

GEMÜ news

OVERCOMING CHALLENGING TIMES TOGETHER

Product news

Innovations

Application reports

Apprenticeship and working

Commitment and initiatives

Magazine for the
customers, partners
and friends of the
GEMÜ Group

EDITION 01.2020

Dear Readers,

The COVID-19 pandemic has a firm grip on how we currently live our lives and is creating unprecedented challenges for the economy, politics and society. Everyone is affected by the current crisis and GEMÜ is also feeling the impact of COVID-19.

In contrast to other crises, we cannot draw on any previous experience with regards to such a pandemic. As scientists discover more and more about the new virus on a daily basis, this makes planning a company's future difficult. In order to prevent the uncontrolled spread of the virus, we are subject to limitations on an unknown scale.

These unprecedented times require completely different procedures. We started to implement appropriate measures to protect our employees very early on. Our precautions, such as a new shift rotation or the introduction of mobile working, enabled us to maintain our supply availability even when the pandemic peaked. The support of our strategic suppliers with whom we are in close contact also played a significant role in this, helping us fulfil our agreed delivery obligations.

We are happy to see that the measures implemented so far have been successful. We are, however, still in the middle of a crisis and no one knows exactly whether there will be a second peak followed by further lockdowns. We are trying to master these challenging times as best we can using all the means available to us, and thank our customers and employees kindly for their understanding, loyalty and the trust placed in us. Only together are

we strong and successful, and we will overcome the impact of COVID-19 together in this way. We wish you the best of health, confidence and perseverance for the coming weeks and months.



Gert Müller
Managing Partner



Stephan Müller
Managing Director



GEMÜ HONoured AS "GLOBAL MARKET LEADER" FOR THE FOURTH TIME IN A ROW

The Ingelfingen-based valve specialist GEMÜ has been awarded the title of "Global Market Leader" for yet another year, earning the distinction for 2020 as part of the global market leader index of the University of St. Gallen and the Academy of German Global Market Leaders.

For the fourth time in succession, the German business magazine WirtschaftsWoche has awarded the owner-managed technology enterprise GEMÜ Gebrüder Müller Apparatebau GmbH & Co. KG the WirtschaftsWoche quality seal of "Global Market Leader", declaring them a "Champion" of 2020. In doing so, WirtschaftsWoche has recognised GEMÜ's inclusion in the global market leader index in the segment "Valves and automation components: Valves, Process and Control systems for sterile applications".

The global market leader index is compiled under the scientific direction of Professor Dr. Christoph Müller of the HBM Unternehmenschule (school for entrepreneurs) at the University of St. Gallen, in cooperation with the Academy of German Global Market Leaders (ADWM). In doing so, objective selection criteria and transparent selection processes are developed to determine the actual global market leaders. The information acquired is then scientifically evaluated and the results are published in a condensed form.

The researchers designate companies as "Global Market Leader Champions" if they are first or second in the relevant market segment, are represented on at least three continents with their own production and/or sales companies, have an annual turnover of at least €50 million, and can demonstrate an export share or foreign share of at least 50% of their turnover. Another important criterion for a company to obtain the accolade of "Global Market Leader Champion" is to be (owner-)managed with headquarters in the German-speaking region (Germany, Austria or Switzerland).

As a family-owned, owner-managed business headquartered in Ingelfingen-Criesbach (in the German state of Baden-Württemberg), with 27 subsidiaries as well as six manufacturing sites in Germany, Switzerland, China, Brazil, France and the USA, GEMÜ fully satisfies these requirements. In addition to these prerequisites, it was the cutting-edge technology and market leadership in the field of valves, process and control systems for sterile applications that served as a crucial factor for WirtschaftsWoche in awarding the accolade and WirtschaftsWoche quality seal of "Global Market Leader – Champion 2020" to GEMÜ.

"This award from WirtschaftsWoche shows us that it is highly worthwhile to consistently invest in the innovative capacity of GEMÜ and develop new products in addition to continually refining existing ones. Our focus on customer requirements and the investment in digital future issues is also paying off," remarks Gert Müller, Managing Partner at GEMÜ.

WirtschaftsWoche

**GLOBAL
MARKET
LEADER**

Champion

2020

GEMÜ

Valves, Process and Control
systems for sterile applications

ADWM
Akademie Deutscher Weltmarktführer

Henri B. Meier
Unternehmenschule
Universität St. Gallen

Norbert Neumann

Team Leader/Press Officer

Corporate Communication

norbert.neumann@gemue.de

FUTURE TOPIC: AI THE DIGITAL TWIN

Get information from status data in real-time. That is often associated with artificial intelligence (AI). Linking this data with digital models puts the digital twin in focus, from companies that want to derive real benefits from the concepts in order to be able to offer customer-oriented, highly efficient products.

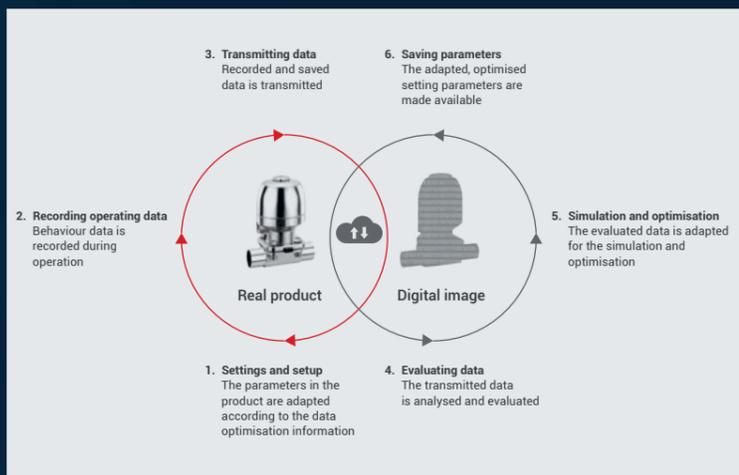
The use of digital models in industry has long since become the norm. These are used, for example, in the use of CAD in product development for validation during simulations or for planning complex plants with collision checking.

The concept of the digital twin extends the understanding of the model and considers both the real product and the digital image, as well as a combination of both.

The combination of the product's operating data with the digital model enables a virtual image, which, beyond the rather static use of models, can represent the real status information in digital form.

As the diagram illustrates, this observation shows an action circuit. Initial product settings can be optimized by evaluating operating data. By linking both worlds, the real product and the digital twin, updated data can flow into the product application and thus support optimization.

We are on the way to an interesting future.



Werner Flögel
Digital Officer – Innovation
Global Technics
werner.floegel@gemue.de

TEN YEARS ON THE ROAD ONE MAN – ONE TRUCK – 270,000 KM

Thomas Medelsky has been on the road for GEMÜ with the roadshow for ten years. He alternates between spending a year travelling through Germany then a year visiting customers in Europe. And he's had a lot of interesting experiences along the way. Converted with the help of a local carpenter and electrician, the roadshow truck, which gives customers an insight into the GEMÜ world, was ready for the road in 2010.

One man, one truck, and all of our products. Thomas Medelsky's roadshow truck holds exhibits for the entire product range. With exchangeable product displays, Thomas Medelsky adapts each product presentation to the customer in question, explains the functional principle of the valves and demonstrates the use of CONEXO. "Every year we welcome more than 1600 visitors to the roadshow and spark the interest of even those customers who until now knew very little about GEMÜ. This lively interaction with others inspires me every time and gives me the motivation to stay on the road," explains Thomas Medelsky.

Ensuring that customer visits run smoothly requires good advance planning. The Trade Fair Communication team from the Global Marketing department makes sure that the tours are planned optimally and effectively. "Since the roadshow began, I have visited more than 1500 customers and travelled around 270,000 kilometres," adds Thomas Medelsky.

Throughout these ten years, there have of course been numerous highlights, such as an almost two-week-long journey through Russia to Moscow in 2011. We reported on that journey in GEMÜ News 01/2012. Even the arrival was spectacular – after taking the ferry to Helsinki, the truck travelled more than 1000 km along the M11 via St. Petersburg to Moscow. The roadshow spent a week in this megacity, at the "Crocus" exhibition site, where GEMÜ products were presented to keen visitors to the PCV Expo.

Thomas Medelsky also took another special trip to Bucharest. There, he presented the roadshow at an exclusive site in front of one of the largest buildings in the world – the Palace of the Parliament, where the "Expo APA" trade fair was held.

