UPDATE.26

GERRESHEIMER

Customer Newsletter
October 2018

CPHI NEWS

COP syringes for demanding, sensitive medications
Gx RTF® ClearJect®

Micro pump for Parkinson's treatment
CE declaration obtained

Best in class for optimal processing
Gx® Elite Glass Vials

Full solution for irradiated products incl. validation
Irradiated dropper bottles

Fits through many mailboxes and is therefore ideal for online suppliers
Duma® Pocket

Safe and easy syringe handling
Gx InnoSafe®

GERRESHEIMER AT CPHI WORLDWIDE 2018

Micro pump for Parkinson's treatment from Gerresheimer subsidiary Sensile Medical receives European CE declaration of conformity

A wearable micro pump from Sensile Medical has received EU certification for the European market. A European pharma company has obtained a CE declaration of conformity for the pump, which is specially designed for the treatment of Parkinson's disease, and is now bringing it to market. This is the first time a micro pump from Gerresheimer subsidiary Sensile Medical has come into commercial use.

The micro pump is used in the treatment of advanced Parkinson's disease. Its great benefit for patients relates to ease of use, including features such as automatic filling with liquid medicine. State-of-the-art technologies such as a color display, charging unit and data storage help enhance therapy management. The handy-sized, discreet pump comes with a leather bag for it to be worn on the user's belt.

A prerequisite for market launch was the CE declaration of conformity for medical devices. Now it has that, the pharma company can bring the pump to market. Sensile Medical developed the micro pump for Parkinson's disease treatment especially for the pharma company concerned. It is one of currently five concrete customer projects in various therapeutic areas.

"The CE declaration of conformity and market launch for the first micro pump, in this case for Parkinson's treatment, marks a key milestone for our subsidiary Sensile Medical. The deservedly strict approval standards for patient-critical delivery systems of this kind are now satisfied and market launch can begin. We are correspondingly optimistic regarding further application areas for Sensile Medical's micro pump technology," explained Andreas Schütte, Member of the Management Board of Gerresheimer AG.

A personally programmable basal profile enables treatment to be optimized for Parkinson's patients and ensures that they receive the precise dosage they need. Likewise for the bolus rate: A patient can cause the device to deliver a bolus at just one touch of a button. Sensile Medical's patented SenseCore micro rotary piston pump at the heart of the pump device ensures exceptionally safe, precise drug delivery. An even greater level of safety is attained by eliminating flow rate calculations.

"In developing the micro pump for Parkinson's treatment, we have completed a highly ambitious project to exacting requirements that improves treatment for patients. The device also comes with a large number of different languages already on board, enabling its use in many countries around the world," explained Derek Brandt, CEO of Sensile Medical AG.

Sensile Medical – a member of the Gerresheimer Group since July 2018

By acquiring Switzerland-based Sensile Medical AG in July this year, Gerresheimer is expanding its business model to become an original equipment manufacturer (OEM) for drug delivery platforms with digital and electronic capabilities. Sensile Medical develops innovative drug delivery products and platforms, including digital connective functions, for pharmaceutical and biopharmaceutical customers. The company will be joining Gerresheimer's team of experts and sales specialists at CPhI Worldwide in Madrid for the first time.

The micro rotary piston pump – a key component

Sensile Medical AG developed a new kind of micro pump, which is the key component of all products. SenseCore is small, very precise in dosage, and inexpensive to manufacture as it is only made up of two plastic parts. Thanks to its high degree of flexibility, it is compatible with a variety of drugs. It is the key component in a range of pump platforms. Sensile Medical's current product range stands out thanks to its high dosage accuracy, easy handling, and safe drug delivery mechanisms.

