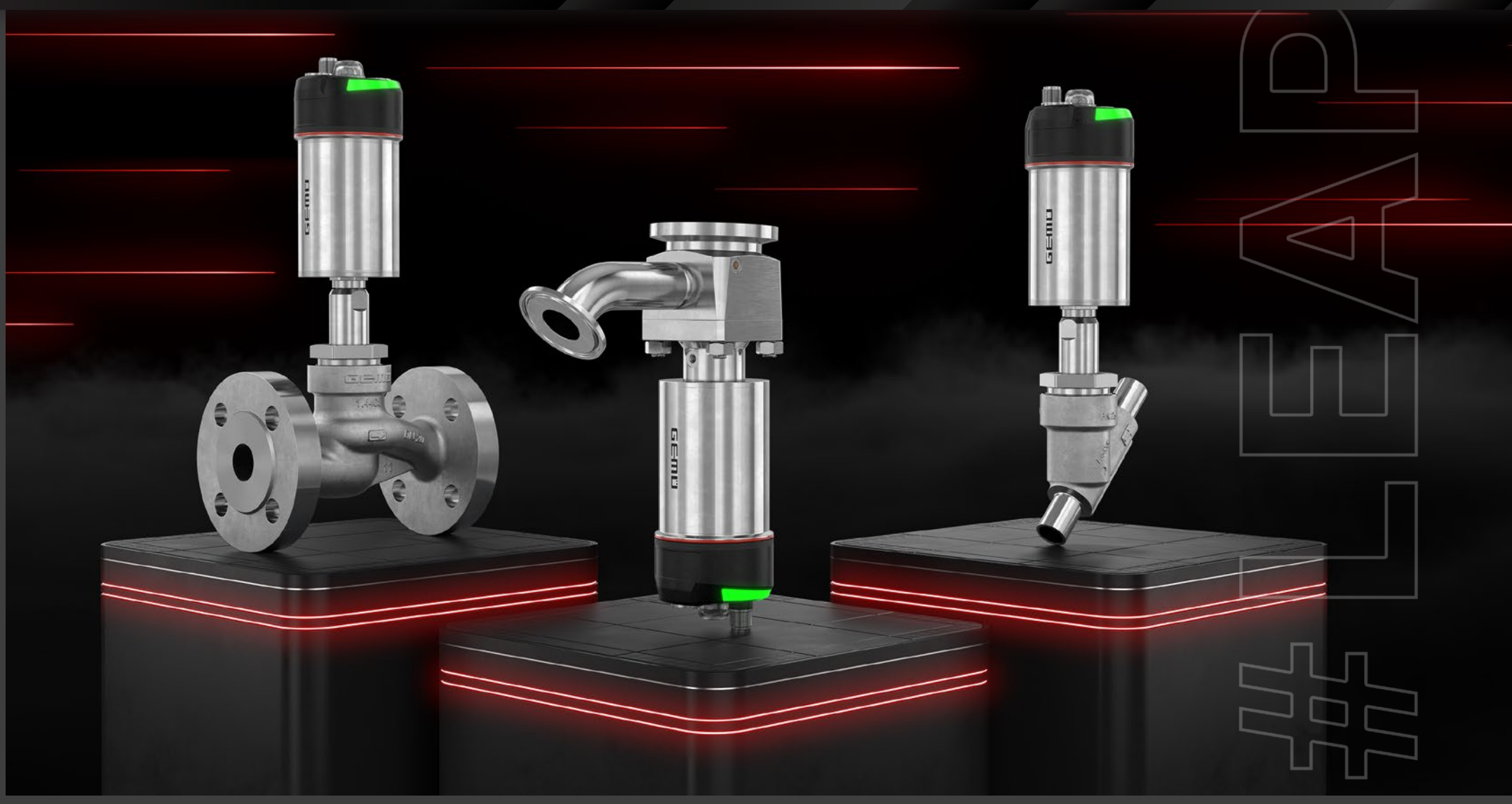

THE NEW PRODUCT GENERATION
FIRST PRODUCTS ARE AVAILABLE

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LEAN. EFFECTIVE. AGILE. PLATFORMIZED. GEMÜ presented its new product generation under these four terms for the first time at ACHEMA 2024, impressing trade visitors and industry experts alike. The first product series, the GEMÜ S40 globe valve, as well as the GEMÜ P40 tank bottom valve and the GEMÜ 12A0 intelligent electrical position indicator, are now available!

GEMÜ S40 – versatility meets long service life

The pneumatically operated GEMÜ S40 2/2-way globe valve is designed for pharmaceutical and industrial applications. It impresses thanks to its modular design and extensive application possibilities. GEMÜ S40 can be used flexibly with variants as angle or globe valves and compatibility with all existing 2/2-way globe valve bodies.

⇒ **Simple installation and low maintenance:**
Top-mounted control air connections for flexible alignment, as well as a central union nut for easy actuator replacement when installed, provide major advantages during installation and maintenance.

⇒ **Simple automation:**
Automation modules, such as the position indicator GEMÜ 12A0, can be installed quickly and safely without additional mounting kits.

⇒ **Sustainable design:**
Wearing parts such as the spindle seal are replaceable, which reduces operating costs and increases sustainability. Integrated visual indicator and sight glass simply show the valve position and protect the actuator from external influences.

GEMÜ P40 – specialist for sterile applications

The GEMÜ P40 tank bottom valve was specially developed for sterile applications. The hermetic separation of medium and environment, and the use of stainless steel components make it the ideal solution for sensitive processes.

⇒ **Optimized design:**
The radial valve body and seal design minimises sediment deposits and ensures that the system runs completely empty and is very easy to clean.

⇒ **Innovative plug diaphragm technology:**
This ensures long-term valve tightness with minimum maintenance requirements.

⇒ **Maximum flexibility:**
Individual connection variants and standards offer customized solutions.

GEMÜ 12A0 – intelligent automation for process valves

The GEMÜ 12A0 electrical position indicator is a robust, modular automation module that is compatible with all pneumatically operated process valves of the new product generation. Thanks to contactless position detection and modern communication technologies, it is a central component for smart and customizable process control.

⇒ **Simple installation and handling:**
Fewer mounting kits make installation quick and easy. Local configuration and status diagnostics via the GEMÜ app as well as autonomous end position detection save time and reduce errors.

⇒ **Connectivity:**
The IO-Link and ASi-5 communication interfaces enable seamless integration into automation solutions. The possibility of software updates creates a high degree of future-proofing.

⇒ **Predictive Maintenance:**
Condition monitoring sensors open up new possibilities for predictive maintenance and minimise unplanned system downtimes.

The new product range from GEMÜ – a perfect combination for maximum efficiency

Rely on tried-and-tested quality and state-of-the-art technology to take your systems to the next level!
Take a leap into the future with us and ask your contact at GEMÜ for a product presentation at your company.

DEAR READERS,

In view of the geopolitical upheavals and the uncertain economic outlook, it is currently not easy for us as company management to make a reliable forecast for the coming year. The challenges we all face should not be underestimated. Nevertheless, we are confident that, together with our dedicated employees and loyal customers, we will overcome these challenging times. It is particularly important for us to continue to rely on trust and cooperation. This will enable us to get through this phase together and emerge stronger.

We would like to take this opportunity to thank our customers for their loyalty and trust. Thanks to your loyalty, we can pursue our goals and continue to develop. At the same time, we would like to thank our employees worldwide for their excellent cooperation and outstanding commitment. Their commitment and passion are the driving forces that drive our company forward.

The past year was very eventful for the GEMÜ Group. Our 60th anniversary was a particular highlight – a milestone that symbolises consistency and reliability. Another important moment was the presentation of our new product generation at the ACHEMA trade fair in Frankfurt. The first products are already available and we will be gradually launching more on the market in 2025. With the new platform products, we are making a big leap towards the future, from which our customers will benefit to a particular degree.

Another highlight of the year was the inauguration of our new headquarters. We look forward to welcoming you personally to this impressive building. Our modern meeting rooms provide the ideal setting for creative workshops. In the integrated workshops, we give our customers fascinating insights into product functions and offer them the opportunity to experience and test products directly.

For 2025, we will continue to be a reliable partner that our customers can always count on in the future. We appreciate the trust placed in us and look forward to continuing our successful collaboration.

We wish you a healthy, successful new year and every success on your journey. Stay healthy and inspired – then we will master the challenges ahead together.

Gert Müller
Managing Partner
of the GEMÜ Group

Stephan Müller
Managing Director
of the GEMÜ Group

MICROSOFT HOLOLENS IN GLOBAL OPERATIONS
IMPROVING EFFICIENCY THROUGH MIXED REALITY

Hands-free communication and interaction directly from the shop floor – enabled by Microsoft HoloLens.

Mixed reality (MR)* has long since stopped being an abstract topic for the future. Within projects, GEMÜ already relies on Microsoft HoloLens, a flexible solution which offers new possibilities in the area of communication.

An example of the successful use of HoloLens is the "AGV (automated guided vehicles) platform" project. The mixed reality technology makes it possible to design direct communication originating from the shop floor, which enables a fast response and adaptation to operational requirements. GEMÜ can contact the implementation partner directly via HoloLens and share relevant information, which helps you to make decisions immediately and in a targeted manner. The advantages are obvious: Faster troubleshooting, fewer communication barriers and a more efficient exchange of knowledge.

The experience that was gained in this project has encouraged GEMÜ to also extend the use of HoloLens to other projects, for it to be used there right away. MR glasses play a central role, in particular when it comes to collaboration with the site in India. HoloLens is used there in a targeted manner without the need for a physical presence. This type of communication not only saves time but also minimizes costs that would otherwise arise through travel and logistical preparations.

The long-term objective is to establish new technologies as a central component of the communication strategy. The application of MR technology not only creates new methods of collaboration, but also strengthens the ability to act flexibly and efficiently on a global level. Mixed reality and other forms such as augmented reality are a valuable building block for further developing digitalization at GEMÜ and especially in global operations, and for intensifying networking between the GEMÜ sites.

**Mixed reality (MR) combines the physical and digital worlds by allowing real and virtual objects to interact in real time. This technology allows users to seamlessly embed digital content in their real-world environment and interact with it, often using special devices such as Microsoft HoloLens. In industry and in the educational sector, MR creates new opportunities for collaborative work processes, immersive training courses and improved visualization of complex data.*

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THE NEW PRODUCT GENERATION WITH SMART SENSOR SYSTEM FOR GREATER PLANT AVAILABILITY

Thorsten Ungerer, Senior Manager for Platform Management, provides some exciting insights into the world of sensor systems in this interview. This innovative technology enables the monitoring of plant processes, and thus effectively helps to avoid unplanned shutdowns.

GEMÜnews: *Mr Ungerer, you made a significant contribution to the development of the new product generation from GEMÜ. What role did the subject of sensor systems play in this?*

The new product generation was developed from the ground up with a focus on digitalization and automation. The automation modules of our valves play a central role in this, and contribute to a significant increase in the level of automation. They ensure more precise monitoring of the valve condition and promote both process optimization and an increase in plant availability. In this context, the development of the new product generation was focused on which measurement variables can be recorded and evaluated, in order to precisely evaluate the condition of GEMÜ products.

