

# gnews

## update 33

customer newsletter, may 2021

### Agenda

Title Story	2
Platform Solutions	4
Gx® Biological Solutions	5
Diagnostics and Medical Devices	9
Primary Packaging Plastics	10
Sustainability	11
From our Plants	12
People	14
Web & Event	15



**Gerresheimer sets itself ambitious sustainability targets as part of its corporate strategy**

# Gerresheimer sets itself **ambitious sustainability targets** as part of its corporate strategy

**Ambitious targets will direct Gerresheimer's sustainability strategy in the coming years. Among other things, the company wants to cut its CO<sub>2</sub>-emissions by half by 2030. The number of occupational accidents is to be significantly reduced by 2028. By 2023, ecodesign criteria are to become a fixed component of product development at Gerresheimer.**

"For us, thinking and acting sustainably means taking a long-term view on our impact as a company. Sustainability has thus become an important pillar of our corporate strategy. It will be an important driver of innovation and growth for us," says Dietmar Siemssen, CEO of Gerresheimer AG. Gerresheimer's new sustainability strategy is based on three pillars. GxPure, GxCircular and GxCare. Ambitious measurable individual targets have been set for these three areas, which are to be achieved within a specified tight timeframe.

## **GxPure - Commitment to the environment and climate**

As a manufacturing company, Gerresheimer attaches great importance to the environment. Energy is required for the production of plastic and glass packaging, and the melting processes in the high-temperature furnaces are particularly energy-intensive. In this context, it is important for Gerresheimer to improve energy efficiency in its processes and also to avoid the associated greenhouse gas emissions. The company has set itself the goal of

reducing its Scope 1 and 2 emissions by 50 percent by 2030 (base year 2019) in absolute terms, while at the same time achieving ambitious growth targets.

## **CDP Carbon Disclosure Project - B rating achieved**

Gerresheimer has been participating in the CDP, the non-profit Carbon Disclosure Project (CDP), since 2008 and publishes the successes of its initiatives and measures to protect the the climate. In the CDP Climate Change Report 2019, the company has again achieved a good B rating (on a scale from A to D-), which is above the industry average.



**Sustainability is a strategic pillar of our corporate strategy. For us, thinking and acting sustainably means taking a long-term view on our impact as a company.**

Dietmar Siemssen, CEO



## Furnace of the Future

As a member of the European Container Glass Federation FEVE, Gerresheimer is involved in the "Furnace of the Future" project to pilot hybrid technologies for the decarbonization of glass production together with other glass manufacturers.

## Water - Alliance for Water Stewardship (AWS)

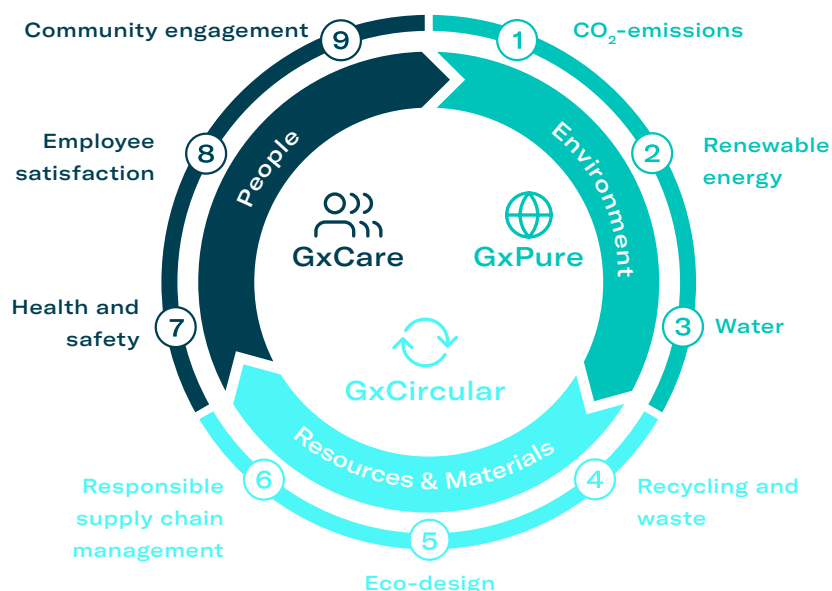
In the production of plastic and glass packaging, water is mainly used for cooling and cleaning. Gerresheimer recently joined the AWS and aims to use water responsibly and sparingly. At all production sites affected by high water stress, the company will introduce sustainable water management systems which will be certified against the Alliance for Water Stewardship (AWS) standard by 2030. At the same time, Gerresheimer aims to reduce overall water intake by 10 percent by 2030 compared to 2019.

## Gx Circular - Commitment to sustainable products and resource conservation

In the production of pharmaceutical primary packaging and drug delivery systems, diagnostic systems and packaging for the cosmetics industry made of glass and plastic, Gerresheimer aims to make a contribution to the circular economy by designing its products and processes to reduce their environmental impact and close the loop.

## Eco-design

The term eco-design describes the inclusion of environmental aspects as early as the product design process, with the aim of improving the



Gerresheimer's new sustainability program consists of three pillars: GxPure, GxCircular and GxCare and includes nine focus topics.

environmental impact of the product throughout its life cycle - including production, transport, use and disposal. Gerresheimer has set itself the goal of integrating eco-design principles into 100 percent of the new products developments as early as 2023. In doing so, the requirements for product quality as well as patient safety and the fulfillment of regulatory requirements must be harmonized with the eco-design principles from the very beginning. Already in the existing product portfolio, for example, recycled glass and plastic or reusable parts and dematerialization strategies are used. Renewable raw materials are also used.

## GxCare - Commitment to people

As a manufacturing company, responsibility for the safety and health of all employees is a top priority for Gerresheimer. Therefore, it is a key objective

to reduce the lost time accident frequency at the sites by 80 percent by 2028. The introduction of an occupational safety management system in accordance with ISO 45001 at all production sites by 2023 provides the appropriate framework.