"My personal highlight is always visiting Eastern European countries such as Bulgaria or Romania. I am struck by the keen interest of the people there and their excitement when the GEMÜ truck stops by," explains Thomas Medelsky.

As well as these positive experiences, Thomas Medelsky has of course faced complications and obstacles. These include formalities such as tolls and customs. A total of eight toll devices are required in order to record tolls within Europe. Customs documents for entry into Switzerland have to be issued and submitted in advance. Hurdles such as these can be overcome, however, with professional planning.

When Thomas Medelsky is not on the road with the roadshow, he works with the trade fair team to plan and coordinate his trips and consider the preparation and follow-up work required while solving technical problems with the truck or reviewing the documents required.

One thing is for sure – Thomas Medelsky never gets bored! Every trip is unique. New contacts and new companies, unique experiences, challenges and highlights are all part of his day-to-day work. We're already excited to hear about his experiences over the coming years.

We'd like to wish him a bon voyage and many more successful years on the road with the GEMÜ roadshow!



Middle: Thomas Medelsky



Product training

Nicole Gronbach
Global Marketing Intern

Thomas Medelsky

Roadshow
thomas.medelsky@gemue.de



On site in Sweden



Roadshow at a customer in Finland



In front of the Palace of the Republic in Bucharest

FROM LIQUID MANURE AND DIGESTATE TO FERTILIZER AN APPLICATION FOR FERTILIZER PRODUCTION

Liquid manure and digestate from biogas plants were previously applied to areas of arable land as farm manure. The core nutrients it contains, such as phosphorus, nitrogen and potassium, are absorbed by the plants. However, the increase in agriculture leads to over-fertilization and thus to pollution of bodies of water. The amendment of the Fertilizing Ordinance will significantly restrict permitted quantities and times.

For farmers this means effort and additional costs for storage, transport and even disposal in some circumstances. Solutions are being sought for this "waste problem". At the same time, the European Union has recognized phosphate as an important resource and, as liquid manure in particular is rich in phosphate, it is an important source for phosphate extraction.

The plant designer Geltz Umwelttechnologie GmbH has developed the NuTriSep process to solve this problem. By separating the individual substances, several sellable products are created. Through these, the desired nutrients can be fed to the agricultural land in a targeted manner. Water remains as a residue, and is so low in nutrients that it can be used for irrigation. Alternatively, the water can be further treated in future to achieve direct discharge quality.

In the field of valves and equipment, the valve specialist GEMÜ was able to support and advise the Geltz company during the transition from pilot-plant scale to large-scale plant via its technical consultants. A further advantage is GEMÜ's wide product range. In addition to flowmeters, diaphragm valves and butterfly valves, ball valves and pressure retaining valves could be used in this project and supplied from just one source. Thanks to customer-oriented support and on-site visits to the end customer, the project was successfully implemented as planned.



GEMÜ R690 diaphragm valves for medium distribution

To protect the plant against excessive pressure, the positive displacement pumps have each been equipped with a pressure retaining valve. Should the pressure on the pressure side of the pump rise above the set value due to clogging or any other impairment, the pressure retaining valve opens towards the suction side and the excess pressure can be relieved.

Separation of phosphate → phosphate salt

The previously dissolved phosphates are precipitated from the non-particulate liquid as phosphate salt and can be separated. The phosphate salt obtained can be sold as fertilizer.

Ammonia scrubber → nitrogen solution

The liquid released from phosphate is offset with lye and heated. In a subsequent column, the liquid is sprayed in counter-current to a warm air stream. Due to the increased pH value and temperature, ammonia is released from the water and passes into the air (ammonia stripping). The air with the ammonia is then guided into an acidic scrubber. Here ammonia is washed out of the air with sulphuric acid and reacts to form ammonium sulphate. As a solution, the ammonium sulphate can be used as a fertilizer.

Potassium concentration → potassium fertilizer

After the ammonia stripping, the remaining water offset with potassium can still be concentrated. The resulting potassium solution can also be used as fertilizer.

The remaining water can be used, for example, in sprinkler irrigation.

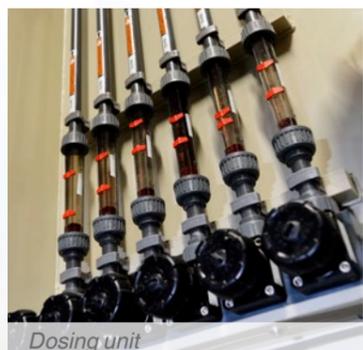


Separation of organic solids – product peat replacement

As a first step, the digestate from a biogas plant is acidified to separate the nutrients from the solid fraction. The solids are then separated over several filtration steps. These organic solids are similar in structure and composition to peat, but unlike peat they do not have to be degraded at the cost of severely damaging the environment. Therefore, this peat substitute can be used as a valuable product in gardening and landscaping.

The acid dosage follows via diaphragm valve blocks fitted for the customer with a cable and connected to variable area flowmeters. The dosing system is easy to install due to the pre-fabricated block structure from GEMÜ.

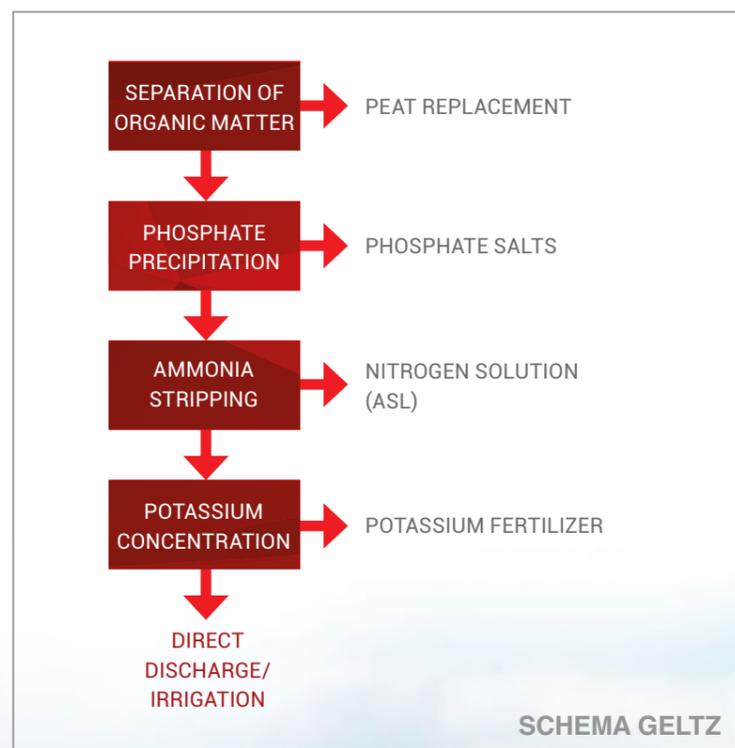
In the field of membrane filtration, pneumatically operated butterfly valves are used for the rinsing processes.



Dosing unit



Filtration area



SCHEMA GELTZ

The NuTriSep process not only reduces soil over-fertilization and avoids additional costs for farmers, but also produces several sellable products, resulting in a win-win situation for all parties involved.

Product information

A custom designed plastic diaphragm valve block from GEMÜ is used for acid dosing. This block solution is made of PVC, as this material is very well suited for use with acidic media. GEMÜ plastic handwheels are mounted on the block and customers can flexibly select the actuators. The main customer benefits of using GEMÜ plastic blocks are space-saving benefits, lower maintenance costs and shorter mounting times. The GEMÜ plastic blocks are assembled and delivered directly to the customer ready for use. This means that the block merely has to be installed in the plant on site.

GEMÜ has expanded the portfolio of block solutions and also offers individually extendable and modular options. The concept is capable of covering the majority of variants with only a few basic designs. Within seconds and without an additional piping system, gluing or welding, the blocks can be quickly and easily adapted on site to meet customer requirements. Economic use is guaranteed in plants in the chemical industry and environmental chemistry, as well as in surface, painting and electroplating technology, municipal and industrial water treatment and other fields of use. GEMÜ multi-port valve blocks made of durable plastics allow valve interfaces in pipeline plant engineering to be extremely compact and individually designed.

 **Sven Truckenmüller**
Application Management
Technical Consultant
sven.truckenmueller@gemue.de



GEMÜ EXPANDS ITS CAPACITIES IN THE SERVICE SECTOR SERVICE- AND FUTURE-ORIENTED

GEMÜ is expanding its existing capacities in the service sector. The Service department, which was established in summer 2017, combines all activities relating to the after-sales domain. The department currently consists of 18 employees and is organized into three main areas: Service Helpline, Customer Service and Technical Training.