GEMÜnews: *Which measurement variables can be monitored by the integrated sensors?*

Monitoring the most important physical operating factors is crucial, as these have a substantial impact on the service life of the products. The relevant factors include temperature, humidity and air pressure in particular.
Electrical characteristic values such as supply voltage and current consumption are decisive for electronic products, in order to ensure optimal operating conditions. This allows the energy consumption of the products to be determined. The measured values can then be used to increase the efficiency of the process plants in conjunction with the implementation of an energy management system.

GEMÜnews: *: Electrical characteristic values are, of course, important. But what other measurement variables can be monitored?*

Another elementary variable is the control air supply pressure for pneumatically operated process valves. This must be within a specified, permissible range for the products to function reliably. Experience shows that control pressure problems are still one of the main causes of errors in these products. By monitoring the control pressure, specific messages can be generated if it is too low, too high or unstable.
Other measurement variables are also important for evaluating the quality of the type of operation. Acceleration and oscillation are particularly relevant here, as strong vibrations not only adversely affect the products and components, but are also an indication of process faults. A positive side effect of the acceleration measurement is that it can also be used to determine the mounting angle. This information makes it possible to check whether the valves have been installed at the specified angle so as to ensure an empty run – a particularly important feature, in particular in sterile applications.

GEMÜnews: *Why are the aforementioned measurement variables in particular so important for the reliable operation of a plant?*

The aforementioned measurement variables are decisive parameters that directly or indirectly influence the service life and functionality of the products. Furthermore, these variables can be used to draw conclusions about the cause of the error in case of failure. A targeted correlation of the measured values also allows potential malfunctions to be recognized at an early stage, so that preventative measures can be taken before a problem arises.

GEMÜnews: *How can the measured data be read out?*

The measured data from the sensors can be transmitted via the existing communication interfaces, read out and used for further processing. In this way, users get the option of continuously monitoring the sensor values, recording them and analyzing them specifically for anomalies or emerging negative trends.
With the GEMÜ App and a Bluetooth connection, the sensor values can also be displayed quickly and directly on the smart device. This makes troubleshooting much easier, in particular in the event of faults, and also offers the convenient option of directly reading off the current status of a product during maintenance or service work.

GEMÜnews: *How exactly does the advanced sensor system help to avoid unplanned plant shutdowns?*

By reading out the sensor values at sensible intervals, deteriorating conditions can be recognized as a trend long before an actual malfunction occurs. This monitoring can be carried out directly by the users, by saving the read-out sensor values and checking them for abnormal changes. Such changes are also monitored directly in the device using defined warning thresholds, in order to inform the users of these changes through specific messages.

GEMÜnews: *The adjustable warning thresholds make it possible to react to problems at an early stage. How do users benefit from this functionality?*

Device-specific and application-specific warning thresholds can be stipulated for each sensor value for undershooting and exceeding threshold values. If a sensor value leaves this defined threshold range, a warning message is automatically generated and output. In this way, the user can react at an early stage, before actual malfunctions even occur, and reliably evaluate the condition of the products and the entire process.
Critical threshold values are also defined for elementary physical variables such as temperature and supply voltage. If these values are exceeded or undershot, the device automatically switches to error mode and moves the valve to a predetermined safety position in a targeted manner.

GEMÜnews: *How does the new product generation support users with its advanced sensor system?*

For the automation modules of the new product generation, the dedicated sensor system was determined using a broad-based cost-benefit analysis, then appropriate sensor types were selected and skilfully integrated into the hardware design. The GEMÜ 12A0 electrical position indicator is part of the new product generation. Equipped with this advanced sensor system, it offers operators the option of comprehensively monitoring the status of the device and the operating conditions. This makes a decisive contribution to extending the service life of devices and plants, helps to avoid expensive unplanned shutdowns and reveals potential for optimization.

GEMÜnews: *What do you think companies should pay attention to when they want to use innovative sensor system solutions?*

First and foremost, it is important to consider which characteristic values have a significant influence on the type of operation and service life of the devices. These can vary depending on the product type, intended application and environment. Based on this, the question arises as to which of these relevant characteristic values can be meaningfully determined and evaluated. However, the costs and integration options also play a central role in the selection of the specific sensor system. Overall, these new technical features should help the customer to gain even more knowledge about the condition of their plant and its individual components, in order to increase plant availability and make shutdowns even easier to plan.

GEMÜnews: *Thank you for the exciting insights, and we look forward to future developments in this area.*

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ACHEMA 2024

PIONEERING VALVE TECHNOLOGY
GEMÜ SETS NEW STANDARDS

GEMÜ will be presenting new pioneering product generation at the largest trade fair in the processing industry and setting new standards in the world of valve technology.

A total of 2842 exhibitors from 56 countries presented their latest products and innovative processes at ACHEMA 2024, the leading trade fair for the processing industry, from 10th to 14th June 2024. The event at the Frankfurt exhibition centre attracted 106,000 participants from 141 nations and offered insights into the latest developments for the chemical, pharmaceutical, food and related industries.

ACHEMA 2024 offered GEMÜ a big stage to present the new generation of valve technology. Under the motto "Valve of the future, electrified, connected, intelligent", GEMÜ presented its pioneering products to interested visitors. The presentation of the new product generation met with great interest and the stand was very busy throughout. GEMÜ impressed many visitors with its modern and innovative stand design. An interactive and informative environment gave visitors the opportunity to experience GEMÜ products at first hand.

Another highlight at the stand was the Quantum Leap Experience. Using VR glasses, visitors were able to experience the "Valve of the future" up close in a mixed-reality application. For all interested parties who were unable to visit GEMÜ in person at ACHEMA 2024, the GEMÜ Digital Showroom offers an excellent opportunity to do so. Innovative product highlights and numerous interesting key facts about GEMÜ await interested visitors..

Overall, GEMÜ can look back on a successful ACHEMA 2024, which encouraged and inspired the technology company in its endeavours to continue pursuing the innovative LEAP into the future with full energy.

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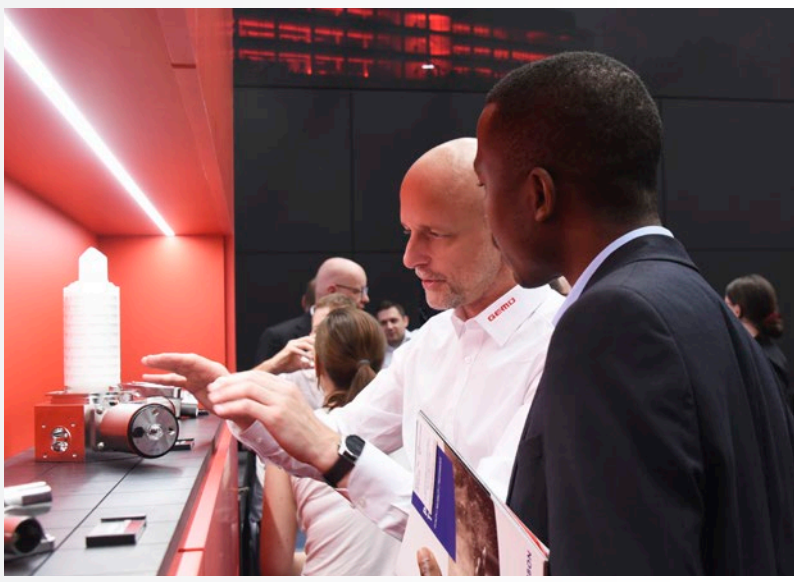

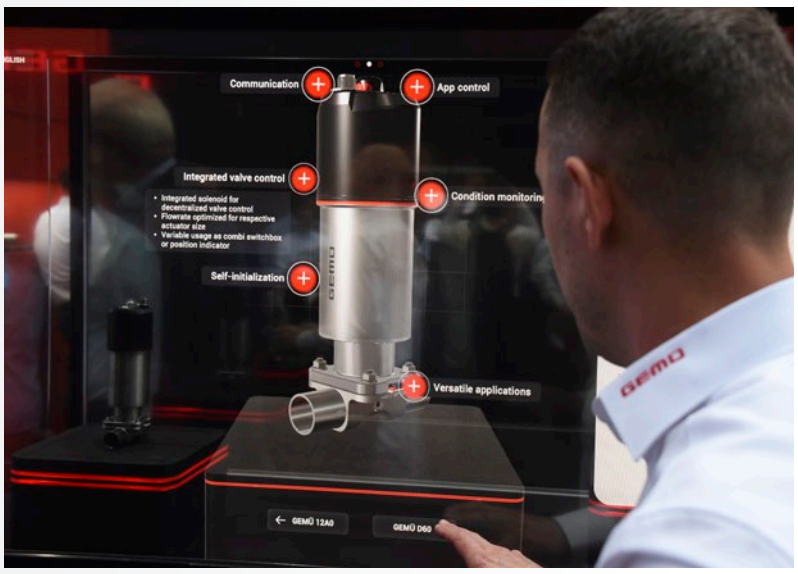

GEMÜ EXPANDS COMPETENCE IN MEMBRANE TECHNOLOGY

NEW PRODUCTION AND OFFICE BUILDING

GEMÜ France and Intercarat, both of whom are subsidiaries of the GEMÜ Group, have moved into their new production and office building in Altorf, north-eastern France.

The new building is part of GEMÜ's strategy to further expand its capabilities in the area of diaphragm technology. In recent years, GEMÜ has already expanded in this field and continuously increased its capacities. By building the new production and office building, the technology company is continuing this strategy and has doubled its production area in France to over 3500 square metres, thereby creating space for further growth.

"This investment is a major step into the future and underlines our commitment to long-term growth and innovation," says Gert Müller, Managing Partner of the GEMÜ Group.

The new premises not only offer more space for production and storage, but also provide state-of-the-art offices and training rooms to create an optimal working environment for employees. "We're looking forward to welcoming our customers and partners into our new building and designing the future together with them," explains Rolf Meier, Managing Director at Intercarat.

About GEMÜ France:
GEMÜ France is a subsidiary of the GEMÜ Group and specializes in the sale of valves, measurement and control systems on the French market.

About Intercarat:
Intercarat is a specialist in diaphragm production within the GEMÜ group. The manufactured diaphragms are installed in diaphragm valves and are also available as spare parts.

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GEMÜ RECEIVES „ALLIANZ INDUSTRIE 4.0 AWARD“
AWARD GIVEN IN THE "EXCELLENCE" CATEGORY

On 23rd October 2024, Baden-Württemberg's Minister of Economic Affairs, Dr Nicole Hoffmeister-Kraut, presented GEMÜ with the Allianz Industrie 4.0 Award in the "Excellence" category. The award recognizes companies that stand out for their comprehensive and advanced approaches to digital transformation.