## EcoVadis - Silver Rating achieved

Numerous international pharma and cosmetics customers regularly review Gerresheimer with regard to sustainable business practices. In 2018, Gerresheimer achieved a score of 46 points in the annual EcoVadis assessment, thus making the leap from bronze to silver rating. In 2020, the company improved its score within this rating to 58 out of a maximum of 100 points and is therefore currently among the top 6 percent of the companies assessed in the comparative industry of pharmaceutical suppliers and medical technology.







# Innovative SensAIR™ platform for first drug delivery device for biologics

With SensAIR™, Gerresheimer presents for the first time a new platform for on-body delivery which can deliver drugs of higher viscosity, such as monoclonal antibodies (mAb). The aim is to provide patients with the best possible support in the subcutaneous delivery of large-volume biologics. The ready-to-use SensAIR™ On-Body device is easy to use and enables patients to start medication in a self-determined manner in familiar surroundings, for example at home.

The SensAIR™ On-Body device can be adapted to many medications of different viscosities and different requirements. This applies to the size of the medical device as a whole, as well as to the needle used, variable cartridge sizes and possible connectivity, for example to the patient's smartphone. Together with Gerresheimer's One-Stop-Shop quality promise, which includes a solution from the cartridge to the drug delivery device from a single source, SensAIR™ enables optimized delivery of biologics.

"Everyone benefits from SensAIR™: patients, their relatives and also doctors. This device is an innovative medical device which, when worn on the body, delivers up to 20 ml of biologics subcutaneously to the patient," says Oliver Haferbeck, Head of the Advanced Technology & Innovation Unit at Gerresheimer and CEO of Sensile Medical AG. He explains that patients gain significantly in quality of life because they can administer their medication also themselves at home. The ready-to-use concept ensures that the patient does not have to carry out any lengthy and complicated preparation steps, but can operate the device simply.

## More quality of life for the patient

To date, many patients with a wide variety of indications have to endure long and stressful infusions in a hospital setting to treat their condition. How much easier would it be if patients could carry out the treatment also at home? SensAIR™ makes life easier for these patients, as they can care for themselves over a longer period of time and - depending on the indication - only need to visit the doctor or hospital for check-ups.

SensAIR™ is an innovative product platform for the delivery of large-volume and highly viscous biologics. The technology, function, design and construction of the platform were jointly developed by Gerresheimer specialists and the product is supplied from a single source.

## Safety and cost efficiency

The SensAIR™ Infusor is characterized by a simple concept which can be cost-effectively adapted to different needs, especially patient needs. Gerresheimer thus offers a platform solution which provides a wide range of options with regard to the biologic to be applied; starting with the drug flow rate (0.15 - 1.00 ml/min), through type

(for example glass cartridge) and volume (up to 20ml) of the primary packaging, to connectivity.

With this focus, SensAIR™ is attractive to the market even with varying quantities of devices per year, as developments and processes can be adapted in the shortest possible time. The existing technologies and know-how, which have already proven themselves in the market, are consistently pursued in SensAIR™. This is a significant advantage in terms of time-to-market, among other things by quicker enabling clinical trials.

Gerresheimer is therefore both a partner for the SensAIR™ device and a supplier and manufacturer of the primary packaging, i.e. the cartridge containing the active ingredient. This represents significant added value as a long-term partner and system supplier.



With SensAIR™, Gerresheimer presents for the first time a new platform for on-body delivery which can deliver drugs of higher viscosity, such as monoclonal antibodies (mAb).



# Regulatory services for biotech customers

The core competence of small and medium-sized biotech companies is the development of new active ingredients. But they often need extensive support in choosing and applying the right primary packaging or device. With our new cross-divisional unit Gx® Biological Solutions, we offer a comprehensive service package for biotech companies in a wide range of areas from product development to material and functional testing to intensive regulatory support. The latter is the focus here and its benefits for customers are presented in detail below.

Judith Oehler, Gerresheimer Olten

A fast time to market is the ultimate goal for a business when it comes to launching a new product. The regulatory affairs team is a core player in enabling market access by obtaining and maintaining the necessary regulatory approvals. Gerresheimer employs highly dedicated and experienced regulatory affairs managers whose early involvement during a new product development is a key asset for a successful launch, minimizes risks on the way, and saves resources. Their expertise covers primary packaging materials for