Service Helpline

With the Service Helpline, GEMÜ offers its customers a central contact point for all after-sales queries. These often relate to the detailed handling of incorrect orders and returns, management of complaints and claims, and handling of repairs and products requiring maintenance. Within 48 hours after the goods arrive back with us, the customer will receive a receipt of goods confirmation, and the customer's request will be processed as quickly as possible in order to keep customer satisfaction at the highest level throughout. Depending on the nature of the request, further steps are then initiated by the Service Helpline and centrally controlled. The Service Helpline, therefore, not only offers customers a way of contacting GEMÜ directly, but also helps to first internally channel the flow of information regarding the issues, suggestions and wishes of the customers in order to subsequently coordinate the necessary measures. Based on this, products and procedures are often adapted and revised, and processes improved, which in turn can be the source of a completely new technical innovation.

Customer Service

Customer Service offers expert support in the areas of commissioning, maintenance work and support, setting and adjustment tasks, labelling and 'conexing' components, repair services and plant screening for process optimization. The deployment of experienced GEMÜ service technicians benefits customers in many ways.

The risks regarding possible downtimes or plant failures are minimized. The GEMÜ specialists carry out maintenance in cycles and thus significantly increase the safety and reliability of the plants. In addition, GEMÜ Customer Service can contribute to a considerable prolonging of the plant's service life. The customer's investment value is maintained for noticeably longer. Through plant screening, current and potential weaknesses in the customer's process are initially identified, which can then be used to identify potential for increasing productivity, effectiveness and efficiency. In the long term, this leads to significant improvements in quality, shorter lead times, and a continuous improvement of operational processes and energy efficiency.

GEMÜ has a highly modern, digital unique selling point here too: "GEMÜ CONEXO" – the "future of intelligent valve designs". This involves software that simplifies the maintenance process and makes it safer and more documentable by actively guiding the maintenance technician through the maintenance plan and ensuring all information associated with the valve, such as test reports, test documentation and maintenance history, is directly available in digital form.

Technical training

The "Technical Training" division offers a vast amount of product and application training as well as professional training for service and maintenance personnel, and supports first-time employees and people changing career just as it does experienced technical personnel. The training content is didactically structured according to subject so that the participants' technical knowledge is increased, further developed and maintained to a high level. To make this possible, GEMÜ has developed a new, three-part training system that consists of all-round, specialist and expert training.

On joining the company, the "GEMÜ all-rounder" receives sound general and application-specific basic training as the foundation for safe entry into the world of valves, measurement and control systems.

The second training level, "GEMÜ specialist", consists of specific, advanced and application-specific product training.

The "GEMÜ expert" status is achieved by particularly experienced participants through additional intensive industry-specific technical training at the highest level and the expert exchange of experience within an expert group.

Training sessions are held by specially qualified and experienced training providers and consist primarily of passing on theoretical knowledge combined with practical application.

A truly distinctive feature in this area is the "GEMÜ VR" virtual reality training module developed by GEMÜ itself, which optimally complements the knowledge gained from other training. With this practical form of learning, the training content is made even more intensive, lively and tangible for the participants. **Registration information or any further information on technical training is readily available from the GEMÜ training team.**

Through the expansion of the Service department, GEMÜ wants to proactively respond, in a future-oriented and forward-looking manner, to customer demand and requirements for valve, measurement and control systems. In addition to the range of products and applications that already exists, further benefits for customers are to be offered to support the success of the core services. In times of globally intertwined markets and international competition, these service elements are very important features that set GEMÜ apart from the competition and can turn a product that is already very good into a comprehensive premium service with the aim of long-term customer loyalty and customers who are always satisfied with the service received.

Contact Details:

GEMÜ Training Team

Contact Person:
Jessica Donner
training@gemue.de
07940/123-8796

GEMÜ Service Helpline

helpline@gemue.de



Daniel Rettenmeier
Working Student Service
daniel.retttenmeier@gemue.de

Markus Hammel
Service Manager
markus.hammel@gemue.de



Ivona Meißner
Corporate Communications
Advisor
ivona.meissner@gemue.de

Norbert Neumann
Corporate Communications
Team Leader/Press Officer
norbert.neumann@gemue.de

GEMÜ TAKES ON FLOWERING SPONSORSHIP UNITED FOR BIODIVERSITY

Sustainable action is an important part of GEMÜ's principles. This also includes nature conservation and preservation of diverse ecosystems. GEMÜ contributes to this by sponsoring a 2000 m² flowering area in Mulfingen-Ochsental.

The agricultural partner has set up a flowering meadow on an area of arable land in Mulfingen-Ochsental. The organic mix of flowers is not only beautiful to look at, but also serves as a habitat for bees and other insects, providing them with sustenance. By promoting new flowering areas, GEMÜ supports the biodiversity of native insects and creates a valuable habitat for them. A vast number of bees and insects use the flowering meadow for nesting sites and as a source of food. Plants absorb CO₂ and then later, when they die,

this gets transferred into the soil. The agricultural enterprise works purely organically and does not use any pesticides. This enterprise also ensures that none of these substances are able to reach the flowering meadow from their surroundings. With the flowering sponsorship, GEMÜ is making an important contribution to the environment and is committed to preserving the habitat of bees and other insects in the local region.

FAST DELIVERY AND IQ DOCUMENTATION IN JUST TWO HOURS

It was as early as 1893 that GEA Westfalia Separator manufactured and supplied the first milk separator. Today, the company is one of the world's most renowned equipment manufacturers with approximately 3500 employees.

As well as separators, the company, which has its headquarters in Oelde (Westphalia, Germany), also produces decanters and special products. The systems and devices are used for the mechanical clarification and separation of liquids for the foodstuff, chemical, pharmaceutical, biotechnology, energy, shipping and environmental engineering industries. Over 50 Sales and Service companies belong to the GEA Westfalia Separator Group and look after their customers on-site.

Quick availability and safeguarding of system operations

GEA customers expect a long service life from their systems and devices, and expect high quality

from every individual component. However, they would like these to become operational as quickly as possible, and any modernization or maintenance work to be managed without down times. In order to achieve this, the company implemented the CONEXO RFID system solution in June 2017 after a test phase of only four months. During this process, the company focused on:

- ⇒ Assignment without requesting tenders
- ⇒ Direct warehouse availability
- ⇒ Accelerated manufacturing at GEA
- ⇒ Faster qualification within the factory

⇒ Optimized maintenance processes
In close collaboration with in vivo solutions, GEA digitalized their systems and devices, and inventoried, or more specifically, synchronized all valves on the CONEXO portal and in the CONEXO app. As a result, previous expenditure on project-specific pricing is no longer required. In addition, valves are stored in the warehouse independently of their project, which necessitates fast availability. As the allocation of valves only occurs in the final assembly stages, the systems and devices can now be supplied at short notice.



Preventing assembly errors and simplifying qualification

The optimization of in-house processes was an integral objective of the digitalization project. However, plant reliability was not to be compromised under any circumstances, instead GEA customers should see a clear added value. André West, Project Manager at GEA Westfalia Separator noted: "The documentation and qualification of a system is as important for the end customer as the technology itself and uses a large part of the manufacturing time available." In particular, verification that all valves are installed in the correct places and the assignment of the correct certificates can sometimes be difficult and time-consuming. Thanks to the close cooperation and the further development of the CONEXO portal and the CONEXO app, GEA have now been able to reduce their expenditure on IQ documentation to one or two hours.

Service support and maintenance offerings

The next step will be for the company from Oelde to provide more support to their customers with assembly and maintenance operations. Using the RFID system solution from in vivo solutions, service personnel can follow step-by-step instructions in the CONEXO app, which can be used on any standard tablet or smartphone. The app can also store customer-specific safety information for maintenance and assembly, and confirm that individual steps have been performed by the relevant employee. Examples include:

- ⇒ Installation of components
- ⇒ Visual checks of components
- ⇒ Replacement of components
- ⇒ Photo documentation of the condition of removed parts

Marina Dege

Commercial Management
marina.dege@inevvo-solutions.com

Kevin Johanning

Outside Sales / Consultant
kevin.johanning@inevvo-solutions.com

GEMÜ DATASHEETS NEW LAYOUT 2020

When the Technical Documentation department introduced the Schema ST4 authoring/editing system in 2014, the layout of the datasheets and operating instructions was also redesigned. Following the recent design optimization for the catalogue and ongoing discussions regarding user guidance within the scope of a general digitalization drive, the layout is set to be revised again.