From left to right: Dr Isabella Jesemann (Allianz Industrie 4.0 BW), Dr Dietrich Birk (Managing Director of VDMA e.V. BW), Manuel Schneider (GEMÜ), Dr Nicole Hoffmeister-Kraut (Minister of Economic Affairs BW), Matthias Fick and Sebastian Rautenberg (both GEMÜ)

Matthias Fick (Managing Director), Manuel Schneider (Senior Head of Department, Global SCM & Industry 4.0) and Sebastian Rautenberg (Head of Department, Global SCM & Industry 4.0) accepted the award on GEMÜ's behalf at a ceremony in Stuttgart. "Receiving this award is an honour, but it is also a motivation to remain at the forefront of technological development and keep driving forward the digital transformation in industry," commented Matthias Fick, Managing Director of GEMÜ, highlighting the importance of this success.

GEMÜ received this recognition for the development and implementation of the GEMÜ Smart App: Operations in particular. This app revolutionizes digital process control on the shop floor by enabling consistent digitalization and mapping processes across the value creation chain. The high level of digitalization not only increases efficiency, but also gives GEMÜ a decisive strategic competitive advantage.

"We are delighted to receive this award as confirmation of the success of our work in recent years. This success would not have been possible without the commitment and interdisciplinary collaboration of our colleagues. Special thanks go to all those who contributed to this success with their commitment and expertise. Together, we have created a solid basis on which we can continue to build within the global GEMÜ production network. I am looking forward to the future developments and innovations that we will go on to achieve together," reports Mona Buck, Team Leader for Industry 4.0 Process Management & Project Management for the GEMÜ Smart App.

With the GEMÜ Smart App, an innovative approach has been implemented that fully utilizes the advantages of digitalization for production. The app integrates advanced user interface and user experience elements, so that production processes can be controlled transparently and flexibly. Shop floor employees benefit directly from the intuitive user interface, which puts work processes into a structured, guided workflow and minimizes error sources through automatic process control. Participatory collaboration with employees is also part of the project approach, and is realized through key user structures and regular communications. Last but not least, the GEMÜ Smart App project has shown that the success of digital transformation is not just a technical challenge, but depends principally on people coming together, learning, growing and creating something new together.

"We are very proud that GEMÜ has received the Allianz Industrie 4.0 Award Baden-Württemberg in the 'Excellence' category. This recognition confirms that we are on the right path with our strategy of developing innovative and digital solutions that offer our customers genuine added value," says Gert Müller, Managing Partner of the GEMÜ Group.

The continuous further development of the app as well as the scaling and global roll-out ensure long-term success. The award confirms GEMÜ's path as an innovator and pioneer in the area of Industry 4.0 – a role that will also be continued in the future with commitment and responsibility.

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Neutralization system for wastewater in surface treatment

WATER REUSE
THE SIGNIFICANCE OF SUSTAINABLE WATER MANAGEMENT

Our planet's water resources are facing increasing challenges. The growing world population and changing lifestyles are leading to an increased demand for water in various sectors such as agriculture, industry and households. At the same time, many regions are facing water scarcity, which is being exacerbated by climate change and inadequate water management.

In this context, water reuse is becoming increasingly important in order to meet the increasing demand for water, as it enables the sustainable and efficient use of this vital resource. The traditional method of linear water management, in which fresh water is extracted, utilized and then disposed of as waste water, puts a strain on the environment and leads to pollution. By reusing water, harmful substances can be reduced and the ecological footprint can be minimized. This approach involves treating waste water from households, industry and agriculture to make it reusable for various purposes.

In agriculture, reused water can be used for irrigation, reducing the pressure on scarce fresh water resources. This helps to secure food production and preserve the soil.

In industry, water reuse can contribute to more efficient exploitation of resources. Process water can be reused after treatment, which allows water consumption in industrial plants to be optimized.

For these reasons, water reuse is a focal area at GEMÜ. GEMÜ solutions for recycling industrial water are already being used right now in many industrial processes. Depending on the type of waste water and product quality of the treated water, the different requirements for material resistance and functionality can be covered by the appropriate product versions.

Water reuse plays a key role in tackling the global water crisis. It not only enables the increasing demand for water to be met, but it also helps to reduce environmental effects and promote more sustainable water management. Valves and shut-off valves are important components in water treatment. GEMÜ already currently offers the appropriate solutions for this.

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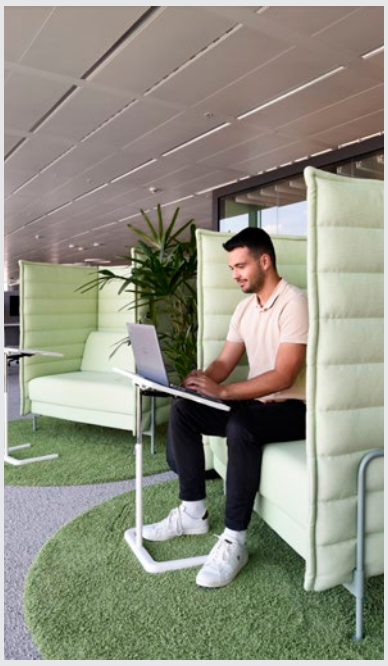
WELCOME TO THE NEW GEMÜ WORKSPACES
RETHINKING INNOVATION AND COLLABORATION

The move to the new headquarters opens up numerous opportunities for GEMÜ to design its work even more efficiently and creatively in modern and functional environments. Each business unit has workspaces on its own floor. These new workspaces offer a variety of facilities that are tailored to different work requirements and create an ideal environment for collaboration and innovation.

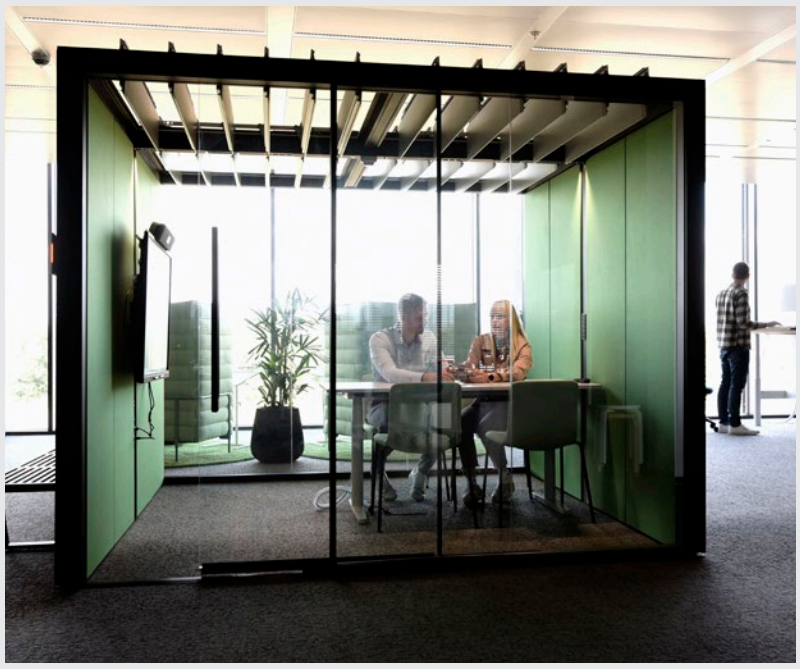
A particular highlight is the central workshop, which has been specially designed for larger workshops and practice-oriented training sessions. Here, the teams have access to a spacious environment that is extremely well-equipped from a technical perspective, in which they can work together on projects, develop prototypes and test innovative solutions directly on location. As part of the 'LEAP into the future' campaign, training courses on new products are already being actively organized here, in order to optimally prepare employees for the latest developments.

The central workshop is supplemented by a smaller workshop, which is also state of the art and equipped with a 3D printer for the Industry business unit. This workshop makes it possible to create prototypes and customized components quickly and easily, which further facilitates the implementation of creative ideas. The Industry business unit is currently using this workshop to work on a solution for a customer in the printing machine sector, where installation space is a decisive criterion. Additive technology helps to quickly create a prototype, and thus to efficiently cater to the customer's specific requirements.



The new alcove cabins are available for concentrated and undisturbed work. These retreats are available in various designs to meet different needs. Whether for individual work or smaller meetings, the alcove cabins offer a peaceful and shielded environment in which productive work is possible. These cabins are ideal for retreating from the hustle and bustle of office life and working on important tasks.

'Orange boxes' have been set up for team meetings. These flexible facilities are perfect for rapid dialogue and dynamic collaboration as a team. They are designed to create an inspiring atmosphere in which ideas can flow freely. The orange boxes are equipped with state-of-the-art technology and offer everything that is required for productive meetings.



The new GEMÜ workspaces offer the optimal conditions for meeting the challenges of today and tomorrow with creativity and innovative capacity. The modern working environment promotes productive collaboration, supports the implementation of new ideas and makes it possible to meet increasing requirements in an efficient manner.

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SIL CERTIFICATION
GEMÜ 650 DIAPHRAGM VALVE

The GEMÜ 650 diaphragm valve was the first in-house product from the GEMÜ range to receive SIL (Safety Integrity Level) certification. The valve can now be used in applications up to SIL 2 in a simple design and up to SIL 3 in a redundant construction.

The project was initiated in May at the request of a customer, with the objective of certifying the GEMÜ 650 diaphragm valve to SIL 2 level, and thus complying with the safety requirements in specific applications.

A decisive milestone in the project was the audit in August, during which the entire flow of goods and the associated processes were comprehensively reviewed. The certifiers attested to the fact that goods were being produced in a modern, efficient way and gave thoroughly positive feedback, meaning that SIL certification was successfully achieved in October 2024.

With SIL certification, customers can now easily use the GEMÜ 650 diaphragm valve in safety-related applications without having to carry out a separate "Prior Use" assessment, which was previously required for exclusive FMEDA use. This significantly reduces the effort required for integration and makes the valve much easier to use.

In view of the forthcoming IEC 17955, which relates specifically to the functional safety and reliability of valves and actuators, SIL certification is becoming even more important in order to satisfy future standards and requirements. GEMÜ has thus achieved a significant step in the area of functional safety.

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TRADE FAIRS 2025
(INTER)NATIONAL

Pharmapack medical	22.01. – 23.01.	Paris (FR)
Biopharma and Lifesciences	23.01.	Little Island Cork (IE)
Semicon Korea	19.02. – 21.02.	Seoul (KR)
PDAC Canada	02.03. – 05.03.	Toronto (CA)
CFIA Rennes	04.03. – 06.03.	Rennes (FR)
Smagua Spain	04.03. – 06.03.	Zaragoza (ES)
CBST China	05.03. – 07.03.	Shanghai (CN)
Expo Lounges Karlsruhe	25.03. – 27.03.	Karlsruhe (DE)
Semicon China	26.03. – 28.03.	Shanghai (CN)
Interphex USA	01.04. – 03.04.	New York (US)
Expofarma Mexico	02.04. – 04.04.	Mexico City (MX)
Pharma Kongress	08.04. – 09.04.	Wiesbaden (DE)
Cophex Korea	22.04. – 25.04.	Kintex (KR)
EuroChlor Conf. & Exhibition	13.05. – 15.05.	Barcelona (ES)
ChemUk	21.05. – 22.05.	Birmingham(GB)
Industrimässorna Öresund	21.05. – 22.05.	Malmö (SE)
Pharmintech Italy	27.05. – 30.05.	Bologna (IT)
Career Day for Family-Owned Businesses	06.06.	Ingelfingen (DE)
Interphex Japan	09.07. – 11.07.	Tokyo (JP)

Subject to change!