GERRESHEIMER AT CPHI WORLDWIDE 2018

Production starts for the Gx RTF® ClearJect® COP syringe

Series production of our first plastic syringe has begun at the Pfreimd site

Production in the cleanroom in accordance with GMP Grade C

At the Pfreimd site, we have started mass-producing our new Gerresheimer Gx RTF® ClearJect® needle syringes. The products, made from the high-performance plastic COP (Cyclo-Olefin Polymer) are used when especially complex drugs need to be packaged. The new product is the first plastic syringe developed by Gerresheimer itself and the first manufactured in Germany; it is the first syringe of any kind for the Pfreimd site and Gerresheimer Regensburg GmbH.

Complete system for high cost-effectiveness

The new Gx RTF® ClearJect® COP syringe is available in a length of 1 ml with cannula. The design is compliant with ISO 11040-6. The first model of the syringe is fitted with a 27 gauge, 1/2 inch (12.7 mm), 3-bevel thin-walled stainless-steel needle. A comprehensive syringe system is available, complete with the COP syringe body with plungers, plunger rod, backstop or finger flange, and needle shield. Use of market-standard components provides a cost-effective complete solution.

COP syringes for complex drugs

Primary packaging for innovative drugs needs to be of a high standard. Biotechnologically manufactured medications in particular must not interact with the packaging as they might have an undesired effect upon the patient. Gx RTF® ClearJect® syringes have a particularly low interaction potential. The material COP has a high pH tolerance and does not release any alkali ions in the drug solution, which means that the risk of a ph value shift is eliminated when in storage. They are break resistant and as transparent as glass. It has a low oxygen permeation rate compared to other plastics, and its values for extractables and leachables are also low.

Production for uncompromising quality

At the Pfreimd site, products are manufactured in accordance with the particularly high quality requirements for pharmaceutical primary packaging, in line with GMP. The new production system, built by the automation team from the Wackersdorf Technical Competence Center, is designed so that the entire processing chain takes place in the cleanroom, from injection molding to complete RTF packaging. There, in close partnership with our inspection specialists from Bünde, we have installed a series of cameras at different stations to monitor all of the relevant stages of production. This means that we are using Gerresheimer Bünde GmbH's extensive expertise in inspection systems for glass products and transferring it to the production process for plastics. The inspection system for the production line ensures uninterrupted monitoring throughout the entire process. The Gx® G3 inspection software was developed for glass products over several years and is an established standard for glass-processing machines. Injection-molded parts sometimes have other additional inspection requirements. New evaluation procedures have therefore been specially developed and fully, collaboratively tested for this purpose.

When manufacturing plastic syringes, we test all relevant geometric parameters and check for cosmetic or visual defects as we always have for glass syringes. This means that, among other things, we carry out a complete visual inspection – a 360-degree product test – for the entire syringe body. All data relevant to the process is stored in a database, which also serves as a data source for the CAQ (Computer-Aided Quality) system. This system was also developed in Bünde for process data analysis and logging and is being further developed for new customer requirements.

GERRESHEIMER AT CPHI WORLDWIDE 2018

1 Cannulas are separated

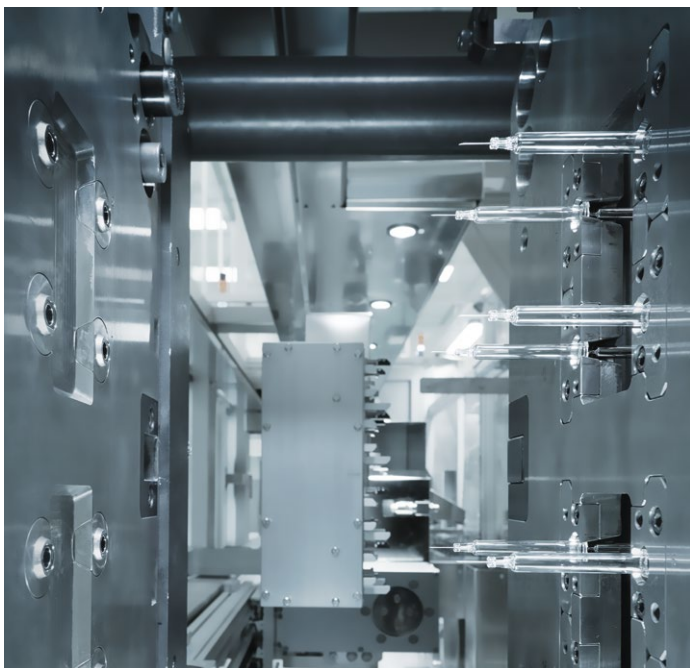
In the first stage, the cannulas are separated. Cameras check whether the cannulas are lying with the tip towards the handling for insertion. If they are, the insert-placing gripper can insert the cannulas into the mold correctly. If even one of the cannulas is positioned with its butt towards the handling for insertion or is not there, all of the separated cannulas are discarded and separated once again.