As part of a coordination phase with colleagues from Product Marketing, a concept has been developed, which is to be implemented at the end of 2021 following coordination with the respective Business Unit/Business Segment and Heads of Product Management. All datasheets for product types that are currently featured in the catalogues will be converted to the new layout and the new structure. All existing products with the layout from 2014 will be updated.

In addition to visual changes on the first page or in tables, which are now being adapted to the catalogue layout, it was predominantly structural questions that drove this project. Order data will be presented with availability, for example, as these pieces of information belong together. There will be a chapter containing all ordering options and their exceptions. Availability will be indicated with clearer symbols and there will be the option of visually marking certain standard versions. The appearance of the order example will be fully adapted to the catalogue, whereby a link in the PDF will allow the user to switch to the product selection tool.

Generally speaking, all datasheets will have a table of contents. This will make it easier for readers to select and navigate to specific topics. They will be able to do this either via the table of contents or directly in the PDF. Since PDF navigation is not available on all mobile devices, navigation via the table of contents provides an alternative option.



The appearance of technical data will to a large extent remain the same. A few minor modifications have been made. The features of the technical data have been structured in order to make them easier to compare in datasheets and beyond.

The appearance of accessories will also be adapted to the catalogue layout. In addition to add-on components and accessories, any certificates that are available for a product type should also be presented with the datasheets.

These changes may seem minor but are intended to improve understanding, clarity and usability. Full integration into the authoring/

editing system will lay the foundation for further digital use of this information. For example, it will enable all datasheets to also be offered as an HTML version. This makes them considerably easier to read on mobile devices and enables interactive elements (e.g. videos or

table filters) to be incorporated. A type of datasheet designed for configuring a product is also conceivable.

Enrico Kliesch

Head of Technical Documentation
enrico.kliesch@gemue.de

NEXT STOP: THE FUTURE

The smiling happy faces of the apprentices peer from the bus into the Hohenlohe district and promote GEMÜ apprenticeships or training programmes. Next stop: The Future!"

Since the end of March, the GEMÜ Smile has been accompanying a local Metzger Reisen bus in Hohenlohe.

The bus is deployed as a regular service and runs commuters and schoolchildren from the region to work or school and back home every day.

We are delighted when the GEMÜ Smile infects as many people as possible and brings a smile to their faces!



Katrin Engert
Head of Vocational Training
katrin.engert@gemue.de



RELIABLE EVEN WITH STRICT REQUIREMENTS GEMÜ BB04, B24, B44 AND B54 BALL VALVES

Florian Sawitzki
Product Manager Ball Valves
BU PFB
florian.sawitzki@gemue.de

Ball valves can be used in many different ways – even for more rigorous requirements.

With the cannulated ball as shut-off element, a ball valve is particularly suitable for safely shutting off liquid and gaseous media at a higher operating pressure. Since a small amount of the medium invariably gets between the ball and the body during the opening and closing movement, ball valves are suitable for use with mechanically pure, neutral or corrosive liquids, gases or vapours. Caution must be exercised with crystallizing media, as these can have a negative effect on functionality. Due to the high seal friction caused by their design,



Manually operated ball valve GEMÜ B24

ball valves are predominantly used for low cycle duties.

The new GEMÜ BB04, B24, B44 and B54 ball valves now also meet the high demands of the pharmaceutical and food industries as well as the biotechnology sector. The three-piece 2/2-way ball valve is made of stainless steel (1.4435 | equivalent



Pneumatically operated ball valve GEMÜ B44

316L), with a defined delta ferrite content of < 3%, and thus meets the customer requirements for these industries. The media wetted surfaces of the ball valve are electropolished as standard according to ASME SF5 (Ra ≤ 0.51 µm) and only FDA, USP Class VI and



Motorized ball valve GEMÜ B54

VO (EU) No.10/2011-compliant plastics are deployed for the seals used, including the optional minimal deadleg seat seal. The DIN EN ISO 5211 mounting flange makes it easy to adapt automation components such as pneumatic or motorized quarter turn



Ball valve with bare shaft GEMÜ BB04

actuators and in turn best satisfy customer requirements. The new GEMÜ BB04, B24, B44 and B54 ball valve series are available with DIN, ISO and ASME connection standards in nominal sizes 8 to 100.

GEMÜ DEVELOPS NEW MOTORIZED CONTROL VALVE

The semiconductor industry places stringent requirements on valves, measurement and control systems. Pneumatically operated valves are to an increasing degree no longer able to comply with the control requirements of leading process equipment manufacturers. It is for precisely this reason that GEMÜ has developed the GEMÜ C53 iComLine motorized control valve. The 2/2-way diaphragm globe valve GEMÜ C53 iComLine was developed for precise and demanding control applications in semiconductor production.

The sealing concept of the valve is based on the tried-and-tested GEMÜ PD design, with actuator and medium separated by a regulating cone made of resistant PTFE. As the regulating cone contour, actuator stroke and connection size can be customized to meet customers' requirements, the GEMÜ C53 iComLine satisfies virtually all control and flow requirements of the high-tech semiconductor industry. Thanks to the combination of the precise stepper motor with ultra pure body materials, the valve is particularly suitable for lithography, CMP and etching processes, as well as applications in the analysis field of any semiconductor production process.

The GEMÜ C53 iComLine diaphragm globe valve cannot only be installed as a simple 2/2-way valve. It can also be integrated into a GEMÜ PC50 iComLine M-block in order to realize complex flow charts using minimal space.



The GEMÜ C53 iComLine motorized diaphragm globe valve for ultra pure processes



Multi-port valve block, which uses the integrated check valves and a temperature sensor to control the temperature of the DI water in the machining of silicon wafers in the FOUF cleaner

GEMÜ'S NEW PINCH VALVE YOUR TUBE CAN NOW SMILE!

As a valve manufacturer with a wide product range, GEMÜ is currently developing and testing single-use pinch valves. These are characterized by their intuitive, safe operation as well as high quality and service life.

The GEMÜ Q30, Q40 and Q50 eSyStep valves have a tube which is compacted from above by a compressor for controlling and regulating media. Due to the specially developed contour of the compressor, the stress on the tube is minimized and thus the service life of the tubes is increased. Tubes can be safely inserted and drawn off with simple handles and without tools. Various butterfly valves and compressors are available for replacing the tube size, which can be quickly achieved without having to remove the valve or the actuator.

The butterfly valve also serves as protection against interference and secures the tube in the process. An optionally available flange plate with collar enables panel mounting in the cleanroom.

Due to the different actuator systems and body materials, GEMÜ can comply with a wide range of requirements so that the valves can be employed in the most varied applications. This includes the following processes, among others:

- ⇒ Chromatography
- ⇒ Media mixing
- ⇒ Fermentation
- ⇒ Cell harvesting
- ⇒ Purification
- ⇒ Filtration

The first prototypes are already being used by customers. The official market launch of the new pinch valves is expected in the third quarter of 2020.

You will find further information in the next GEMÜnews.



Pneumatic and motorized GEMÜ Q30, Q40 and Q50 eSyStep pinch valves

Lars Seeberger
Operational Product Manager
BU PFB
lars.seeberger@gemue.de

COVID-19 – WHAT HAPPENS NEXT?

EXEMPLARY COVID-19 MANAGEMENT AT GEMÜ

GEMÜ was one of the first companies in the Hohenlohekreis district in Baden-Württemberg to be honoured by the Federal Ministry of Labour and Social Affairs (FMLSA) for its exemplary COVID-19 management.

The FMLSA published a federal SARS-CoV-2 Occupational Safety and Health Standard as a protective measure against the COVID-19 pandemic. The requirements for occupational health and safety listed here are binding for all employers as well as employees.



Following a careful review by ias AG, an occupational health and safety organization, they confirmed that GEMÜ had been exemplary in meeting all the requirements of the SARS-CoV-2 Occupational Safety and Health Standard, and awarded the "certified SARS-CoV-2 Occupational Safety and Health Standard" certification mark to GEMÜ following FMLSA specifications, making it one of the first companies in the Hohenlohekreis district in Baden-Württemberg to achieve this.