30 YEARS OF EXPERIENCE WITH MULTI-PORT VALVE BLOCKS
THE RANGE IS GROWING OVER TIME

GEMÜ has been setting standards in the area of multi-port valve designs for three decades. What began in the 1990s with the introduction of the first multi-port valve blocks has developed into a worldwide success story. With the customized solutions of the multi-port valve blocks, GEMÜ offers efficient options for process optimization to its customers from a wide range of industries, such as the pharmaceutical, biotechnology, foodstuffs and chemical industries. This led to the growth of an impressive product range.

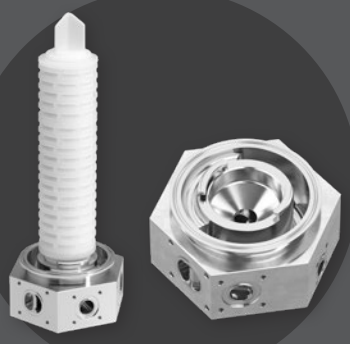
With a view to constant innovations and ground-breaking developments, GEMÜ is committed to continuously refining and actively helping to shape the world of valves in line with technological progress. The following problems were therefore recognized in plants at an early stage. To enable complex valve combinations in plants, it has long been standard practice to weld 2/2-way valve bodies together with matching pipe fittings. This procedure is still used even today, although it can result in dead spaces that can only be cleaned with difficulty, which constitutes a major disadvantage for plants with aseptic or sterile requirements.

GEMÜ HIGHLIGHTS

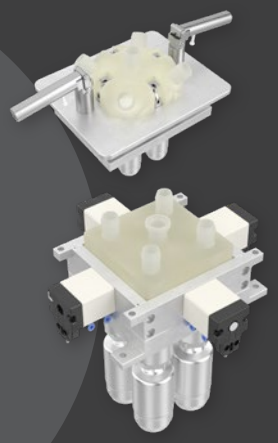
GEMÜ P600S MODULAR MULTI-PORT VALVE BLOCK IN STAINLESS STEEL

GEMÜ P600M M-BLOCK STAINLESS STEEL DIAPHRAGM VALVE

BLOCKS FOR SPECIFIC APPLICATIONS, SUCH AS FOR THE FILLING INDUSTRY



MULTI-PORT VALVE BLOCK AS FILTER BASE FOR CARRYING OUT PUPSIT FILTER TESTS



SINGLE-USE MULTI-PORT WITH MANUAL OR PNEUMATIC LOCKING DEVICE

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Successful concept of M-blocks

A compact and multi-functional design that delivers product reliability for sophisticated processes, minimizes dead spaces and specifically addresses customer needs – this is what the multi-port valve block solution offers. While several valves, fittings and pipe components are used in the complex welding configurations, M-blocks are manufactured entirely from a single piece of stainless steel block material, meaning that weld seams can be completely dispensed with. Therefore, in addition to a minimized hold-up volume and the best possible cleanability, multi-port valve blocks also offer reduced installation costs and improved expertise protection for plant operators. Special process connections such as Tri-clamps or hygienically compatible seal contours can be machined directly on the valve body, and customized block solutions can be developed. The manufacturing of M-blocks thereby complies with the principle of a Special Engineering department with standardized series production.

Range and variety

For a long time now, it has no longer just been multi-port valve blocks made from stainless steel that play a role in plant engineering. As a leading valve manufacturer, GEMÜ also offers innovative M-block solutions in plastic. Thanks to their material properties, they are frequently used in semiconductor systems, water treatment, waste water treatment and the chemical industry. GEMÜ also offers a wide range of sealing technologies, ranging from diaphragm valves and diaphragm globe valves with PD sealing technology right up to globe valves. In addition, we are continuously working on further developments to meet the growing requirements. Examples of these include the modular GEMÜ P600S multi-port valve block made of plastic or stainless steel as well as application-specific M-blocks, for example for the filling industry.

Single-use solutions are a continuously growing market segment. They offer a versatile way to increase flexibility and agility in plants while simultaneously minimizing risks. GEMÜ recognized the potential and developed the GEMÜ single-use multi-port as a complex and cutting-edge solution. The actuator unit remains permanently installed in the plant. Unlike with a conventional M-block based on the diaphragm valve principle, the two media wetted components (valve body and diaphragm) are sealed together. This produces the central component, the single-use valve body, which is separated from the actuator and disposed of after use.

The PUPSIT filter block is a specially manufactured multi-port valve made from stainless steel that can be used as a base for filter housings. The entire filter unit, comprising filter base, valves, fittings and connections, is manufactured from a stainless steel block made of block material, and enables pre-use post-sterilization integrity testing (PUPSIT) to be carried out easily.

Likewise, GEMÜ's newly launched product generation of multi-port valve blocks also heralds a new era. The seat geometry and cavities are being redesigned and re-manufactured, so as to be able to provide plant engineering with even more flexible, process-optimized and more compact multi-port valve blocks in the future.

History continues to be written

GEMÜ is also dealing with the future issues of automation and 3D printing. A promising future approach when it comes to the further development of M-block technology lies in the automation of the design and manufacturing process. At present, each M-block is made from blocks in the data pool that already exist, or, depending on particular customer specifications, designed completely from scratch. This means that, in accordance with the design guidelines, all blocks do indeed comply with the respective specifications, but no automation of the designs is possible. Partial automation has already been enabled in the process by transferring 3D designs to production programming via special software tools. Using a valve configurator, it is also possible to provide the customer with a 3D model of a 2/2-way valve by selecting a suitable actuator and the corresponding accessories. The next step, which GEMÜ is already working on, is to have designs created by the valve configurator using particular specifications and directives, so that not only the components such as the actuator, diaphragm and body are put together accordingly, but the body is also designed automatically according to the corresponding specifications. The next steps follow on directly from these particular specifications, which are worked out in such a way that automated manufacturing processes can deliver efficient and precise results. This noticeably speeds up the process for the customer and enables automated design in accordance with directives. The expertise of the design engineers is also still required, as versatile special shapes can only be integrated into the automation process with difficulty, which is why GEMÜ is also constantly expanding its capability in this area.

In addition to automation, the innovative manufacturing process of additive manufacturing (3D printing) offers further future potential in the world of multi-port valve blocks. By converting the individual cross-sections into physical layers and combining them, a multi-port valve block is generated as a component. The tool-free procedure offers great design freedom and a high degree of customizability. It also allows complex blocks and other optimizations to be realized. In addition, simulations can save material by using or applying actual material only where technically necessary. Not only the amount of material but also the weight can be significantly reduced as a result, and consequently so can the heating and cooling times for sterilization. Prototypes have already been additively manufactured during development at GEMÜ. However, there are many criteria relating to the materials used, the surface finish and the quality, which must first be considered together with the customers in order to successfully place the new technology on the market. GEMÜ is committed to developing these and other innovations in the product development of multi-port valve blocks.

Today, GEMÜ can proudly look back on a success story characterized by proximity to our customers, technical expertise and 'state of the art' process solutions – and this success story is far from over.

GEMÜ SERVICE: SUMMERSHUTDOWN 2024
INTENSIVE MAINTENANCE AND SERVICING WORK LASTING 113 DAYS

During the summer months, many companies in the processing industry shut down operations for several days or weeks to carry out maintenance and servicing work.

A total of 51 GEMÜ Service employees carried out extensive maintenance work on customer plants in the most varied locations, over a total of 113 days during what has become known as the "summer shutdown", which lasted until the beginning of October 2024. With service assignments in Austria, Sweden and Germany, the GEMÜ Service department used the time when many companies were shutting down their production facilities for the required maintenance work, which gave an impressive demonstration of its performance capability.

The successful implementation of these assignments is the result of careful planning, a high degree of flexibility and exceptional commitment. This major project was completed thanks to the enormous commitment of the GEMÜ service technicians and the support of other colleagues.

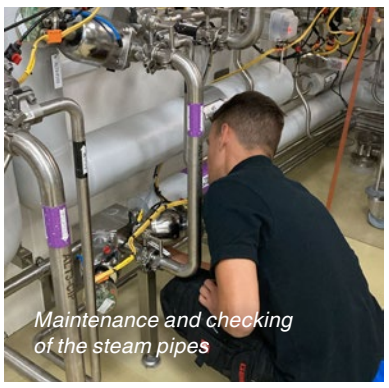
In particular, the flexibility of many colleagues has made a valuable contribution to its success and demonstrates the cross-departmental cohesion at GEMÜ.

With the successful completion of the "summershutdown", the GEMÜ Service department has shown that it fulfils the highest standards of quality even in complex projects, and can make a significant contribution to the operational capability of plants.

For the GEMÜ Service department, the end of the shutdown also means the kick-off for 2025, as initial discussions are already being held with customers and subcontractors to ensure that maintenance work runs smoothly again next year.

The GEMÜ Service department would like to thank all colleagues for their exceptional performance and commitment which has made this maintenance work, which was the most extensive in the history of GEMÜ, possible in the first place.