In the first stage,
the cannulas are separated.

2 Insert molding for adhesive- and tungsten-free production

In the second stage, the gripper then inserts the cannulas into in the multi-cavity hot runner mold, where they are overmolded with plastics when the syringe body is injection-molded.

Production using the injection molding procedure has a whole range of benefits. Firstly, it makes the syringe design flexible and particularly precise. For expensive, innovative drugs in particular, this has significant benefits as it minimizes dead volume and means that very little of the expensive drug is left in the syringe when used. The cannula is also firmly connected to the syringe body during the overmolding process. Therefore, there is no need to make a hole in the syringe cone for the glued-in cannulas, making it impossible for tungsten or adhesive to be released.



In the second stage, the gripper then inserts the cannulas into in the multi-cavity hot runner mold, where they are overmolded with plastics when the syringe body is injection-molded.

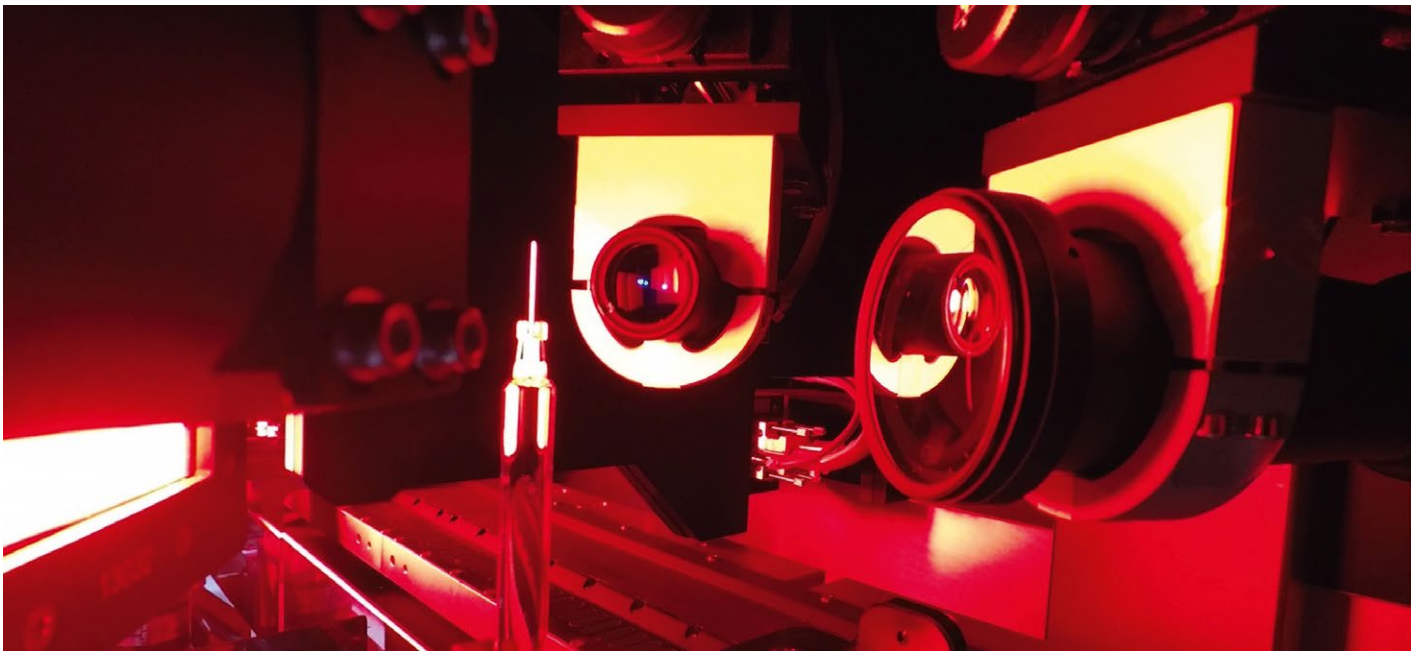
GERRESHEIMER AT CPHI WORLDWIDE 2018

The Gx RTF® ClearJect® production system

The completed syringes are then fully automatically taken and placed on the conveyor belt, from which the gripper moves them to the second area of the syringe production system.