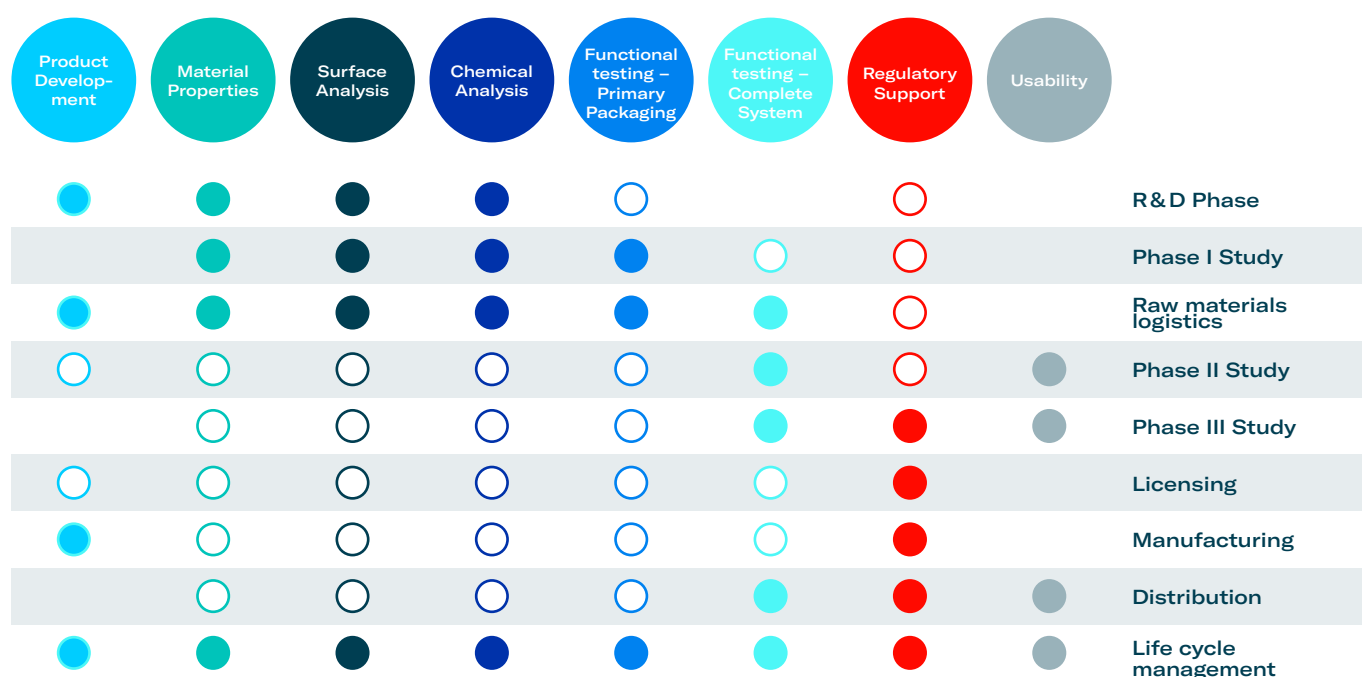
medicinal products made of glass and plastics as well as medical devices.

## Customers profit from regulatory support as part of the Gx® Biological Solutions offer

The wide range of packaging solutions for medicinal products offered by Gerresheimer includes standard and specialty vials, as well as cartridges and syringes made of glass and/or polymers (available in both bulk and ready-to-fill configuration) for highly complex biological drug products. Gerresheimer also develops ambitious and innovative drug-delivery devices to

meet unmet medical needs. To support its biotech customers, Gx® Biological Solutions offers, as part of its full service regarding product development of primary packaging and drug-delivery solutions, comprehensive regulatory services to support clients in achieving shorter times to market. Gerresheimer's regulatory affairs (RA) managers foster a close collaboration with the customer's RA team and define a robust regulatory strategy for the product early on. "The Gerresheimer RA managers strongly support the newly set-up Gx® Biological Solutions organization. This service allows our customers to focus on their core activities, which is developing drugs, while we at Gerresheimer will support bringing their drugs to the market by providing primary packaging and delivery solutions in the most professional way", explains Stefan Verheyden, Global Vice President of the Gx® Biological Solutions Team.

Gx® Biological Solutions provides integrated support on all levels of the pharma value chain





### RA accompanies a product development from as early as the feasibility phase

RA managers are part of Gerresheimer's multidisciplinary product development team. If a new product involves the development of a new drug-delivery device, RA managers support the engineering team from as early as the feasibility phase and throughout the device development. They prepare the regulatory deliverables, provide advice, and contribute to reviews. Early involvement of the RA team reduces the risk of delayed approval.

### Regulatory risk management reduces certain business risks

Management of regulatory risks allows to decrease certain business risks. The RA team flags, mitigates, and defines fallback options. Depending on the target market and the product, regulatory risk management activities may include pre-registration interactions with authorities (e.g., the FDA) and conformity assessment bodies. RA managers prepare the regulatory submission file and oversee possible deficiency reports to obtain regulatory approval for the product in the desired market. Additionally, they take care of product registrations. "We are currently working with great detail on the registration of our primary packaging products in

China and are now very familiar with the registration procedure", says Chassandra Koch, Regulatory Affairs Manager at Gerresheimer Bünde.

### A strong documentation smoothens the regulatory approval process

The key for a smoother approval process lies within a clear, concise, structured, and complete documentation, as regulatory approval is based on it. To support that, the Gerresheimer RA team routinely supports other disciplines in compiling new documents and reviewing existing ones to yield a high-quality regulatory submission. "We provide technical writing training to our colleagues in development here at Gerresheimer Olten (Sensile Medical AG). We also offer active support in drafting and reviewing documents with a technical writer in the Regulatory Affairs team" says Elly Gysels, Head Regulatory Affairs at Gerresheimer Olten. Anna Wisniewska, Regulatory Affairs Manager in the Gerresheimer Primary Packaging Plastic division, adds: "We evaluate the impact of changes within our packaging on the registration documentation of our clients. Thanks to this, we provide support to our clients and a faster and more effective completion of a change at health authorities".

### Post-market involvement

The involvement of the RA managers continues beyond the market launch: during the post-market phase they keep supporting the change management and maintain the certificates necessary for the product to remain on the market.

### Gerresheimer employs a high level of RA experience

Gerresheimer employs nine RA managers located in Germany, Poland, Switzerland, and the USA, with a focus on drug primary packaging and medical devices. These colleagues have various backgrounds, including engineering, quality management or life sciences, and combine more than 50 years' experience as RA managers backed-up by more than 120 years within the medical device and pharma industry to provide the regulatory know-how and enable successful market launches for Gerresheimer products throughout the world.