Diaphragm replacement on tanks is very often carried out in a restricted space


Maintenance and checking of the steam pipes

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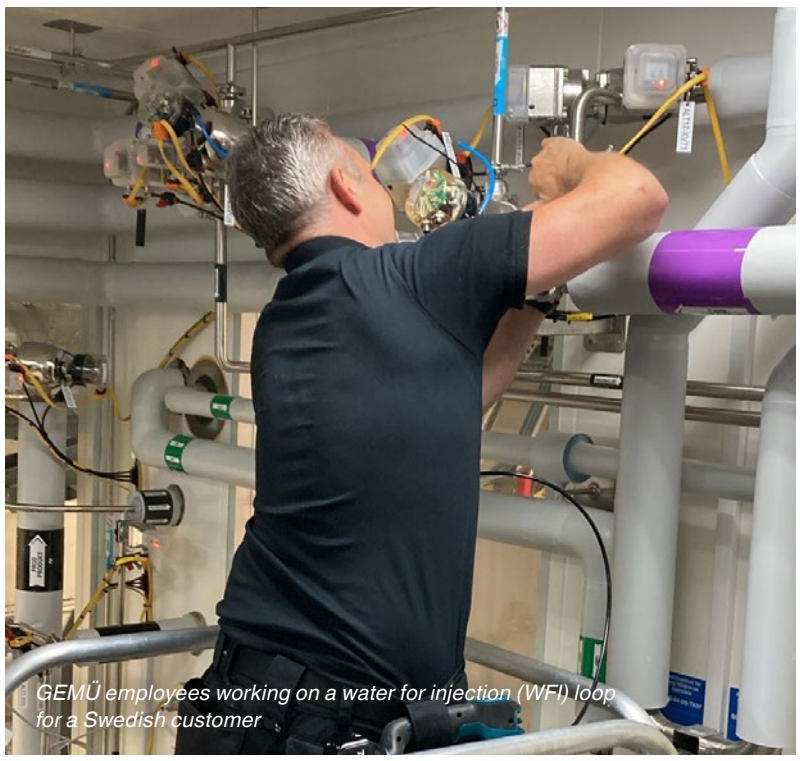
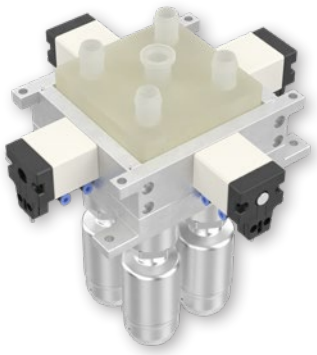

GEMÜ employees working on a water for injection (WFI) loop for a Swedish customer

SINGLE-USE APPLICATIONS FOR THE SMALLEST OF SPACES
INNOVATIVE SUMONDO MULTI-PORT BLOCKS FOR HIGHER PROCESS RELIABILITY

With the GEMÜ SUMONDO multi-port block, GEMÜ offers the ideal solution for single-use applications in the pharmaceutical and biotechnological industries.

The tried and tested GEMÜ SUMONDO diaphragm valve principle ensures hermetic separation between the actuator and the medium by welding the diaphragm to the body. When using the GEMÜ SUMONDO multi-port, the actuator unit (multi-use) remains permanently installed in the plant, while the valve body (single-use) is replaced after use. The milled disposables enable various designs, connections and sensor integrations for targeted use in the upstream and downstream area. This means that the multi-port blocks can be individually designed and manufactured according to customer requirements.

The advantages of a SUMONDO multi-port over conventional solutions are comparable to the advantages of stainless steel solutions. The compact multi-port blocks, without tubes or piping between two seats, have a low hold-up volume in comparison with single valve solutions. This allows higher process reliability and efficiency to be ensured. The compact design also means that less space is required in the plant.


Actuator unit with pneumatic locking (PSUA) with GEMÜ SUMONDO multi-port block (ASUB)


Actuator unit with manual locking via hand lever (PSUH) with GEMÜ SUMONDO multi-port block (HSUB)

Key:
- ⇒ **PSUA:** Actuator unit for single-use multi-port blocks with pneumatic locking
- ⇒ **PSUH:** Actuator unit for single-use multi-port blocks with hand lever locking
- ⇒ **ASUB:** GEMÜ SUMONDO multi-port block (disposable) for actuator unit with pneumatic locking (PSUA)
- ⇒ **HSUB:** GEMÜ SUMONDO multi-port block (disposable) for actuator unit with hand lever locking (PSUH)

GEMÜ offers two versions for locking the multi-port (disposable), based on pneumatic locking (PSUA) and manual locking via a hand lever (PSUH). Both versions of the actuator unit enable simple operation and fast replacement of the disposable between different production cycles.

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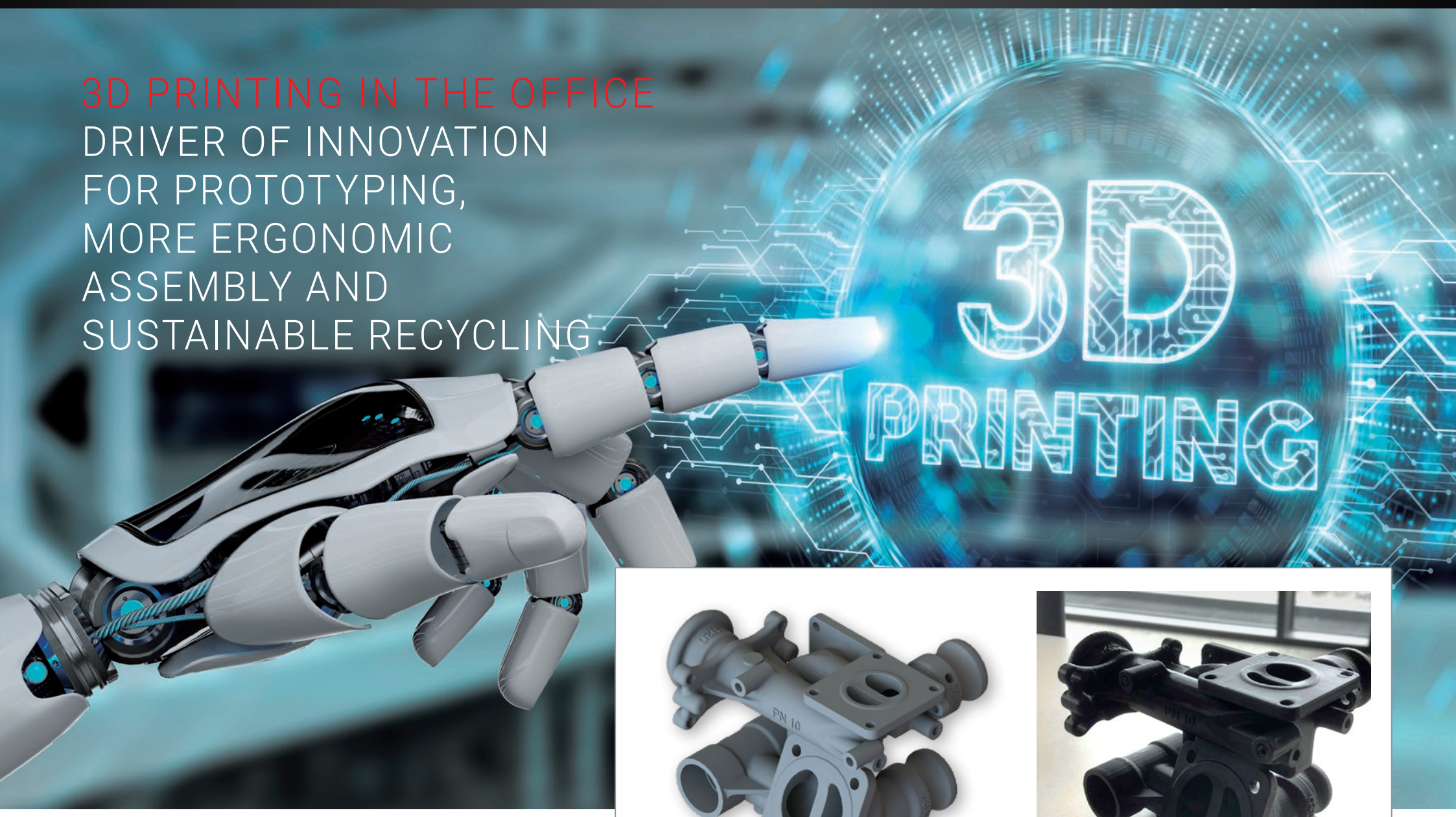
3D PRINTING IN THE OFFICE
DRIVER OF INNOVATION FOR PROTOTYPING, MORE ERGONOMIC ASSEMBLY AND SUSTAINABLE RECYCLING



Since August 2024, a 3D printer has been improving the everyday office life of the Industry business unit, and has been proving to be a true all-rounder. Its introduction revolutionized the development of prototypes, made the assembly of quarter turn valves more ergonomic and enabled a more sustainable use of resources.

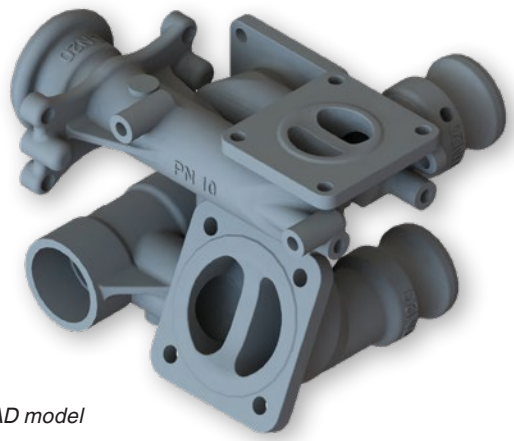
The quiet humming of the printer is now an integral part of the working environment, and indicates that future technology is in use here.

Faster prototype development for more efficient idea generation

A key advantage of the 3D printer is the fast realization of prototypes. This support substantially speeds up the development process for new components. While complex orders and long wait times used to be necessary, ideas can now be realized immediately and easily as visual models. The printed prototypes serve as a basis for discussions and help to better visualize concepts. The components can be assessed together and further improvements can be developed.

Customized assembly aids for more ergonomic workflows

The Assembly department for the quarter turn valves also benefits from the new 3D printer. Customized auxiliary materials can now be designed and printed quickly and easily for particular challenges in the assembly process. These customized solutions contribute to a more ergonomic way of working and enable colleagues to perform their tasks more efficiently and more conveniently.

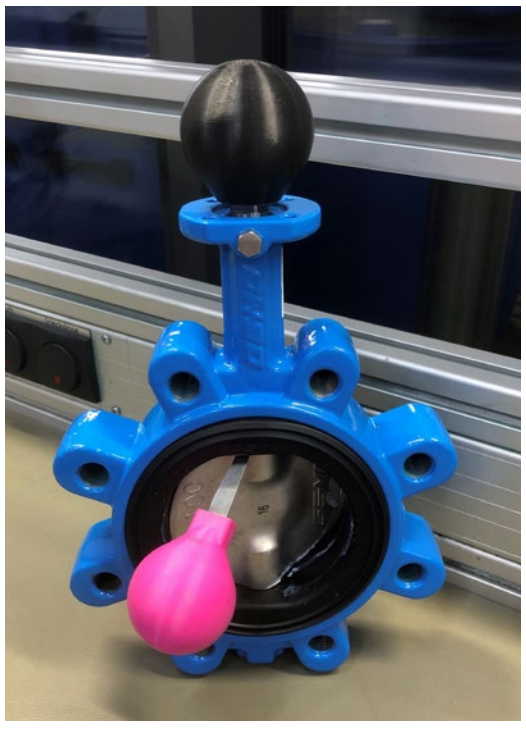


CAD model of a valve body

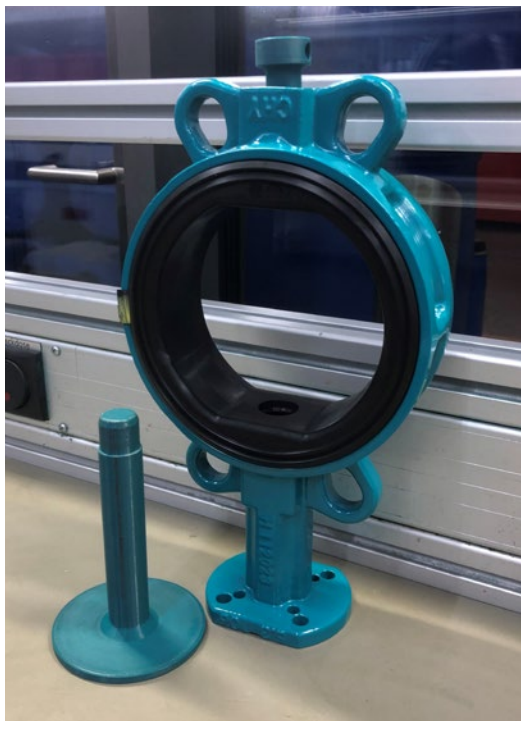
3D-printed demonstration model

Sustainable recycling for resource-saving 3D printing

In addition to efficiency, the focus is also on the responsible use of resources. Although FDM (fused deposition modelling) printing is becoming more and more precise, it is inevitable that there will be misprints or plastic residues. The plastic waste is carefully sorted and collected, before then being sent to a specialized filament recycling company. The company processes the waste and uses it to produce new filament, which can in turn be used for 3D printing. This closes the material cycle and reduces the ecological footprint.