This is where the cosmetic and geometric inspection takes place, serving as the first of two testing stations. At the first station, the injection-molded part is examined to ensure that there are no defects. The inspection systems differentiate between cracks and scratches, particles and air pockets. It can even detect small defects measuring 25 µm. By way of comparison, a hair has a diameter of 60 µm. The next station has two cameras which check the geometry of the syringe head, determine whether the cannula is at the correct angle, and ensure that no snags have formed on the cannula tip.

Inspection of needle angle and snag-free tip

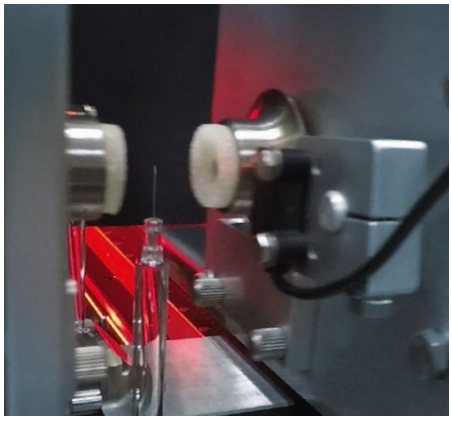


GERRESHEIMER AT CPHI WORLDWIDE 2018

3

Siliconization with highly viscous silicone oil for reliable functionality and a high level of operating comfort for the end user

During further processing, the syringe and the cannula are siliconized with a closely monitored amount of the highly viscous silicone oil Dow Corning 360 MD (12,500 cST) which releases a particularly low quantity of particles into the drug solution. This ensures reliable functionality and a high level of operating comfort for the end user. The silicone oil is placed onto the cannula with a little sponge. The syringe body is siliconized by spraying it with a nozzle.