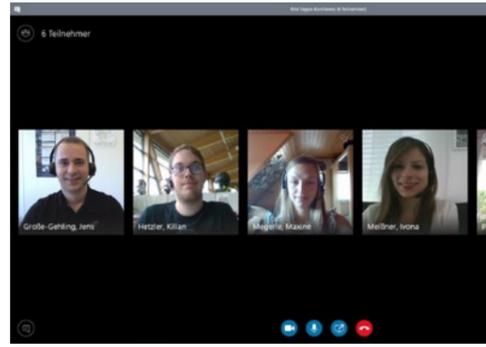


They reviewed which measures were taken when and how by the company during the risk assessment. GEMÜ set up a COVID-19 task force very early on which monitored the current situation on a daily basis, decided on measures, drew up emergency plans and coordinated and communicated all activities. The task force also acted as a point of contact for answering questions from all members of staff. Active communication was undertaken via the Intranet, e-mails and briefings by

superiors. The task force's communication efforts were supported by advisory posters and rollups in order to make the employees aware of the gravity of the situation and also remind them to observe the required precautionary measures in their free time.

Company regulations for clarifying suspected COVID-19 cases were met and instructions were given as to how affected employees should act. Where possible, office work was carried out under the "mobile working" initiative. In particular, in cases where office space was used by several people without complying with the social distancing required, teams were divided into two with each team spending one week in the office and one week at home respectively. Mobile working also helped employees look after those they care for (for example, children or relatives in need of care). Thanks to GEMÜ's good technical equipment, it was possible to adapt to the new work situation quickly. The IT department set up a pick-up point where all employees who did not have their own laptops could collect a Notebook, which could then be used by two employees. Here the used Notebooks were checked and disinfected before being handed to the next employee. Recently introduced Skype for Business was also helpful in this situation as it not only allowed users to call each other using a PC without the need for a fixed phone line, but also replaced meetings in person with telephone and video conferences. Online training courses could be carried out this way too. In addition, GEMÜ adapted the shift model in production and logistics in such a way that several employees meeting in close proximity (such as around the timekeeping system, in the changing rooms, wash rooms and showers, etc.) could be avoided.

The use of common routes (including stairs, doors and lifts) was managed in such a way that sufficient distancing could be guaranteed. In places where experience had shown that people congregated, corresponding markings determined the required social distancing. Alternative measures such as perspex screens and an obligation to wear face masks were put in

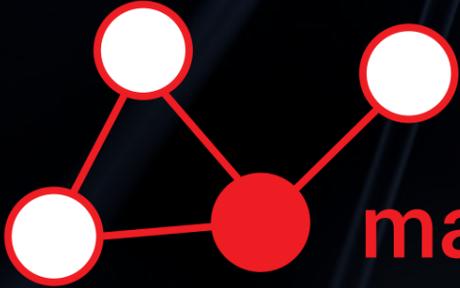


place in areas where the minimum distance of 1.5 metres between employees could not be ensured. Ensuring business continuity was a top priority for GEMÜ as well as employee and client health. To ensure this, important measures were also implemented in the supply chain, such as screening all suppliers and their deliveries, activating existing second sources, increasing the availability of critical suppliers, monitoring the supply chain daily for occurring disruptions as well as simulating availability in the ERP system.

The COVID-19 pandemic and the resulting necessary precautionary measures came rather suddenly for GEMÜ as well. GEMÜ not only profited from its fast and decisive handling of the situation, but also from having invested in digitization for quite some time and having introduced even more flexible working hour models recently. GEMÜ has mastered the challenges of the COVID-19 pandemic well so far with the commitment shown by all members of staff, the technical equipment and the resulting opportunity to be there for our clients as usual.

Ivona Meißner
Corporate Communications
ivona.meissner@gemu.de





made by GEMÜ

GEMÜ is a modern technology company with a global network of production and sales locations.

This global networking, together with standardized procedures and processes in the areas of engineering, production and logistics, enable GEMÜ to provide its customers with the same high GEMÜ quality, wherever they are in the world. In the area of production, for example, this means that customers all over the world receive products of a consistently high GEMÜ quality thanks to the high level of vertical integration across all GEMÜ factories.

IMPLEMENTATION OF GLOBAL SUPPLY CHAIN MANAGEMENT

From the supply chain management's (SCM's) point of view, "Made by GEMÜ" primarily means standardization and identical production and process quality throughout the various production companies and consequently within the entire GEMÜ Group.

Due to identical specifications, GEMÜ ensures consistently high product quality, irrespective of the site at which a product is manufactured. The advantage here is that production capacities can be flexibly distributed and supplemented depending on market volatility. This is ensured by the global SCM, which is located at the "top of the umbrella" above the production companies.

To achieve this structure, three crucial steps are required:

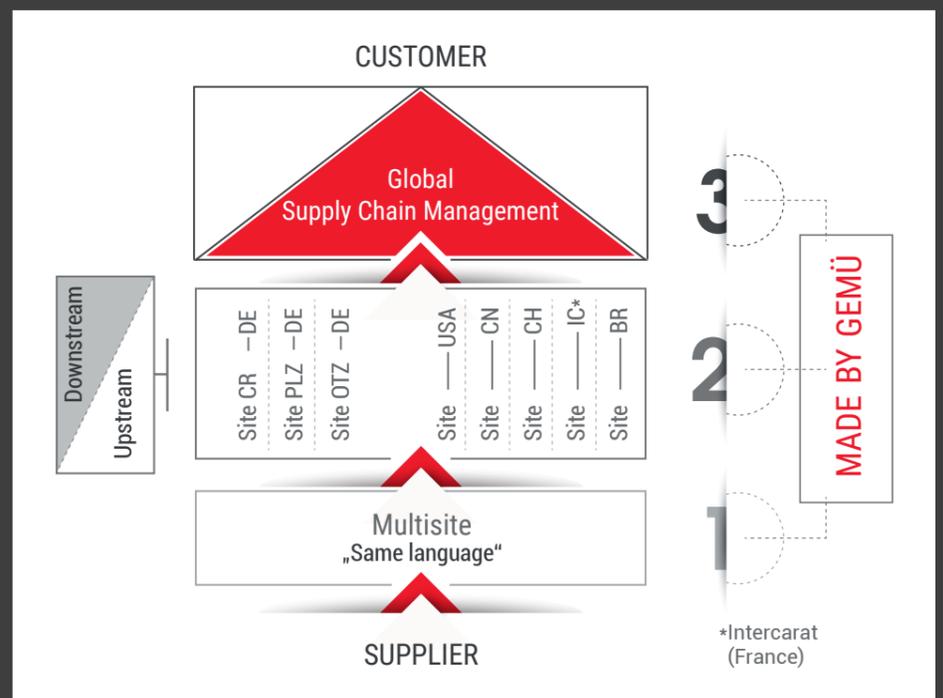
- ⇒ A "common language" shared between the different sites is essentially indispensable. This foundation is generated by networking via a common ERP system as part of the Multi-site or ERP department. In addition to a standardized information exchange, global master data management (e.g. item master, parts lists, product groups, etc.), global processes and resulting global management reports are also generated.
- ⇒ The next step will be to standardize the production processes and manufacturing processes in the production companies and thus achieve consistent quality worldwide at a high level.
- ⇒ The most significant benefit of this is that all resources distributed within the group are available. The stocks can, depending on requirements, be used and distributed by the global SCM. Furthermore, production capacities can be consolidated and calibrated worldwide. This will enable the worldwide logistics hubs to be supplied by the production companies in the future and will ensure optimized global availability of GEMÜ products.

In collaboration with GEMÜ USA, this procedure could already be optimized for an existing structure and then implemented accordingly. Harmonization through the same documentation as part of the "RFID as standard" project and the correctly aligned production steps enables a 100% matching product. Therefore it would make no difference at which site the goods were produced. In this way, the process that has become known as cross-docking can be used. This means that the components, which were produced at different sites, are fully assembled to make the final product and, together with the corresponding documentation, prepared for dispatch to the end user. This reduces the logistics effort in the next stage of the supply chain or in the local logistics hub. The shipments, which are already packed according to end user specifications, only have to be handed over to local transport service providers.