The black "wave handle" makes it easier to install the butterfly valve.
The pink venting tool ensures damage-free decompression of the pole area. Both parts were created using the 3D printer.



The 3D printer was also used to create the assembly mandrel for better positioning of the liner. Gluing the liner into the valve body is very difficult due to the fast-setting adhesive. The assembly mandrel ensures correct positioning when the liner is first inserted, resulting in fewer rejects.

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PRECISION FOR SOPHISTICATED PROCESSES
GEMÜ SOLUTIONS FOR BATTERY CELL PRODUCTION

Battery cell production is at a critical crossroads worldwide. With demand for electric vehicles in Europe – in Germany in particular – having recently fallen sharply, numerous global projects are on trial or are temporarily suspended. This development raises questions not only about the future of battery technology, but also about the competitive ability of European manufacturers. Recently, various headlines such as BMW's cancelled orders from Northvolt or PowerCo's reduced production plans in Salzgitter have caused a stir. Then there are cancellations such as from the Chinese manufacturer SVOLT, which has abandoned its plans to build battery cells in the Saarland.

Despite these challenges and the sometimes sceptical reporting, there are also some positive signs. The demand for battery cells continues to grow worldwide. Demand remains strong, particularly for home storage solutions, power tools and industrial electricity storage. In Asia in particular, interest in electric cars and battery solutions remains at a consistently high level. Due to this increasing demand, new battery production factories, known as gigafactories, continue to be built all over the world. The battery industry continues to demonstrate a high level of innovative drive.

GEMÜ: CAPABILITY AND EXPERIENCE IN BATTERY CELL PRODUCTION

As a leading provider of valves, measurement and control systems, GEMÜ has been actively involved in battery cell production since back in 2017, and brings extensive technical expertise to the industrial sector. The company offers solutions for various critical process steps, and thus contributes to efficiency and quality assurance in the manufacture of battery cells. The focus is on applications for the precise and reliable filling of battery cells with electrolyte solutions, a technologically demanding process step that significantly influences the performance capability of the cell.

Electrolyte filling plays a decisive role, because the electrolyte "activates" the cell and enables the flow of ions between the anode and cathode. As filling is often carried out with corrosive, toxic and volatile media, maximum precision is required. GEMÜ has developed a range of innovative solutions here that fulfil the stringent requirements.

SPECIALIZED TECHNOLOGIES FOR ELECTROLYTE FILLING

GEMÜ e-filling lance

Electrolyte filling is done using a combination of a Coriolis flowmeter and the GEMÜ e-filling lance. The lance forms a direct interface to the battery cell and fills it with the required amount of electrolyte. The solution is particularly suitable for laboratory facilities and small series machines. Electrolyte quantities and interfaces can be adapted from cell to cell without a negative impact being had on the filling precision (+/-1%). This allows each cell to receive the exact quantity of electrolyte solutions required for its performance capability.

GEMÜ stainless steel manifolds for solvent supply

Chamber dosing

In chamber dosing, valve solutions are used where a precisely defined space is filled with the required amount of electrolyte before it enters the battery cells using inert gas. This procedure achieves a very high filling precision, while simultaneously eliminating the need for flow measurement systems. This technology is characterized by its compact design and is ideal for mass production.

In addition to electrolyte filling, GEMÜ offers specialized valve solutions for other battery cell production processes, such as for slurry mixing and electrode coating. When it comes to slurry mixing, active materials, solvents, additives and binders must be combined in the correct ratios of mixture, and applied to the anode and cathode films. Stainless steel butterfly valves and ball valves are used here, which enable the correct dosing and distribution of the mixtures and thus contribute to even coating.

GEMÜ valves are also an integral part of the equipment at the supply and distribution level of a gigafactory. The stainless steel manifolds from GEMÜ, for example, are used to supply the process level with the solvent NMP (N-Methyl-2-pyrrolidone). It is, on the one hand, a component of the electrolyte, but it is also used for coating. GEMÜ solutions are also used in upstream and downstream processes such as raw material production and battery recycling, which emphasizes their versatility and reliability.

EXPERTISE AND KNOWLEDGE OF THE MARKET IN A DYNAMIC ENVIRONMENT

GEMÜ also continues to see great potential in the development of the battery industry. With its many years of experience and wide range of solutions for battery cell production, GEMÜ supports both plant designers and cell manufacturers in optimizing and automating their processes. Demand for battery cells for a wide variety of applications will continue to develop steadily in the future as well. Thanks to its comprehensive technical expertise and knowledge of the market, GEMÜ is a strong partner for the further development of the battery industry.

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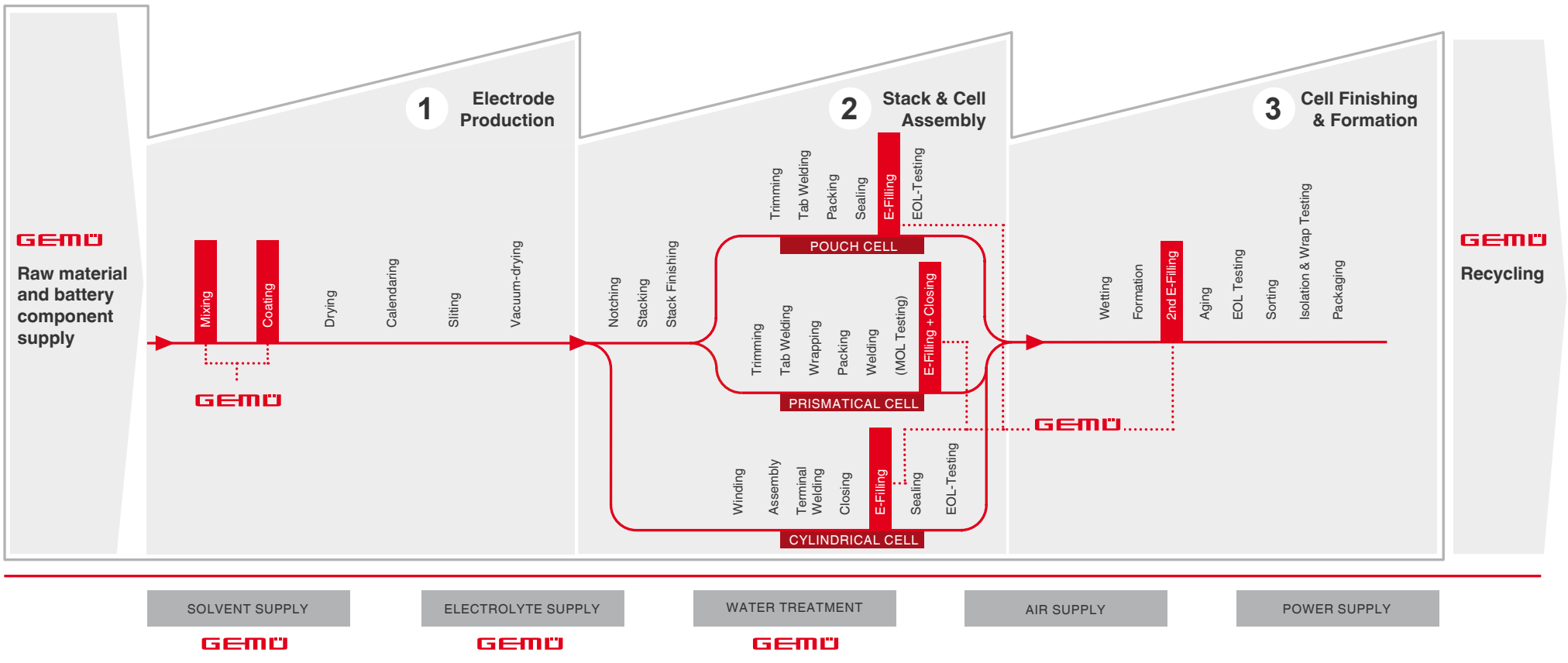

GEMÜ BRAZIL PROMOTES SUSTAINABILITY AND SOCIAL RESPONSIBILITY

STRENGTHENING PARTNERSHIPS AND SOCIAL COMMITMENT

GEMÜ Brazil is undertaking initiatives to strengthen its commitment to sustainability and social responsibility. The GEMÜ subsidiary not only offers customers products and services, but is also committed to environmental protection and supporting local communities.

Collaborations for a sustainable circular economy

Partnerships were recently entered into with **Uniformes do Bem** and **Zero Waste Brazil**, two companies that specialize in sustainable waste management. These collaborations aim to find environmentally friendly solutions for waste that often ends up on rubbish dumps or in co-processing, and their focus is on reuse or recycling. For example, rubber waste and PPE (personal protective equipment), which were previously used as substitute fuel for industrial furnaces, are now processed into raw materials for the manufacture of environmentally friendly furniture, coverings and flooring. As part of a socio-economic approach, **Uniformes do Bem** makes an important contribution to the income security of workers in waste separation cooperatives. Some of the coverings produced are donated to various institutions. "We turn our waste into resources that can be of use to others," explains Fabio Kuriyama, Quality and Environmental Officer at GEMÜ Brazil. Furthermore, GEMÜ Brazil promotes environmentally conscious behaviour on site, for example by eliminating plastic cups in the canteen and at the coffee machines.

Delivery of used PPE to Uniformes do Bem

Committed to the community and anchored in a culture of sustainability

As part of a sustainability-oriented corporate culture, GEMÜ Brazil's commitment extends far beyond one-off campaigns. Projects are therefore regularly organized in the community – such as the recent renovation of a daycare centre, where employees volunteered to paint fences and redesign the environment for the children.

GEMÜ employees paint the fence of the daycare centre

To mark Children's Day on 12th October 2024, GEMÜ Brazil employees distributed packets of sweets to local schools.
These initiatives contribute to the promotion of early childhood education, and emphasize the relevance of social action in both an industrial and a societal context.