The silicone oil is placed onto the cannula with a little sponge

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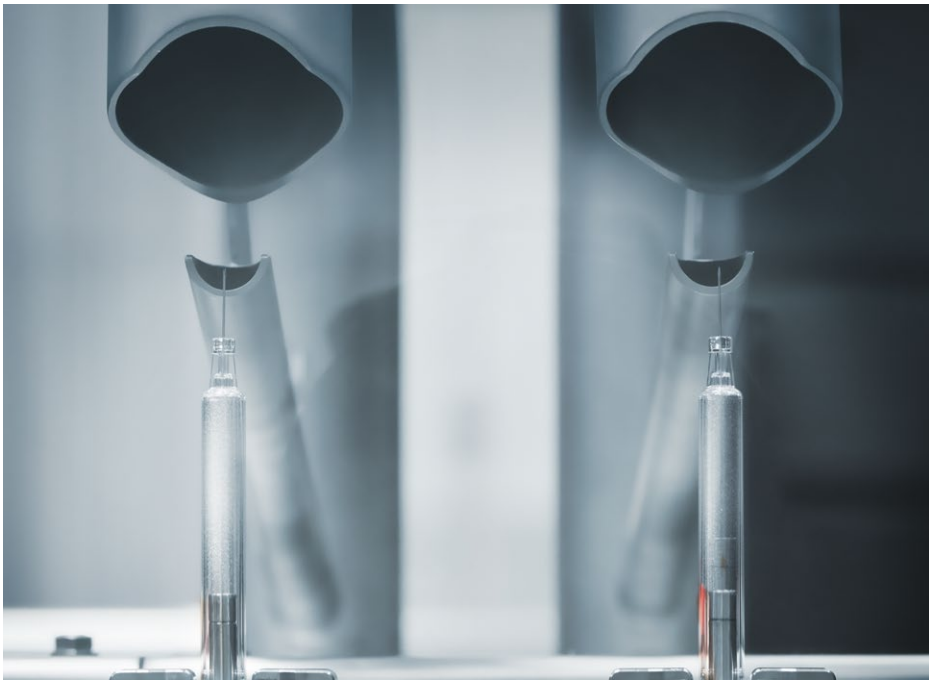
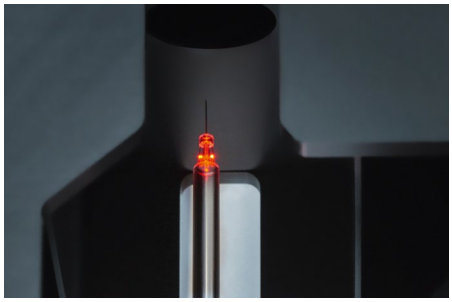
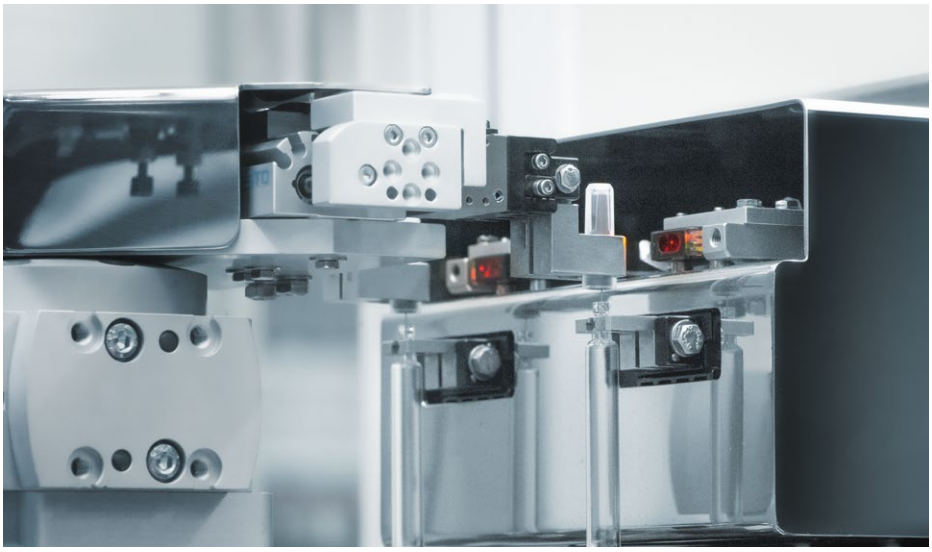




Cannula is checked for consistency

The cannula is then blown out to remove any emulsified silicone oil that might be in it. It is then inspected to check that the siliconization is even along the entire syringe body and that the cannula is not clogged with silicone or any other foreign particles.