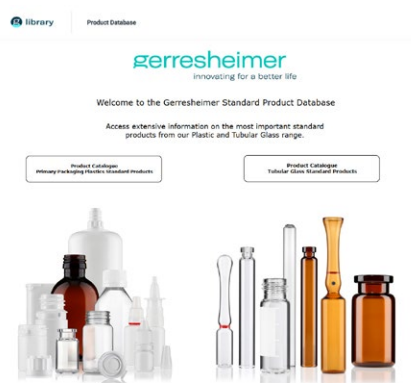
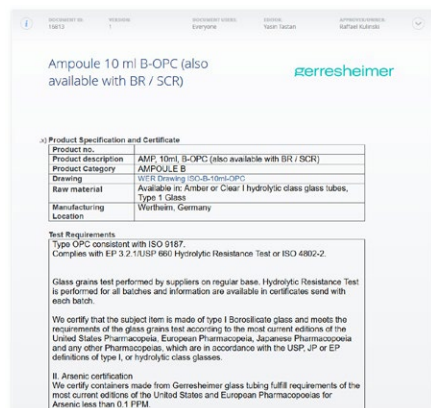


**Judith Oehler**, Technical Writer in Regulatory Affairs at Gerresheimer Olten (Sensile Medical AG), did her PhD and research at the University of Oxford from 2013 - 2020 on molecular mechanisms involved in cancer development. Since her return to Switzerland, she supports as part of the Regulatory Affairs team the regulatory approval of advanced drug delivery devices and innovative medical devices developed by Gerresheimer Olten.





## Standard product database supports product registrations



manufacture them. Each product specification contains extensive information on the product like: raw material, test requirements, packing information, storage, quality control, certifications and much more.

Here are some of the benefits for you:

- Contains all information intended for product registration
- Save time by direct access to product information
- Database with product specifications for all standard products
- Access via the internet through password-controlled access
- Access to current, printable information of any specific products you wish to review

If you want to get access to the Gerresheimer Standard Product Database, please contact your Gerresheimer sales representative who will be happy to take care of the registration process for you.

### The range now also includes tubular glass products

Gerresheimer has enlarged a digital tool that makes your life easier when it comes to finding and registering the right packaging for your products. It is called The Gerresheimer Standard Product Database and is available to you on the internet via your web browser at no extra cost. It is based

on the already existing database for Primary Packaging Plastics products. The product database now includes a wide selection of our standard Primary Packaging Pharma products made of Tubular Glass and Plastics. It ranges from different Ampoule Types to ISO Vials for Glass and containers for liquid and solid doses for Plastics, all listed under the name of the plant that will

## Gerresheimer in North America: Clinical Supply Program for Gx® RTF vials is part of a comprehensive service offering

The successes in the fight against Covid-19 have brought biopharmaceuticals into the spotlight. As part of its primary packaging business for glass containers, Gerresheimer offers a wide range of products and services for the mostly parenteral administration of these medications.

Small and medium-sized biotech companies in particular make use of the extensive range of services, be it advice on the right primary packaging material for the relevant clinical phase, support with approval and regulatory processes, laboratory services and much more. A new addition is the establishment of a sample supply, especially for Gx® RTF

vials. The Gx® RTF injection vials made of Type I borosilicate glass are formed in accordance with cGMP, washed in a clean room, packed in trays or nests and tubs and sterilized. Gerresheimer offers its own packaging configurations, but also the well-known SG EZ-fill® packaging format.

Many small to medium-sized biotech customers operating in the early stages of research and development typically require smaller sample quantities of up to 10,000 Gx® RTF vials. Gerresheimer stocks these RTF vials, as well as Gx RTF® syringes, for customers to incorporate into their stability, testing and early clinical studies. Standard sizes such

as 2R, 6R, 10R and 20R vials in trays with EU blowback are always available for this purpose. This means that the most commonly used container formats for biopharmaceutical development are kept in stock, enabling customers to respond quickly to urgent market requirements.



The Gx® RTF vials of the Clinical Supply Program are offered in various packaging configurations.



# Patented innovative production technology for metal-free glass syringes

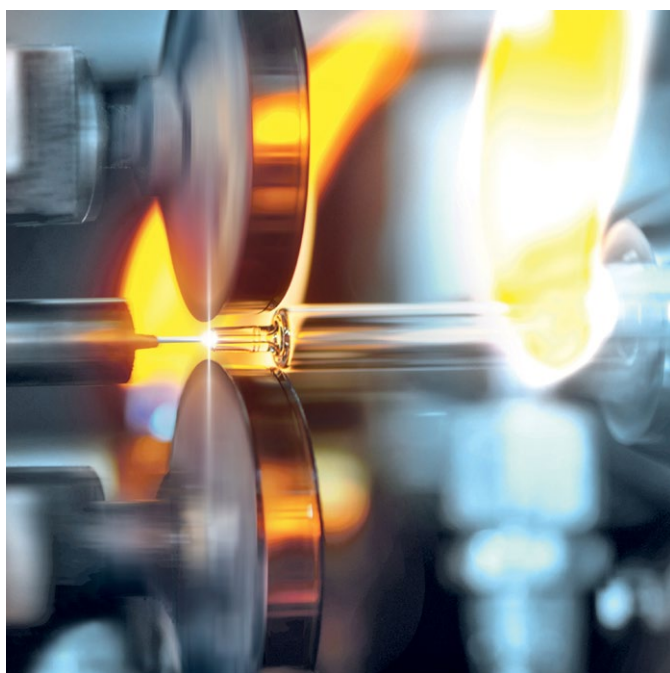
Biotechnologically manufactured active ingredients demonstrate a series of special features. Some are highly viscous, concentrated and in individual cases, tend to interact with silicone oil or, for example, tungsten residue from syringe production. The new cross-divisional unit Gx® Biological Solutions offers a special metal-free manufactured syringe which is produced with a patented innovative production technology for these applications.

"Our metal-free syringes are especially suitable for our customers and partners who are involved in the development of biotechnologically manufactured active ingredients," says Stefan Verheyden, Global Vice President Gx Biological Solutions & Sales Syringes Medical Systems. "A production technology specially developed and patented by Gerresheimer ensures that the pin used for conical shaping is no longer made of the tungsten or an alternative metal usually used, but of a special ceramic."