Another successful project in this context is the redesign of the Victoria butterfly valve. Additional capabilities have expanded the manufacturing site in Shanghai (China) and the quality requirements were raised to a new level. Due to the higher vertical range of manufacture in the production process, GEMÜ benefits from a reduction in lead time and a high degree of flexi-

bility. While the upstream process (customer-anonymous pre-production) is tied to the Shanghai site, the downstream process at other sites, such as in Germany, has the flexibility for order-specific final assembly to ensure fast delivery to customers worldwide. Furthermore, the transport times in the supply chain, e.g. between China and Germany, can be shortened by switching from sea freight to rail transport.

In addition to the aforementioned pilot projects for quality standardization, GEMÜ is pursuing the higher-level objective of establishing the quality promise "Made by GEMÜ" at all production sites and across the complete product range.



Matthias Fick
 Divisional Manager Production & Logistics
 matthias.fick@gemue.de



GEMÜ IS EXPANDING PRODUCTION CAPACITIES IN SHANGHAI BUTTERFLY VALVE PRODUCTION CENTER

In-house machining and coating of butterfly valve bodies and discs is expanding the manufacturing capabilities and is a further important step towards a global production concept.

The production of butterfly valves at GEMÜ Valves China is part of GEMÜ's global production concept. As part of this global production concept, GEMÜ has set the course for further expanding the capability for the production of butterfly valves in their factory in Shanghai.

To achieve this, the manufacturing capabilities have been significantly expanded in order to further increase the effect on production steps that are decisive for quality. In concrete terms, this means that GEMÜ has specifically invested in the mechanical machining and coating of the valve bodies and butterfly discs, and now carries out these production steps themselves in their own Butterfly Valve Production Center with the assistance of state-of-the-art technology.

In recent months, a new fully automated coating system was fitted and commissioned for this purpose. In addition, GEMÜ has developed a special manufacturing and clamping concept that can be used to achieve narrow shape and positional tolerances.

Furthermore, in recent months, an interdisciplinary project team made up of German and Chinese specialists at GEMÜ Valves China was working intensively on the fine adjustment of the individual parameters in order to



Most modern robot technology in the production process of the GEMÜ R480 butterfly valve

optimize the production processes. Now that this work is complete, the expanded GEMÜ production centre has started up its activities.

This has laid the foundations for the latest generation of the GEMÜ R480 Victoria soft-seated, butterfly valve to be produced in accordance with the most stringent quality requirements at the new butterfly valve competence centre in Shanghai, China with immediate effect.

"The expansion of the manufacturing capabilities in our Butterfly Valve Production Center in China is a key step on the path to implementing a global production concept," says Gert Müller, Managing Partner at GEMÜ, commenting on the expansion of production capacities in China. "With the

expansion of our factory in Shanghai, we are offering our customers, thanks to the significant production depth, significant improvements in safety and flexibility, and are implementing our "Made by GEMÜ" strategy at yet another location."

GEMÜ Valves China was founded back in the year 2000 and is one of the largest subsidiaries of the GEMÜ Group. Even before expanding production capacities, the company in Shanghai was one of GEMÜ's most state-of-the-art factories. Thanks to the continued investment in employees, design, production and logistics, GEMÜ Valves China is an important site in GEMÜ's global production concept.

 **Norbert Neumann**
Corporate Communications
Team Leader/Press Officer
norbert.neumann@gemue.de

GEMÜ R480 VICTORIA SERIES THE NEW GENERATION OF SOFT-SEATED BUTTERFLY VALVES

This is the year that the GEMÜ 480 Victoria is given a shiny new look. Since June 2020, the redesign of the GEMÜ R480 Victoria has been available for sale in wafer version.

But what is actually being revised in the tried-and-tested GEMÜ butterfly valve? A specialized team comprising employees from the design, product management, quality management and production areas has not only refined a multitude of technical specifications with the redesign of the GEMÜ 480 Victoria series but has, above all, further expanded GEMÜ manufacturing capabilities. Due to investments in in-house machining and coating competence, GEMÜ now has even more control over quality-critical production processes.

In-house mechanical machining for narrow mould and positional tolerances

In highly automated valve manufacturing at GEMÜ Valves China, the valve bodies are milled in one clamping position. This allows precise shape and positional tolerances to be achieved. In addition, GEMÜ has greater control over butterfly valve quality as they are machined in-house. A further advantage of in-house manufacturing is the fact that the delivery times are more flexible, meaning that availability is better controlled.

Sleek disc design for higher Kv values

GEMÜ butterfly valves achieve higher flow factors due to a flow-optimized and slim disc design. They therefore have greater energy efficiency as there is less pressure loss. The valves' constant compression on axes and shaft bearings mean that they provide great savings in operating costs as they require a lower torque for operation. Due to the PTFE-coated steel bushings in the axle and shaft area, lower torques are generated, which leads to savings in operating costs.

High-quality coating for robust valves

Having a high-quality coating does not start with selecting or applying the coating. Its pre-treatment, such as sand blasting and heating, and robot technology, are also crucial factors in the entire coating process. Using the whirl sintering method, the valve bodies are immersed in a basin with

epoxy powder. The powder melts on to the pre-heated valve body and therefore interconnects to form a robust and resistant surface.

The valves' layer thickness of at least 250 µm ensures consistent corrosion protection in accordance with ISO 12944-6 C5M, even in the liner area. The use of the whirl sintering method considerably improves the adhesion of the coating to the metal when compared to static powder coating.

Reliable and smart – GEMÜ butterfly valves are ready for Industry 4.0

A further feature is the technical optimization of the liner for better tightness. The inclusion of additional material in the seat, axes and shaft areas – as well as a groove in the flow direction for positive liner fixing – improves the butterfly valves' sealing and resistance to slipping. A fixed point for the liner on the valve body makes it easy to change liners and to read the liner material, even when installed.

In addition, thanks to the insertion slope on the liner, it is easy to faultlessly replace parts when carrying out maintenance work or to replace fittings at a later stage. The GEMÜ R480 Victoria series can be used as a like-for-like replacement for the previous GEMÜ 480 Victoria series because these valves have an identical actuator flange and the same installation lengths.

Overall, the new GEMÜ butterfly valves stand out not only thanks to their service-friendly and replaceable components, but primarily because of

their greater safety and efficiency. However, with the integration of an RFID chip, GEMÜ is going a step further and is prepared for Industry 4.0.

With CONEXO, GEMÜ offers an RFID system architecture that enables clear identification of wearing parts, paperless maintenance and process documentation. The CONEXO app guides maintenance technicians step-by-step through the fully customizable maintenance workflows.

The new GEMÜ R480 Victoria series with its numerous customer benefits can be ordered via your contact person at GEMÜ. The following designs are available in the series:

- ⇒ GEMÜ R480 Victoria with bare shaft (*Web code GW-R480*)
- ⇒ GEMÜ R487 Victoria with hand lever (*Web code GW-R487*)
- ⇒ GEMÜ R481 Victoria with pneumatic actuator (*Web code GW-R481*)
- ⇒ GEMÜ R488 Victoria with motorized actuator (*Web code GW-R488*)

GEMÜ R480 Victoria unmachined parts



 **Michael Mütsch**
Strategic Product Manager for
Quarter Turn Valves
michael.muetsch2@gemue.de

GEMÜ P600S M-BLOCK DIAPHRAGM VALVE

MULTI-PORT VALVE BLOCK THAT CAN BE EXTENDED IN MODULAR FORM WITH EASY-TO-REPLACE CONNECTIONS

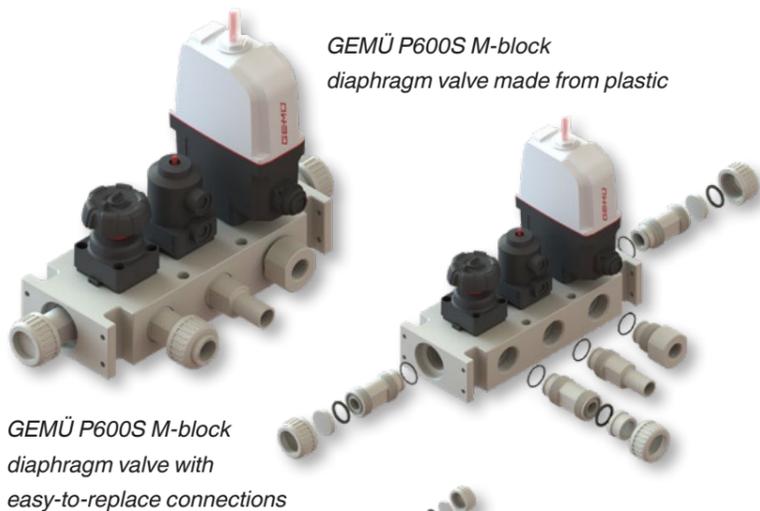
Whether it's in drinking water and waste water treatment or in power generation and environmental systems, the GEMÜ M-block multi-port valve blocks made from plastic can be customized and adapted to fit the respective process. And now this is even more flexible.