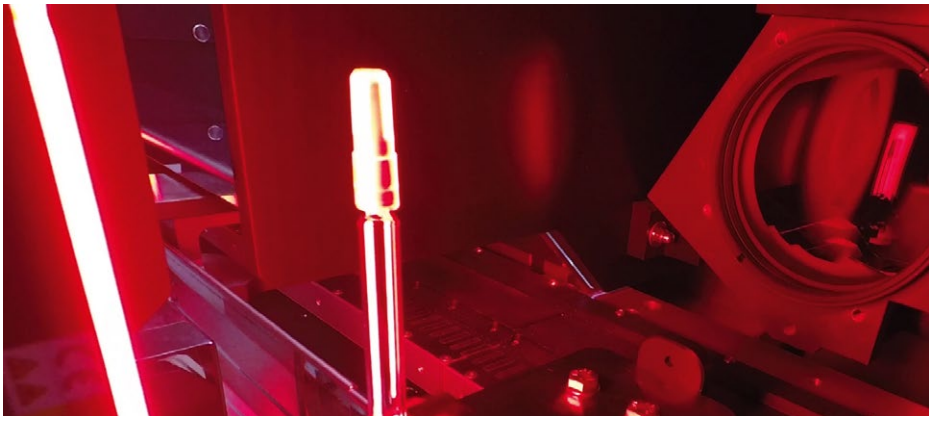
The needle protection system is positioned over the syringe

4

Applying needle shield – market-standard components to ensure the syringe system is cost-effective

A market-standard needle protection system is then placed onto the syringe. To do this, the needle shield is isolated in a vibratory bowl feeder and then positioned over the syringe.

GERRESHEIMER AT CPHI WORLDWIDE 2018



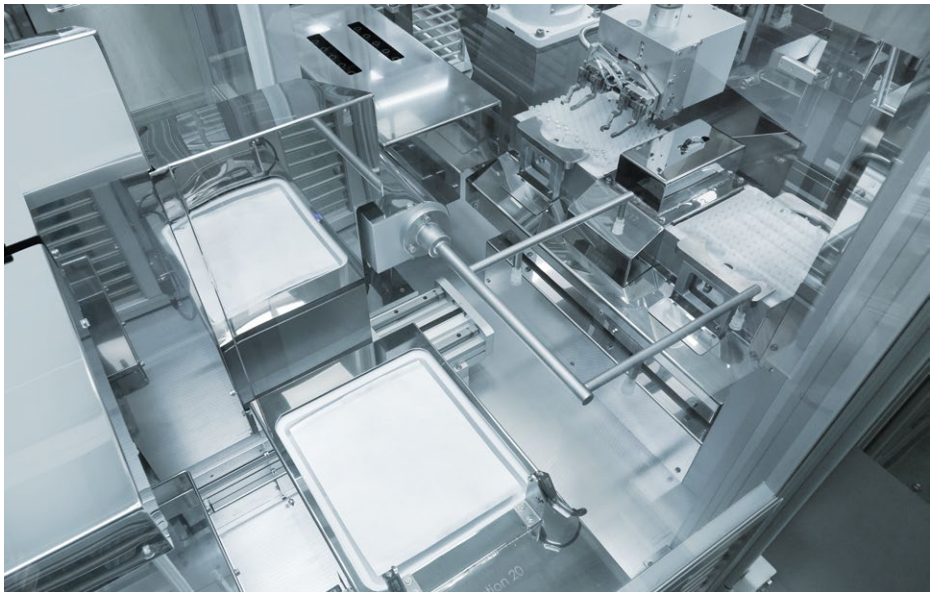
A camera checks whether the needle shield has been moved far enough above the cannula to avoid pricking the rubber. If it has, the needle shield is pushed onto the cannula. Finally, a camera checks whether the entire length of the syringe and the needle shield are correct, and whether the needle shield sits straight on the cannula.

A camera checks whether the entire length of the syringe and the needle shield are correct, and whether the needle shield sits straight on the cannula.

5

Standardized nest/tub format for ease of use with filling lines

Finally, the completed syringes are packaged in standardized nests and tubs to ensure the customer can use them with the filling lines without any problems. The nests are loaded with the syringes on a rotating table and placed into the tubs, which are then sealed with a Tyvek wrap. At the final station, an infrared camera checks that the tubs have been sealed correctly. Finally, the tubs are packaged in headerbags.