## Metal-free technology for residue-free cone shaping

One problem associated with syringe use is that traces of tungsten or other metals occasionally leave residue behind the bore when the syringe cone is shaped. Especially for medications based on biotechnologically manufactured active ingredients, the customers therefore require pre-fillable syringes that ideally exclude the possibility of contamination with metal. With the development of an innovative patented production

technology, Gerresheimer has been able to address this requirement and creates a metal-free 1 ml long Luer Lock Gx RTF® syringe that is ready for series production. This process can also be transferred to other Luer Lock syringe sizes or to Luer cone syringes of various sizes at any time. The pin used to shape the cone with the new technology isn't made of conventional tungsten or an alternative metal, but of a special ceramic. External studies confirm that Gerresheimer can manufacture residue-free syringes for the packaging of especially sophisticated medications with this new technology. The Fresenius Institute conducted a study confirming that no ceramic residue can be detected in the syringe. A biocompatibility study also verifies the non-cytotoxicity of the ceramic material.



Production of a metal-free syringe: The pin used to shape the cone with the new technology is no longer made from the tungsten usually used or an alternative metal, but instead of a special ceramic.



Series-ready, metal-free 1 ml long Luer Lock Gx RTF® glass syringe; transfer of the patented new production technology to the most varied luer lock syringe sizes and luer cone syringes is always possible.





# Test cartridge and reagent block developed for an innovative blood analyzer

Medical technology specialist Gerresheimer has developed the test cartridge and reagent block for a fully automatic blood analyzer which can be used to identify a number of biomarkers for various diseases right at the point of care. On behalf of customer CAMPTON Diagnostics, the design of the unit test cartridge and reagent block was optimized for series production through injection molding and the easiest possible handling.

Initially, Gerresheimer provided the customer with several concepts for both the test cartridge containing the analyzer's innovative biochip and the reagent block, from which up to four test fluids (reagents and sample diluents) are supplied and waste products are purged after testing. For the final design of both components, elements of various drafts were combined and optimized. In developing the test cartridge, the initial focus was on improving the ergonomics of the glass capillary holder, which is where the patient's blood sample is stored. A corrugated finger rest and two extended guide rails make sure that the delicate capillaries can be inserted safely into the cartridge. Two O-rings also ensure the glass capillary tube is sealed in the cartridge. The cartridge itself was rounded to simplify production using injection molding. Ultra-transparent COP plastic was selected as the material for parts of the cartridge so that the user can check to make sure the capillaries are filled completely before inserting them into the test unit. In designing the reagent block, Gerresheimer reduced and standardized the thickness of the block walls to achieve the highest possible stability

and production speed with the lowest possible material costs.

CAMPTON Diagnostics selected Gerresheimer as their development partner because the company offers agile project handling and can quickly and flexibly implement changes. "We are well positioned to work both with start-ups and large pharmaceutical companies," explains Manfred Baumann (Global Executive Vice President Sales & Marketing Administration & TCC). "Thanks to our multi-stage Gx phase model, we can optimally adapt to the needs of our customers. For start-ups especially, fast availability of functional prototypes or small series is critical for clinical testing."

For the blood test, small amounts of capillary blood are taken from the patients, for example from a drop of blood. The blood is drawn by a glass capillary, which is inserted into the test cartridge. Next, the cartridge and reagent block are inserted in the unit. On the cartridge biochip, disease-specific biomarkers in the blood react with the corresponding antibodies on the chip. With the unit, indications of various infections and types



Small amounts of whole blood are enough to identify numerous diseases.

of cancer or autoimmune diseases can be identified right at the point of care, depending on the test cartridge used, and samples no longer have to be sent to the lab and await analysis.

## About CAMPTON Diagnostics

CAMPTON Diagnostics GmbH was established in 2016 as a spin-off of the Fraunhofer Institute for Silicon Technology (ISIT) in Itzehoe, which it maintains a strategic technology partnership with. The company develops and markets complete measurement systems for point-of-care diagnostics. CAMPTON Diagnostics combines biotechnological and engineering expertise under a single roof.

More information at [www.campton-diagnostics.com](http://www.campton-diagnostics.com)



Gerresheimer has optimized the test cartridge and reagent block for ergonomic handling and plastic-suitable production.



## Droppers from Boleslawiec will be classified as medical devices class 1

In 2017, the European Commission approved a new regulation for medical devices, which from May 26, 2021 will replace the current directive 93/42/EEC. The new MDR 2017/745 regulation introduced several changes in the field of medical devices. Following the MDR regulation, the European Medicines Agency issued a guideline in which ophthalmic droppers are classified as medical devices class 1. The new directive aims to increase the quality and traceability of medical devices.

These types of plastic droppers are manufactured in our plant in Bolesławiec. To meet the new requirements of MDR 2017/745 and ISO 13485,

we have to adapt our QM system to the new MDR regulations and provide a large amount of additional information. The requirements for product documentation have also increased, making it much more comprehensive. Gerresheimer Boleslawiec is implementing the new requirements in order to be able to support customers in the change-over process by May 26, 2021. These new regulations are only requirements within the EU and cover manufacturers in EU and products being sold within EU. In the Americas as well as in Asia and the UK, droppers continue to be considered primary packaging rather than medical devices.



## Gerresheimer Zaragoza starts IBM production of vials

Our Spanish plastic packaging plant in Zaragoza has specialized mainly in the production of PET containers. A large order for the production of 15ml vials made of HDPE therefore presented a particular challenge. This was because a new production platform with a completely different raw material and technology (IBM = Injection Blow

Molding) had to be developed within a short period of time.

Thanks to the good cooperation with the Danish sister plant in Vaerloese and the dedicated efforts of the Spanish technicians, the start of production was a complete success.



## Covid-19 drug packaged in Duma Twist-off containers

The Duma Twist-Off container from our production facility in Vaerloese, Denmark, was selected as the ideal packaging for a new Covid-19 drug which comes in tablet form. It directly targets the virus and blocks its replication.