With the new GEMÜ P600S multi-port valve block solutions, GEMÜ has combined what might be considered the contradictory notions of standardization and individuality by developing a sophisticated modular system. It was already possible to order the standardized GEMÜ P600F distribution blocks from GEMÜ and increase the number of seats in a modular fashion. With the new GEMÜ P600S M-block diaphragm valve, GEMÜ has gone one step further, as it is now even possible to adapt the connections at a later date. This means that customers can keep various modules in stock and adapt to fit the specific process in question. The GEMÜ modular system also allows the modular M-block bodies to be combined with all standard GEMÜ actuators and diaphragms. With many years of experience in M-block design, GEMÜ offers solutions for numerous functions, such as blending, diverting, channelling, draining or feeding the most diverse range of media. This gives customers maximum flexibility.

The GEMÜ M-block solutions are characterized by their compact design. Another advantage is shorter installation times as fewer single components need to be assembled. Plant reliability is also increased, as the risk of leaks in the plant is reduced.

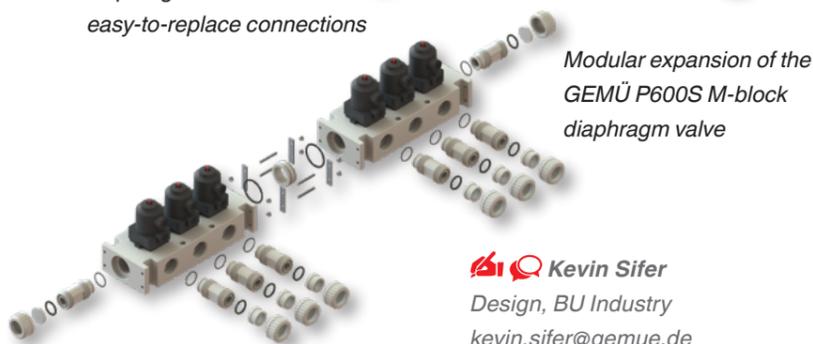
The new GEMÜ P600S M-block diaphragm valves are available with immediate effect in PP-H and PVC materials. The new M-block diaphragm valves are also available in the standard configuration as well as in customized designs. Spigots, threaded sockets and union ends in nominal sizes of DN 8 to DN 25 are also available as modular connections.

With this patented solution, GEMÜ is answering the calls of countless manufacturers who want to allow for the possibility of future on-site expansions or modifications to their process plants.



GEMÜ P600S M-block diaphragm valve made from plastic

GEMÜ P600S M-block diaphragm valve with easy-to-replace connections



Modular expansion of the GEMÜ P600S M-block diaphragm valve

 **Kevin Sifer**
Design, BU Industry
kevin.sifer@gemu.de

GEMÜ PRODUCT NEWS

PRODUCT LAUNCHES



GEMÜ Code 19 EPDM diaphragm

New GEMÜ Code 19 diaphragm for pharmaceutical and biotechnological applications

The newly developed GEMÜ Code 19 EPDM elastomer diaphragm consists of an optimized EPDM compound developed in-house. The new material composition improves the performance of the diaphragm in static applications. At the same time, the new compound achieves better long-term sealing values, which drastically reduces the frequency of diaphragm retightening. In addition, a better diaphragm performance is achieved by optimized positioning of the fabric layer. The GEMÜ Code 19 diaphragm is available in diaphragm sizes 8 to 100 for nominal size ranges from DN 4 to 100.



GEMÜ R481 Victoria butterfly valve with GEMÜ GSR Basic actuator

New GEMÜ GDR and GSR actuators for pneumatically operated quarter turn valves

The GEMÜ GDR and GSR Basic actuators are available for pneumatically operated butterfly valves and ball valves and are suitable for simple on/off applications. The standardized flanged connection according to DIN EN ISO 5211 enables mounting on GEMÜ quarter turn valves, but also on third-party products. The actuators also have an interface according to VDI/VDE3845 for position feedback. Because of the aluminium housing and the epoxy-coated cover, actuators are protected against corrosion.



GEMÜ R563 eSyStep control valve

New control valves with motorized GEMÜ R563 and 566 eSyStep Universal actuator

The GEMÜ R563 eSyStep is now available as the successor to the GEMÜ 563 and GEMÜ 568 control valves. The GEMÜ 566 control valve is also being extended by a motorized version with the GEMÜ eSyStep actuator. The valves are particularly suitable for automatically controlling small quantities. Both linear and equal-percentage control characteristics can be achieved.

PRODUCT EXPANSIONS



GEMÜ C60 CleanStar diaphragm valve with union end

GEMÜ C60 and C67 CleanStar with union end and DIN insert

The GEMÜ C60 and C67 CleanStar diaphragm valves are naturally available in the SmartLine design with new union end connection type with DIN insert (IR butt welding) made of PP material. The nominal size DN 25, actuator size 3 is available.

With this version, the union end is sealed using an FPM O-ring directly on the medium. This has the major advantage of having the union virtually deadleg-free.



GEMÜ FWU FlareStar fitting with PVDF union nut

New connection size for GEMÜ FWU FlareStar fitting

The GEMÜ FWU FlareStar O-ring free union fitting is now also available in connection size 1½" in addition to the 2" variant. The 1½" union has a patented seal contour design and can be combined with our GEMÜ 600HP and GEMÜ 677HP PurePlus diaphragm valves with PFA inliner/PVDF outliner. It can also be welded into manifolds for more flexible handling or replacement of individual strands or valves. The union end is available with both PVDF and ECTFE union nuts.



GEMÜ 655 full bore diaphragm valve

New connections and materials for GEMÜ 655 and 656

The GEMÜ 655 and 656 full bore diaphragm valves have been expanded in their connection and material combinations. Two flanged connections have been newly added in accordance with the EN (Code 8) and ANSI (Code 39) standards. In addition, the valves can in future also be ordered in nodular cast iron material EN-GJS-400-18-LT and EN-GJS-500-7 with butyl, hard or soft rubber lining.



GEMÜ F40 filling valve with GEMÜ 1434 µPos positioner

New nominal sizes for GEMÜ F40 and F60 filling valves

New nominal sizes are available for the GEMÜ F40 and GEMÜ F60 filling valves. The valves with an innovative PD design are particularly convincing in terms of speed, flexibility, resistance and precision in filling processes. GEMÜ filling valves are now available in nominal sizes DN 8 to DN 25 with spigot or clamp connections according to DIN, EN or ASME BPE. The exact configuration options can be found on the datasheet or in the Online Shop.



GEMÜ 507 angle seat globe valve with handwheel clamp

Handwheel clamp for GEMÜ 507, 537, 553 globe valves

The GEMÜ 507, 537 and 553 globe valves and the GEMÜ 9507 replacement actuator will in future be equipped with an integrated handwheel clamp. The handwheel clamp allows the valve spindle to be fixed. This allows a minimum media flow rate to be set and prevents the spindle position being adjusted in the event of strong vibrations.



GEMÜ 530 globe valve

GEMÜ 530 globe valve usable for a larger nominal size range

For the pneumatically operated GEMÜ 530 globe valve, there is an expansion of the pneumatic actuator size by factor six, which allows higher operating pressures with a stainless steel actuator. This new actuator size is available for valve configurations in nominal sizes DN 50 to 100 with body material 1.4408, investment casting material, control function normally closed (NC) and flow direction under the seat. In addition, different spring sets are available for adaptation to the operating and control pressure.



GEMÜ 536 straight globe valve

New operating and control pressure for GEMÜ 536 globe valve

The GEMÜ 536 pneumatically operated globe valve can be also be used at higher operating pressures in the actuator versions code 3A2 and 3A3 with immediate effect. As a result, in some cases, an actuator with a lower spring force can also be selected (3A2 instead of 3A3). This is also due to an adjustment to the control from min. 4.5 to 5.0 bar for the actuator version code 3A2 and from min. 5.5 to 6.5 bar for the actuator version code 3A3.