Education and environmental awareness

GEMÜ Brazil regularly offers school pupils from the region the opportunity to familiarize themselves with the company within the framework of company tours. These visits provide insights into industrial processes and emphasize the importance of technology and sustainability. "These measures are a milestone in the field of ESG (environmental, social and governance), and achieve the objective of promoting sustainable growth and strengthening environmental and social commitment," explains Fabio Kuriyama.

EcoVadis certification: Prize given for sustainable commitment

The awarding of the EcoVadis bronze medal to GEMÜ Brazil in October 2024 was a significant success. EcoVadis certification evaluates the quality of a company's sustainability management system based on three pillars: Policies, actions and results. This award is given to companies that can demonstrate that they have a solid management system in place for the fulfilment of sustainability criteria.

The introduction of sustainable procurement practices offers numerous advantages. They reduce the risk of supply chain disruptions, protect brand reputation, enable reductions in cost through joint action, facilitate access to capital and improve ESG-based assessments in investment decisions. They also create a market advantage, as consumers increasingly expect environmentally friendly and responsible supply chains.

EcoVadis certification is a valuable distinguishing feature for GEMÜ Brazil, and positions the company in an industrial sector that is actively committed to sustainability and environmental awareness – key factors for the achievement of Industry 5.0. This award emphasizes GEMÜ's commitment to sustainable corporate values and environmental protection.

Juscelino K. state school visits GEMÜ Brazil

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GEMÜ 4242 COMBI SWITCHBOX WITH NEW ASI-5 INTERFACE
INNOVATIVE SENSOR SYSTEM FOR PRECISE VALVE CONTROL

In the dynamic world of plant engineering, continuous product improvement and adaptation to new technologies are crucial for success. Close collaboration between manufacturers and customers is crucial here for the development of innovative solutions. An outstanding example of such a partnership is the successful development of the new GEMÜ 4242 combi switchbox with ASi-5 technology and its initial implementation in a large pharmaceutical plant.

Requirements for the development of an innovative solution

A globally leading company in the pharmaceutical industry was faced with the challenge of modernizing its automation solutions. Due to increasing requirements, the customer was looking for an appropriate partner with whom they could translate this into practice. The objective was to make future plants more flexible, faster and, above all, more transparent in relation to data capture. These innovative specifications led the customer to GEMÜ, in order to work together on a customized solution.

The specific requirements of the customer's new plant were discussed in joint planning meetings and several rounds of talks. It turned out here that intelligent networking of the valves via ASi-5 technology would be decisive for the future efficiency and flexibility of the plant.

Development of the GEMÜ 4242 combi switchbox with ASi-5

The GEMÜ 4242 combi switchbox has been completely reworked to incorporate numerous innovations. Thanks to the universal adaptation capability, fitting to a large number of pneumatic linear and quarter turn actuators from the GEMÜ product range is possible.

One of the stand-out innovations in the new GEMÜ 4242 combi switchbox is the innovative travel sensor for valve position detection. This system is based on the use of magnets and associated Hall sensors. As a result, it is contactless and entirely wear-free. The sensors detect the magnetic field of the moving magnets and enable the position of the valve to be determined with extremely high precision. This pioneering system will replace conventional potentiometers in future.

The tried and tested, direct process valve actuation by the internally installed pilot valves has been retained. That means users do not need to connect and actuate additional pilot valves, as everything takes place in the combi switchbox itself. This saves installation time and effort and enables the product to be used more efficiently.

The valve position and various error and program statuses are indicated by programmable, high visibility RGB LEDs. That allows users to read the current status of the product quickly and easily. This simplifies monitoring and error diagnosis significantly. In addition, the product has innovative, autonomous end position control. The manual initialization used to date is now no longer required. This leads to enormous time savings and a significant reduction of possible errors.

Another highlight of the new GEMÜ 4242 combi switchbox is the ability to commission and operate it via Bluetooth using the GEMÜ App. With this innovative function, users can adapt and configure the devices to the application in question easily and intuitively. In addition, current operating values and sensor data can be called up centrally. This saves time and increases efficiency.

The integration of a versatile sensor system in the combi switchbox enables unexpected interruptions to be avoided. The sensors make it possible to detect status changes and anomalies early on. They also capture data such as the temperature, humidity, acceleration, current consumption and supply voltage. This data can be read via the communication interface and GEMÜ App. In addition, the sensor data collected can be compressed in the device itself and stored throughout the service life.

By continuously monitoring the system status, potential problems can be identified early on and resolved before an interruption occurs. The sensor data delivers valuable information about the status of the plant and enables preventive maintenance. Analyzing the data collected enables trends and patterns to be identified that could indicate future problems.

The path into the future

Thanks to the close collaboration between the customer and GEMÜ, the product was revolutionized within a few months with a new communication system, a new travel sensor and a new operating concept, and equipped with an additional sensor system for condition monitoring for data capture.

The GEMÜ Key Account Manager in charge summarizes the situation with satisfaction: "We have accepted the challenge of setting new standards in the digitalization of the pharmaceutical sector. A technological leap has been made with the new development of the GEMÜ 4242 combi switchbox with ASi-5. Using all available resources and in close coordination with the customer, GEMÜ implemented the task quickly and precisely, and thus made a decisive contribution to the success of the project."

This further development sets up GEMÜ as a pioneer who is setting a trailblazing course for the future. In this way, GEMÜ supports its customers in meeting the constantly increasing market requirements.

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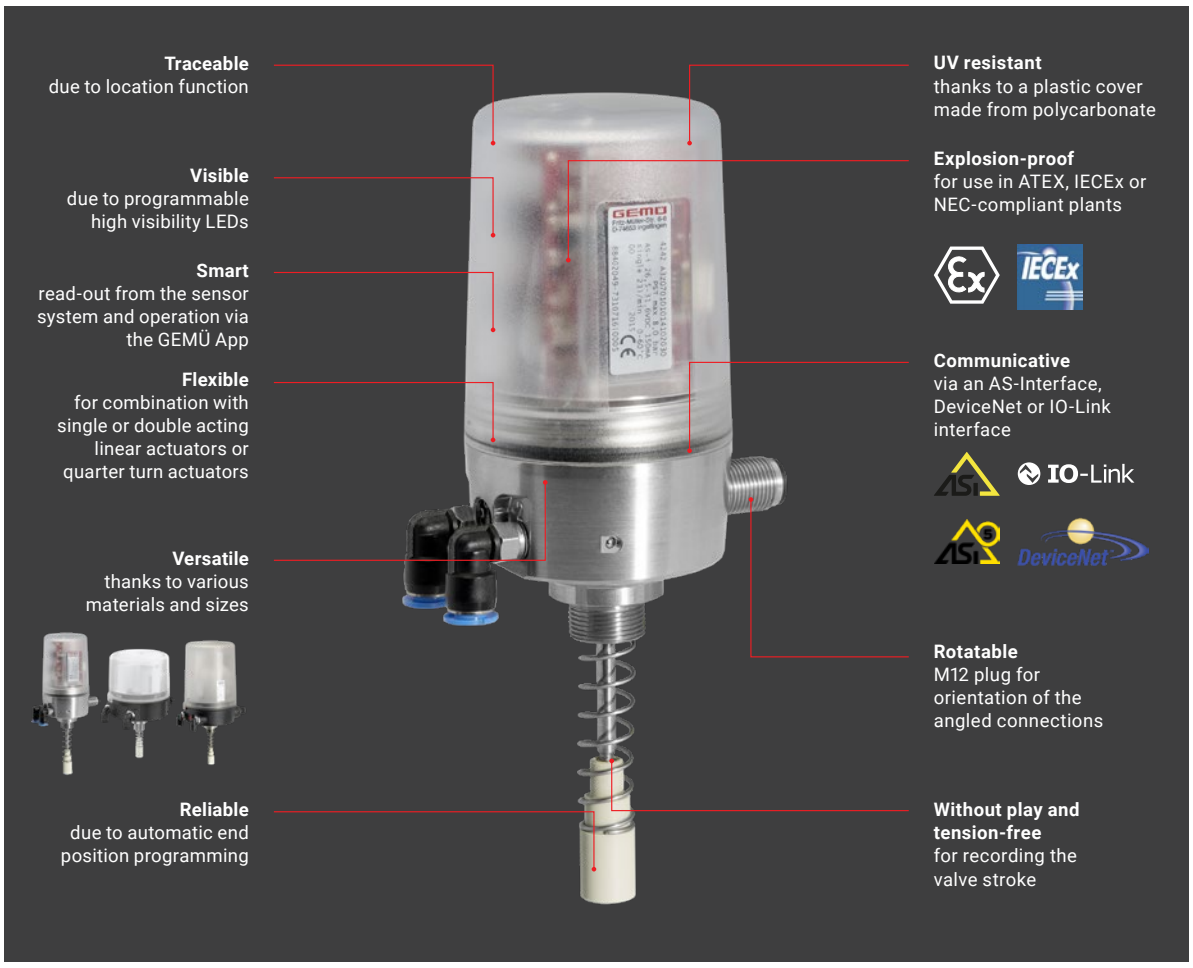

Katharina Bort bowling with colleagues from GEMÜ Brazil.

Vincent Thiel at ChemUK, the trade fair for the chemical industry, in Birmingham.

GAINING INTERNATIONAL EXPERIENCE
OVERSEAS PLACEMENT WITH GEMÜ

As part of their training or studies, GEMÜ trainees in their second year of training or study have the opportunity to visit a GEMÜ subsidiary for a few weeks and help with work there.

In collaboration with their local and German colleagues, many of the trainees develop a joint project on site, or help to work on day-to-day business in a wide range of areas at the foreign site. They get to know new people, communicate in another language and really surpass themselves in response to these new and unfamiliar circumstances. In addition to the cultural differences, there are also various culinary delights to try in each country. The trainees are warmly welcomed to the subsidiaries and quickly notice differences in working styles, which they analyze and reflect on with great interest.

This experience abroad strengthens the character of the apprentices and students, and each and every one of them is grateful for this opportunity to spend time in another country and to work there – something that really can't be taken for granted.

In the following section, apprentices and students report on their enriching experiences abroad at the international subsidiaries – from China and Brazil to Ireland and Spain.

Katharina Bort, dual study programme – industrial engineering and management, and international production and logistics: Brazil (August 2024)

"Five unforgettable weeks in Brazil are now behind me, three and a half of which were spent at the GEMÜ manufacturing site in Curitiba, Paraná. I was impressed with the diversity of the country, the warm-hearted people, the dynamic working environment, the friendly colleagues, the delicious cuisine and much more. Despite the linguistic challenges, my Brazilian colleagues welcomed me with open arms and gave me active support. This overseas placement offered me the opportunity to experience international working methods and cultural differences at close proximity, and to gain valuable professional and personal experience that I will always remember both professionally and personally."