The Drug has been approved based on the final results of a phase 3 clinical trial conducted in patients with mild to moderate Covid-19 infection. The trials have shown that the drug minimizes the likelihood of complications. The drug is available worldwide.



## Gerresheimer participates in the European joint project Furnace for the Future (F4F)



Where glass is melted, there is a high energy demand.

Gerresheimer is one of a total of 19 glass producers who have joined forces in a project with the aim of achieving climate-neutral glass production. In collaboration with the Ardagh Group, they want to drive forward the development, financing and operation of a hybrid electric melting furnace. To this end, an industrial-scale furnace is being built in Obernkirchen, Germany, for the commercial production of glass containers from renewable electricity. The demonstration facility will be built in 2022, with initial results available in 2023. Both technical and market-specific criteria for melting glass to produce glass packaging on a large scale will be evaluated. The companies participating in the Furnace for the Future project collectively produce more than 90 percent

of the glass containers in the European Union, equivalent to more than 80 billion containers. Meanwhile, the F4F (Furnace for the Future) project was selected from 311 projects. This makes it one of the top 70 projects applying for second-stage support from the European Union's ETS Innovation Fund, one of the world's largest funding programs to promote and demonstrate innovative low-carbon technologies.

The glass industry already uses electric furnaces in a few of its 150 manufacturing plants across Europe, but only on a small scale and exclusively for the production of specialty glass. With the new technology, it will be possible to operate electric furnaces with more than 300 tons of capacity per day, which can produce any color of glass and use a high percentage of recycled glass. The use of recycled glass can help reduce CO<sub>2</sub> emissions because less energy is needed to melt it down. For this reason, the 19 companies are investing in the development of this collaborative project to benefit from the experience gained with this technology.

In the USA and India, Gerresheimer already uses twice as much electrical energy to process Type I borosilicate glass as comparable furnaces from most of the companies involved in the project and thus already has a head start in terms of experience. In Belgium, Gerresheimer operates its opal glass furnace fully electrically.

---

## Gerresheimer Boleslawiec switches completely to electricity from renewable energy sources

In order to minimize the impact of our operations on the environment and become more sustainable, Gerresheimer Boleslawiec in Poland will be using 100% electricity from renewable sources from this business year onwards. Electricity generated from wind, solar, hydro or biomass sources is classified as renewable energy and its origin will be confirmed by a "green certificate".

Our production facility thus contributes to better protecting the environment, combating climate change and creating a healthier future for generations to come. Gerresheimer has set itself the target of using only electricity from renewable energy sources in all its sites by 2030.



Wind energy is one of many renewable energy sources.





# New production sites and capacity expansions



The new plant in Skopje (North Macedonia) was ceremonially opened.

## Official opening of Gerresheimer Skopje

On April 27, the official opening ceremony of our new MDS plant in Skopje, North Macedonia, took place, attended by the Prime Minister of North Macedonia, Zoran Zaev, the Deputy Prime Minister, Fatmir Bytygi, the Health Minister, Venko Filipche, the Director of the Industrial Development Zones in North Macedonia, Jovan Despotovski and distinguished guests. The government representatives spent time to get a close insight look into the production of our Skopje plant.

Oliver Burgel, Global Executive Vice President Operations, Procurement, HR & Quality, Member of the Management Board Gerresheimer Regensburg, announced during the ceremony: "We started with first industrial production in December 2020. The COVID-19 impact

delayed the production start, but not significantly. An outstanding accomplishment which could only materialize because of excellent support by our customer base, associates, and suppliers as well as by the government of North Macedonia. Currently sincere negotiations are ongoing regarding an expansion to produce pre-fillable glass syringes."

In Skopje we are producing medical plastic systems for both the pharmaceutical industry and the medical technology sector. The products are being manufactured with brand new, state of the art and highly sophisticated equipment under clean room conditions in 12,500 sqm of modern production facilities. Injection molding and automatic assembly lines are already up and running in the facility.

## Ground breaking for new facility in Berlin, Ohio

On March 9, 2021 the ground breaking for a new Pharmaceutical Plastic Packaging (PPP) facility started in Berlin, Ohio. A building project of approximately 60,000 sq.ft. manufacturing facility will be added to our location in Berlin, Ohio. We will be operating in certified clean room (ISO 8) production with around 30 production lines.

We will be able to offer any packaging for solid applications, ophthalmic and syrup, as well as closures and among others bring production from other regions into the US.



Groundbreaking in Berlin, OH (USA)

## Vial capacities in Queretaro (Mexico) expanded



Clean room production at our tubular glass plant in Queretaro (Mexico)

Gerresheimer has a production facility for pharmaceutical products made of glass in Santiago de Querétaro, Querétaro (Mexico). Here, mainly vials, cartridges and syringes made of tubular glass are produced. The Mexican plant thus contributes to supporting the global market demand for Covid 19 vaccines with our vials and syringes, alongside Gerresheimer's other major production facilities in the USA, Europe and Asia. Héctor García Padilla, Senior Plant Director at Gerresheimer Querétaro, underlines: "Around 2.5 billion vaccines need to be administered in the pandemic in a

short period of time. I can comment that Gerresheimer, in its different plants, will be producing approximately one third of the demand for vaccine vials which will be filled and applied during 2021 at a global level. We have therefore also increased capacity here in Mexico by investing in new equipment for vials in order to be able to meet existing and future demand."

For more information on our Mexico plant and the Mexican glass industry, please see the April 2021 issue No. 94 of Glass Worldwide: GW94.pdf ([glassworldwide.co.uk](http://glassworldwide.co.uk))

## More space for the Small Batch Production of plastics

Gerresheimer Regensburg increased the capacity of its Small Batch Production in the Technical Competence Center (TCC) Wackersdorf. To this purpose, already existing production area has been converted into clean room space, and a new building with additional clean room and office space has been completed. The company is reacting with the expansion of production space in keeping with the growing number of projects that require smaller numbers of units or for which a smaller number of complete products are already required prior to large batch production for development, approval, and industrialization.