GEMÜ K410 butterfly valve with bare shaft

Universal actuator flange for GEMÜ K410 and K415 butterfly valve series

The GEMÜ K410, K415, 410, 411, 415, 417, 423 and 428 butterfly valves now come with a universal actuator flange. This allows the assembly of all quarter turn actuators which have an interface with the standardized flange type F05 according to EN ISO 5211 or flange type G05.

NEW APPROVALS



EAC Logo

EAC approval for measurement and control systems

Our measurement and control system products are again certified for EAC approval. This approval allows the sale and use of the products in the Eurasian Economic Union and applies to the following types:

- ⇒ GEMÜ 1201, 1205, 1211, 1213, 1214, 1215, 1231, 1232, 1235, 1236, 1242 position indicators
- ⇒ GEMÜ 4216, 4221, 4222, 4241 and 4242 combi switchboxes
- ⇒ GEMÜ 1434 µPos, 1435 ePos, 1436 cPos and 1436 eco cPos positioners and process controllers
- ⇒ GEMÜ 3240 temperature measurement device
- ⇒ GEMÜ 3140 pressure gauge
- ⇒ GEMÜ 3020, 3021, 3030 and C38 SonicLine flowmeters
- ⇒ GEMÜ 1256 and 1257 limit switches
- ⇒ GEMÜ 1270, 1271, 1272 and 1273 instrument sensors
- ⇒ Travel sensor 4232

PRODUCT MODIFICATIONS



GEMÜ 620



GEMÜ 687



GEMÜ 695



GEMÜ R690

New actuator versions for the pneumatically operated GEMÜ 687, 620, 695 and R690 diaphragm valves

The GEMÜ 687, 620, 695 and R690 diaphragm valve actuators have been revised in diaphragm sizes 20 to 50. The new low-maintenance actuators are for operating pressures of up to 10 bar, irrespective of the control function and the diaphragm material.

The union ends of the actuator top and base are screwed together from below to protect against contaminants. This allows better cleaning of the actuator. In addition, all control functions have control air sockets made of brass and the optical position indicator is integrated as standard. The RFID socket in the base makes it possible to integrate the actuators into the GEMÜ CONEXO system.

Approval of the CONEXO Pens for China

The CONEXO Pen for reading RFID components in the CONEXO system has recently received CMIIT approval and can therefore also be used in China. CONEXO is an RFID system architecture for unique identification of wearing parts, paperless maintenance and process documentation. Further information on the CONEXO System can be found at www.inevvo-solutions.com.



CONEXO Pen



GEMÜ C60 diaphragm valve with new transport caps

Transport caps for GEMÜ CleanStar and iComLine

The GEMÜ C60 and C67 CleanStar diaphragm valves and GEMÜ C50, C51 and C57 iComLine diaphragm globe valves with flare connection have recently been supplied with transport caps for better protection. The new red caps are manufactured in a cleanroom, placed on the valve's flare connection and fixed in place with a flare union nut. The flare connection as well as the sealing points and thread are thus optimally protected against damage during transport. They also protect the media wetted part of the valves against the penetration of potential particles from outside.



NSF Logo on the product label

NSF approval for diaphragm valves

The GEMÜ 610, 613, 617, 630, R690, R647, R649 eSyDrive, R677 and R693 diaphragm valves now have NSF/ANSI 61 approval and are therefore certified for use in American food and water applications. The approval is available for variants made of the body material PVC-U (Code 1) and with the EPDM GEMÜ Code 17 diaphragm.

2020 training dates

THEORETICAL TRAINING COURSES

ALLROUNDER LEVEL

⇒ Basic technical principles of valve designs

- GV0100GB GEMÜ Products and markets
Half-day training course, on request
- GV0101GB Functional principles of valves and their selection criteria (basic module)
14th September 2020, 08:00 – 17:00
- GV0102GB Plastics in valve and pipeline construction
15th September 2020, 08:00 – 12:30
- GV0103GB Metals in valve and pipeline construction
16th September 2020, 08:00 – 12:30
- GV0104GB Pipe connectors and assembly information
17th September 2020, 08:00 – 14:30
- GV0105GB Explosion protection, ATEX / IECEx
18th September 2020, 08:00 – 14:30

⇒ Basic technical principles of application technology

- GA1000GB Procedures and processes in the biotechnology, pharmaceutical, foodstuffs and cosmetics industries
21st September 2020, 08:00 – 17:00
- GA2000GB Procedures and processes in the high purity, semiconductors and critical media industries
22nd September 2020, 08:00 – 14:30
- GA3000GB Procedures and processes in the chemical, processing and water industries
23rd September 2020, 08:00 – 17:00

⇒ Basic technical principles of measurement and control systems

- GM0101GB Introduction to electric systems, electronic systems and pneumatics (basic module)
12nd October 2020, 08:00 – 17:00
- GM0102GB Measurement variables and measurement principles in process engineering
13rd October 2020, 08:00 – 17:00
- GM0103GB Control circuits: Their construction and function
14th October 2020, 08:00 – 17:00

SPECIALIST LEVEL

⇒ Product training in valve designs

- PV1000GB Valves for the biotechnology, pharmaceutical, foodstuffs and cosmetics industries
28th September 2020, 08:00 – 17:00
- PV1100GB Single-use valves for the biotechnology and pharmaceutical industries
29th September 2020, 08:00 – 14:30
- PV2000GB Valves for high purity, semiconductors and critical media industries
30th September 2020, 08:00 – 14:30
- PV3000GB Globe valves and diaphragm valves in the chemical and processing industries and water
5th and 6th October 2020, 08:00 – 17:00
- PV3001GB Butterfly valves and ball valves in the chemical and processing industries and water
7th and 8th October 2020, 08:00 – 17:00
- PV4000GB Valve designs – accessories and instrumentation for linear valves and quarter turn valves
1st October 2020, 08:00 – 17:00
- PV5000GB Innovations, upgrades and refresher course
Training course on request as required

⇒ Product training in measurement and control systems

- PM0101GB Measurement devices and measurement principles for pressure, temperature, level and volumetric flow
19th October 2020, 08:00 – 17:00
- PM0201GB Positioners: Function and application
20th October 2020, 08:00 – 17:00
- PM0301GB Process controllers: Function and application
21st October 2020, 08:00 – 17:00
- PM0501GB Innovations, upgrades and refresher course
Training course on request as required

SERVICE TRAINING

SPECIALIST LEVEL

⇒ Qualified service fitter in accordance with GMP/FDA

- SM1001GB* Servicing and changing replacement and wearing parts in diaphragm valves for hygienic and sterile applications, attachment and readjustment of valve accessories.
- SM2001GB* Servicing and changing replacement and wearing parts in HP Cleanstar diaphragm valves, attachment and readjustment of valve accessories
- SM2002GB* Expert manufacture of ultra pure PFA tube connections for the GEMÜ FlareStar/TubeStar tubing and fitting system
- SM3001GB* Servicing and changing replacement and wearing parts in globe valves, attachment and readjustment of valve accessories
- SM3002GB* Servicing and changing replacement and wearing parts in elastomer butterfly valves, attachment and readjustment of valve accessories
- SM3003GB* Servicing and changing replacement and wearing parts in diaphragm valves for industrial applications, attachment and readjustment of valve accessories
- SM4001GB* Installation and commissioning of valve accessories such as stroke limiters, electr. position indicators and positioners
- SM5001GB* Servicing for various GEMÜ products, upon consultation

** ca. 3-stündige Unterweisung vor Ort, Termin nach Vereinbarung, ab 5 Teilnehmern*

EXPERT LEVEL

⇒ Qualified Service expert in accordance with GMP/ FDA

- ET1001GB Training as authorized service expert for GEMÜ diaphragm valves.
03rd November 2020, 08:00 – 17:00
Suitable for external service and maintenance personnel with the skills of an experienced mechanic

The training courses will be held in English.

 **Jessica Donner**

Assistant of the Service Department | Organisation of Technical Training
jessica.donner@gemue.de, training@gemue.de



IMPRINT

Publisher and Copyright:

GEMÜ Gebr. Müller
Apparatebau GmbH & Co. KG
Fritz-Müller-Straße 6–8
74653 Ingelfingen-Criesbach
Phone +49 (0) 7940/123-0
gemu-news@gemue.de
www.gemu-group.com

Editors:

Ivona Meißner (GEMÜ)
Norbert Neumann (GEMÜ)
Birgit Seuffert (factum | adp)

Circulation: 4,400 in German
1,700 in English