Jannik Hannibal, apprentice mechatronics engineer: China (July/August 2024)

"My overseas placement took me to China, the third largest country by land mass, where I was able to spend four weeks at GEMÜ in Shanghai. The building on site resembled the German one both externally and internally. During my time on site, I was able to familiarize myself with several departments and collaborate with them in their daily activities there. At the weekends, I was taken in tow by various colleagues, who showed me the sights of the Shanghai area as well as the city itself. China is an impressive country with a fascinating culture and warm-hearted people – I can honestly recommend that everyone takes a trip there."

Timo Pröllochs, dual study programme – business administration and industrial management: Spain (May/June 2024)

"As part of my overseas placement, I had the opportunity to work at GEMÜ Iberica in Barcelona for four weeks. As a member of a small sales team, I was able not only to familiarize myself with the day-to-day work there, but also to develop my own projects and then present them. There was a very familial atmosphere in the team and my colleagues gave me a warm welcome. They introduced me to Spanish cuisine, showed me the surrounding mountains and were on hand to answer any questions I had. The overseas placement was a remarkable experience, which allowed me to learn a lot of new things and which I will definitely remember."

Annette Herz and Sarah Kraus, apprentice industrial management assistants: Ireland (August 2024)

"Thanks to GEMÜ, we had the opportunity this summer to gain an insight into the GEMÜ subsidiary in Cork, Ireland, for several weeks as part of our training. We were quickly allowed to be fully involved in the day-to-day work of the sales company due to the small size of the team there – no matter whether this was in the area of marketing or accounting, or in order registration or processing. Our colleagues also really included us in things in our free time. We have developed so much both professionally and personally. We are very grateful to have been given this opportunity, and would take it again any time."

Vincent Thiel, apprentice industrial management assistant: England (May 2024)

"GEMÜ gave me the opportunity to work for three weeks in our foreign sales subsidiary in England (GEMÜ UK). In addition to regular sales tasks, I was able to travel with a member of the External Sales staff once a week, which gave me the opportunity to get to know customers and plant designers as well as distributors, and to see the products in actual use. I was also able to visit ChemUK (trade fair for the chemical industry) in Birmingham, as well as assisting with its preparation and follow-up work. In my free time, I visited Anfield, Liverpool FC's football stadium, with the local Managing Director. We then explored the city – a city that is characterized by rock 'n' roll. Together with the member of the External Sales staff, I also explored Manchester and visited the Trafford Centre (large shopping centre). I am very grateful to GEMÜ for this unforgettable experience, which has helped me both linguistically and personally. I was able to get to know the English culture and visit some beautiful cities."

Annette Herz and Sarah Kraus with colleagues from GEMÜ Ireland.

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AUMA RP ELECTRIC QUARTER TURN ACTUATOR AS A NEW ALTERNATIVE
STANDARD PRODUCT RANGE OF ELECTRIC QUARTER TURN ACTUATORS COMPLETED

GEMÜ has added the AUMA RP electric quarter turn actuator to its product range, thereby expanding its level 2 trading products with an attractive solution. Developed and manufactured in Germany, this motorized actuator offers a cost-effective option for motorized OPEN/CLOSE applications, in particular in the low-budget sector. Thanks to the robust metal housing, the quarter turn actuator is also ideally suited to outdoor use, and therefore fulfils versatile industrial requirements.

With the AUMA RP, GEMÜ offers another high-performance alternative to the previously used Bernard AQ, and closes an existing gap in its own product range. The RP thus supplements the tried and tested J4C (J&J), PF (AUMA Profox) and AQ (AUMA SQ) actuators, and expands the GEMÜ product range of cost-effective and reliable control solutions.

Advantages of the AUMA RP:

⇒ Low investment and operating costs: The RP will impress you with its excellent price-performance ratio.

⇒ Robust design: High-quality materials such as stainless steel and plastic housing, as well as a metallic drive train, ensure high resistance.

⇒ Easy installation: The actuator can be installed quickly and configured flexibly, and it offers user-optimized adjustability for diverse application possibilities.

AUMA RP electric quarter turn actuator in stainless steel and plastic version

With the AUMA RP electric quarter turn actuator, GEMÜ is expanding its range of products with a cost-effective and practice-oriented solution that takes into account customer requirements as well as the demands of functionality and load capability in various industrial applications.

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DIGITAL PRODUCT PASSPORT
FUTURE-PROOF IDENTIFICATION FOR INDUSTRIAL COMPONENTS

The Digital Product Passport (DPP) is the globally unique passport for every component installed in a system. IEC 61406 specifies how the respective component is identified. This can be carried out using either a QR code, data matrix code or an NFC tag.

For around two years now, all GEMÜ products have been identified using an IEC 61406-compliant QR code, which offers users numerous advantages in practical operation.

The Digital Product Passport can be accessed by simply scanning the QR code using the GEMÜ app or any current camera app. In this way, all product-relevant information is displayed on a smartphone or tablet. Documents such as operating instructions, datasheets and certificates are also immediately available to the customer in all available languages.

This enables users to have digital information about a valve at their fingertips at all times, allowing them to make the right decision in any situation (e.g. incoming goods, plant tour or maintenance). This saves time, avoids tedious research and increases transparency.

Users can also (re-)order products and spare parts directly via the GEMÜ online shop. In addition, GEMÜ already provides its customers with data in accordance with the Asset Administration Shell.
However, GEMÜ provides this service not only for its own products, but also for other companies.

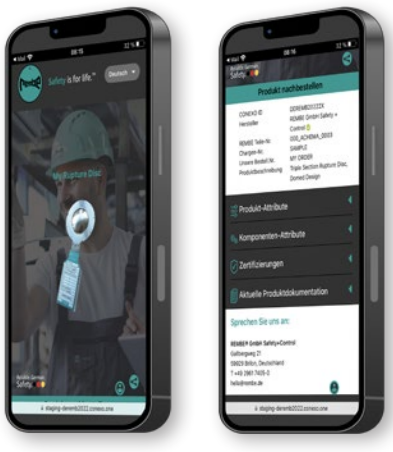
A good example of this is Rembe, which manufactures rupture discs for a wide range of industrial, chemical and pharmaceutical applications. In a joint project, GEMÜ has equipped Rembe's products with its technology.

The CONEXO portal runs in the background, acting as a central database and making the data available in the web browser when a QR code is scanned in the field. In the case of Rembe, the interface was developed by Rembe's IT department and supported by GEMÜ, whose specialists acted as consultants.

The design and functionality of the Digital Product Passport were customised according to Rembe's wishes and requirements. The GEMÜ development team implemented the customer's specifications accordingly.

After a short pilot phase, the roll-out took place within a very short time.
In addition to Rembe, GEMÜ has equipped another valve manufacturer, EVOGUARD, with its technology.

The experience gained from the DPP now makes it possible to implement customer projects extremely efficiently and realise them quickly. Over 4 million components have now been equipped with QR codes. This serves both GEMÜ and its customers as a basis for future digital offerings.



The growing interest in the DPP is also being driven by efforts to promote the circular economy. Next year, the Battery Passport will become mandatory in the EU, and other product groups will gradually follow. Experts and standardisation bodies expect the Digital Product Passport to become mandatory for the fittings industry in the next few years, similar to CE approval.

Thanks to the QR code, which is already applied to GEMÜ valves today, the GEMÜ Group is well prepared for future regulations and already meets the IEC 61406 standard as well as data provision in accordance with the AAS (Asset Administration Shell). With the Digital Product Passport, the GEMÜ Group offers its customers easy access to the world of digital services across the entire product life cycle.

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GEMÜ 649 ESYDRIVE
EXPANSION WITH DIAPHRAGM SIZE 8

In diaphragm size 8 of the GEMÜ 649 eSyDrive product range, nominal sizes DN4 to DN15 will be available with immediate effect. The advantage of this combination is a higher actuating speed, meaning that the valves close in just one second.

With the eSyDrive actuator, the motorized premium actuator with extra functions such as process control, the eSy-Web interface, Modbus TCP and on-site control are now available for diaphragm size 8.

GEMÜ WINS CITY CYCLING 2024
NEW BIKE SERVICE POINT ON THE KOCHER-JAGST CYCLE ROUTE

This year, GEMÜ and its team successfully took part in the Germany-wide "CITY CYCLING" competition for the fourth time in a row, and once again secured victory in the "Companies" category in the Hohenlohe district. With 83 active cyclists, GEMÜ had the largest team in this category, and is a powerful symbol of sustainable mobility. In recognition of this sporting achievement, the GEMÜ team won a bike service point.

The GEMÜ team jointly decided to set up the bike service point in the rest area of the Kocher-Jagst Cycle Route on Criesbach Bridge – just a few metres away from the GEMÜ headquarters. Thanks to its prominent position on the popular cycle route, this pumping and repair station is not only available to GEMÜ employees, but also to all cyclists – as a valuable service facility for independently rectifying more minor mishaps. The foundations were laid in collaboration with the town of Ingelfingen, while GEMÜ takes on the installation and regular maintenance of the bike service point.

GEMÜ offers its sincere thanks to its committed CITY CYCLING team and all those involved who contributed to the successful implementation of this project.

Cyclists can find the new bike service point on Google Maps. The location of the bike service point is shown on Google Maps under "Radservice Punkt GEMÜ". On cycle tours, you are invited to mark the point as a highlight in the Komoot app.

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About the RadKULTUR and CITY CYCLING campaign

The RadKULTUR initiative and the CITY CYCLING competition promote fun and commitment to everyday cycling and sustainable mobility. The objective of CITY CYCLING is to perform as many everyday journeys as possible in a climate-friendly way over a time period of 21 days using a bicycle. Every kilometre counts, especially if it would otherwise have been travelled by car. Further information is available from *www.stadtradeln.de.*

STADTRADELN
Radeln für ein gutes Klima

GEMÜ 2025 TRAINING DATES

June 2025

03.06.2025	08:00-12:00	Product training diaphragm valves
04.06.2025	08:00-12:00	Product training globe valves
04.06.2025	13:00-15:00	Product training PD-Valves
05.06.2025	08:00-12:00	Product training Multiport valves
06.06.2025	08:00-12:00	Product training Butterfly valves
10.06.2025	08:00-12:00	Product training Ball valves
11.06.2025	08:00-12:00	Product training Automation components
12.06.2025	08:00-12:00	Product training Instruments & Accessories
13.06.2025	08:00-12:00	Product training Measuring devices, positioners & process control

December 2025

02.12.2025	08:00-12:00	Product training diaphragm valves
03.12.2025	08:00-12:00	Product training globe valves
03.12.2025	13:00-15:00	Product training PD-Valves
04.12.2025	08:00-12:00	Product training Multiport valves
05.12.2025	08:00-12:00	Product training Butterfly valves
09.12.2025	08:00-12:00	Product training Ball valves
10.12.2025	08:00-12:00	Product training Automation components
11.12.2025	08:00-12:00	Product training Instruments & Accessories
12.12.2025	08:00-12:00	Product training Measuring devices, positioners & process control

The training sessions are held in German.
Subject to change!

For more information and to register, please contact Technical Training.
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