Gerresheimer had already invested a double-digit sum in the millions in the expansion of Small Batch Production in Wackersdorf in 2018. In the context of the plastic and glass competence of the company, 900 square meters of additional area was at that time created for the development and industrialization of glass products like syringes and carpules.

A double-digit sum in the millions has once again being invested to adapt the capacity of Small Batch Production in the plastics segment to the growing number of projects. Produced here are, for example, patch pumps for administering medication, drug containers for injection without needles, point-of-care tests, infusion sets for X-ray contrast agents, syringes, and much more.



The new building with the expanded small batch production in the area of plastics

## New production plant for plastic containers in India

With Triveni Polymers Pvt. Ltd. in Kundli, Gerresheimer has already been well positioned in India for many years. A second production plant in Kosamba (Gujarat) is to strengthen the production capacity for Triveni plastic containers, which are in strong demand worldwide.

The portfolio includes plastic containers for medicines in many formats and designs. The production of child-resistant closures is also particularly important.

Indian custom, the construction of a building measuring several thousand square meters a new plastic packaging production with clean-room environment began in December. Gerresheimer is thus concentrating its production of pharmaceutical primary packaging made of moulded glass, tubular glass and plastic at the Kosamba plant near Mumbai.



Colorful entrance area to the Bhoomi Pujan, as the country worship is called in Indian.

## Capacity expansion at the Lohr site (Germany) successfully completed

About every ten years, the furnaces in our moulded glass plants have to be renewed. In 2019 this was the case at our site in Essen (Germany), and this year the furnace construction was due at our Lohr plant (Germany).

On January 7 this year, the glass draining took place and on March 3, 2021, the first three machines began operating again. In addition to the furnace for amber glass production, the associated buildings and additional production equipment were also completed. The kiln, regeneration chambers, feeding system and flue gas system were also renewed. The new furnace in Lohr will increase capacity by more than 50% in terms of additional tons of glass per day. This will produce around 1 billion jars and bottles of various sizes for our customers every year.



Exterior view of the Lohr plant with new chimney and exhaust gas filter



Backward view of the new melting furnace



## Gerresheimer AG extends CEO **Dietmar Siemssen**'s contract by five years

At its meeting on February 17, 2021 the Supervisory Board of Gerresheimer AG extended the contract with CEO Dietmar Siemssen (57) to the end of October 2026. Dietmar Siemssen has been CEO of Gerresheimer AG since November 2018.



## 25 years with the company: **Niels During** is driving our success in primary packaging plastics



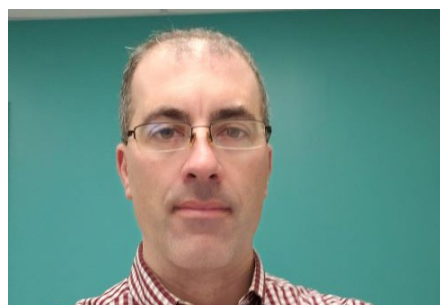
On January 01, 2021, Niels During, Global Executive Vice President Primary Packaging Plastics, celebrated 25 years with the company. He began his career in 1982 as accountant and entered the plastic world on January 01, 1996. He became Managing Director and shareholder of Dudek Plast A/S, located in Vaerloese in Denmark. After the sale of the company to Superfos, Niels became CEO of the respective division in 1999 and developed the pharma packaging business there. Since Gerresheimer took over the company in 2006, he is leading the primary packaging plastics business unit.

## **Rafal Bienias-Gebski** is Senior Plant Director Boleslawiec Tubular Glass



Rafal Bienias-Gebski has been appointed as Senior Plant Director Boleslawiec Tubular Glass and Chairman of the Management Board Gerresheimer Boleslawiec S.A. effective from January 1, 2021.

## **Sean Fitzpatrick** is Vice President Engineering Tubular Glass Global



Sean Fitzpatrick, Senior Director Engineering, Tubular Glass Converting, is appointed Vice President Engineering Tubular Glass Global effective from January 15, 2021

## **Gerry Wilkins** is Senior Director Sales and Marketing USA and Canada Primary Packaging Glass



Gerald "Gerry" Wilkins has been appointed as Senior Director Sales and Marketing USA and Canada Primary Packaging Glass, effective from February 15, 2021.

## **Rupesh Deore** is Director Sales & Marketing Primary Packaging Glass in India



Mr. Rupesh Deore has been appointed as Director Sales & Marketing for PPG India effective from February 2, 2021. He has more than 20 years of experience in Strategy, Sales and Marketing, Product Management and Business Development.





# New corporate design visualizes Gerresheimer's strategic orientation

New corporate design visualizes Gerresheimer's strategic orientation and sustainable growth, innovation, excellence and customer focus. The new corporate design will be rolled out in the complete internal and external appearance. This is already visible on the fundamentally improved new corporate website [www.gerresheimer.com](http://www.gerresheimer.com). A new logo, new color and image worlds and an optimized structure convey a fresh, lively and strong look and feel to customers, applicants, shareholders and other stakeholders.

"With the new corporate design, we visualize and underline Gerresheimer's transformation into a sustainable growth company as an innovation leader and solution provider," says Dietmar Siemssen, CEO of Gerresheimer AG. "The transformation of our company becomes visible internally and externally with the new corporate design. This is what the new corporate design stands for: our growth strategy, excellence, customer focus and innovation. The new claim sums up our aspiration: innovating for a better life."

## gerresheimer

innovating for a better life

With "innovating for a better life", Gerresheimer is adding a claim to its logo for the first time. In future, the claim will play a central and important role in the communicative image.



The cover page of the Annual Report 2020 in the new design.



In parallel with the new corporate design, Gerresheimer has fundamentally revised its homepage and social media channels. The design and menu navigation of the new website are such that everything essential can be found quickly.

### Innovating for a better life

The new corporate design shows a modern company with a very open and friendly logo, with fresh colors, with innovative imagery and design. With "innovating for a better life" Gerresheimer adds a claim as an addition to the logo for the first time. It places a clear and strong focus on Gerresheimer's innovative strength and thus underlines the aim of the new strategy. It also makes it clear that Gerresheimer is an important partner for pharma and biotech companies and for the cosmetics industry. In future, the claim will play a central and important role in the communicative image.

### The new Gerresheimer website

In parallel with the new corporate design, Gerresheimer has fundamentally revised its homepage and social media channels. The design and menu navigation of the new website are such that everything essential can be found quickly. The navigation structure makes it easy for customers, applicants, shareholders and other interested parties to find the right information. Gerresheimer's broad portfolio of products and solutions is now presented in four categories. Users are thus picked up at the top menu level and quickly reach the pages relevant to them.

### Innovation and sustainability strongly weighted

The topics of innovation and sustainability can be found at first glance from now on. Sustainability is of central importance to Gerresheimer. On the new pages, the company now provides detailed information on the topics of environment, circular economy as well as employees and society.

Sustainability is of central importance to Gerresheimer  
[www.gerresheimer.com](http://www.gerresheimer.com)

## Gerresheimer with positive start to the financial year 2021

“We got off to a good start in the financial year,” said Dietmar Siemssen, CEO of Gerresheimer AG. “Our high value products and solutions for biotech and pharma companies saw significant growth in the first quarter. The order books are full. We are well on our way to achieving our targets for 2021. The achievements which are now becoming visible, confirm the effectiveness of our growth strategy, which will continue to roll out systematically.”

In the first quarter of 2021, Gerresheimer Group generated revenues of EUR 303m. Revenues in core business increased organically by 3.1% year on year. The Plastics & Devices Division grew organically by 3.0% in the first quarter of 2021, thanks in particular to the syringes business and the demand for pharmaceutical plastic packaging. Currency-adjusted sales were up 3.2% year on year in the Primary Packaging Glass Division, even though the cosmetics business in the Moulded Glass Business Unit continued to feel the negative effects of the Covid-19 pandemic. The pharma business benefited in the first quarter from growing demand for high value solutions and products such as Gx RTF®-syringe systems, Gx® Elite Glass und Gx® RTF Vials, particularly for biopharmaceuticals.

The full Quarterly Statement for the first quarter of 2021 is available here:

<https://www.gerresheimer.com/en/company/investor-relations/reports>



## Update: Our contribution in the Corona pandemic

Gerresheimer has expanded its production capacities for the manufacture of injection vials for Covid-19 vaccines also in the first quarter of 2021. Gerresheimer is thus facing up to its responsibility and making an important contribution to the fight against the pandemic by supplying glass vials for filling vaccines. At the end of 2020 and in the first quarter of 2021, a total of around 160 million vials for Corona vaccines were sold. Current customers include Biontech/Pfizer, Moderna and Astra-Zeneca. But Gerresheimer is also in talks with potential candidates for further vaccine approvals. Gerresheimer CEO Dietmar Siemssen is sticking to the target of selling one billion vials for Corona vaccines by the end of 2022. “The one billion is absolutely realistic, which corresponds to the capacities we have and will additionally build up to some extent.” With the German company Schott and the Italian Stevanato Group, Gerresheimer is one of the world’s largest producers of vaccine vials.

Currently, the vaccines are administered in vaccination centers and doctors’ offices, where they are drawn up from the vials onto disposable syringes and injected. Should annual follow-up vaccination with the Covid19 vaccines become the standard after the initial vaccination coverage of the population, further business will open up. This is because the vaccines will then probably be supplied in pre-filled syringes, which Gerresheimer also produces - in contrast to the disposable syringes currently in use. Gerresheimer then expects double-digit growth rates in the syringe segment.





## Events

Trade fair  
**European Medical Device  
and Diagnostic Development  
and Product Management  
Conference**  
May 25 - 27, 2021  
Virtual event

Trade fair  
**API China**  
May 26 - 28, 2021  
Guangzhou, China  
China Import and Export Fair  
Pazhou Complex  
Booth 13.2 K25

Press  
**Annual General Meeting 2021**  
June 09, 2021

Trade fair  
**DCAT Week**  
July 12 - 15, 2021  
New York, USA  
Virtual event

Trade fair  
**CPhI South East Asia**  
August 04 - 06, 2021  
Bangkok, Thailand  
Impact, Stand Z04

Trade fair  
**MD&M West**  
August 10 - 12, 2021  
Anaheim, California, USA  
Anaheim Convention Center  
Stand 2577

Trade fair  
**CPhI North America**  
August 10 - 12, 2021  
Philadelphia, PA, USA  
Pennsylvania Convention Center

### Imprint:

© Design and editing  
Gerresheimer Group Communication &  
Marketing  
Klaus-Bungert-Straße 4  
40468 Düsseldorf, Germany

Jens Kürten  
Phone: +49 211 6181 250  
jens.kuerten@gerresheimer.com  
Dr. Cordula Niehuis  
Phone: +49 211 6181 267  
cordula.niehuis@gerresheimer.com  
Marion Stolzenwald  
Phone: +49 211 6181 246  
marion.stolzenwald@gerresheimer.com

[gerresheimer.com](https://www.gerresheimer.com)



## Customized on-body delivery device for high volume and large molecules



## Ready-to-use for home care application

Highly customizable to your needs

- for a wide range of viscous liquids
- high volume – up to 20 ml
- various needle sizes
- adjustable container sizes
- connectivity options

One-Stop-Shop Gerresheimer: from cartridge to device.

**SensAIR™**

**gerresheimer**  
innovating for a better life