Packaging in standardized nests/tubs

LECTURE

October 10, 2018, 4:30 – 5:00 pm
CPhI Worldwide Madrid
InnoPack p-mec, 4F121

Advantages of polymer syringes for demanding formulations

Prefillable polymer syringes have gained big interest by the pharmaceutical industry in recent years. Besides the traditional glass syringe, polymer syringes have established in the aesthetics as well as in the biotech and animal health sectors. There are some advantages of polymer syringes, especially high break resistance and freedom of design, as they are not produced from tubes like glass syringes. Especially for highly demanding drug formulations the features "glue-free" and "tungsten-free" are important. Particulate matter caused by the siliconization of the syringes are often an issue for sensitive drug formulations. Low particle loads are achieved by a special siliconization and there are silicone-free options feasable. The presentation will give an insight into the new production facility for COP syringes called "Gx RTF® Clearject®" in Germany.

Bernd Zeiss

Head of Global Technical Support Medical Systems

Bernd Zeiss is biologist by education and graduated from the University of Göttingen, Germany. After several years working as a biostatistician, in lab automation and in pharma sales, he today is a member of the Gerresheimer Business Development team. He works in the Gerresheimer Centre of Excellence for prefillable syringes as Head of Technical Support Medical Systems. His main areas of work are technical customer support with regard to syringe systems as well as investigating possible interactions between syringe components and drug substance. He also evaluates innovations like COP syringes in comparison to glass and carries out inhouse functionality studies with prefilled syringes.

Gx InnoSafe®:

Greater protection against needle stick injuries

Gerresheimer to present an integrated and passive safety system for avoiding needle stick injuries at CPhI Worldwide in Madrid

With their exposed cannulas, used syringes are a source of risk at physicians' surgeries, laboratories, and hospitals the world over. Although existing needle protection systems reduce the risk of injury for the end user, they are more complex for pharma companies to fill and must be handled by medical specialists. With the Gx InnoSafe®, Gerresheimer is now offering a syringe with an integrated passive safety system that avoids inadvertent needle stick injuries, prevents repeated use, and is designed with pharmaceutical companies' production processes in mind as well as being optimized for simple and intuitive use by medical specialists.

"For health care workers, handling used hypodermic needles is part of their day-to-day job. In some cases, this leads to serious diseases being transmitted. It is estimated that around one million needle stick injuries occur in Europe every year," explains Maximilian Vogl, Global Head of Product Management Gx® Solutions, adding that in the worst case, it can lead to serious infections. There is also the risk of used syringes being used for a second time by accident.

Gx InnoSafe® reliably protects against inadvertent needle-stick injuries and prevents repeated use. Unlike many existing solutions, the needle shield mechanism is activated automatically and does not require any additional manipulation by the end user.

It is therefore known as a passive needle protection system. The processing of the Gx InnoSafe® syringes, which can be carried out without any major changes to existing lines in a nested state, is just as beneficial to pharmacists. This eliminates the need for an additional step to assemble the safety system, as is currently standard on the market.

The user wants a safety system that does not change the familiar injection procedure, that is intuitive and ergonomic to handle, and that requires no additional manual activation to secure the cannula before it is disposed of. As part of the manufacturing process, the Gx InnoSafe® safety system is installed on Gx RTF® glass syringes in the clean room like a standard needle shield. The syringe body is completely visible so that the presence of the active ingredient, its purity, and its administration can be observed and monitored ideally. The injection itself is also administered as usual. After removing the ergonomic sealing cap with an integrated, flexible needle shield, the syringe is placed on the injection site, the cannula is inserted into the tissue to be administered, and the active ingredient is injected as with a common syringe. The safety system cannot be activated inadvertently because the mechanism is not preloaded before the injection. The system is only activated when the cannula is inserted and it automatically ensures that the safety mechanism is permanently locked when the syringe is removed from the injection site. This guarantees that the cannula is reliably covered and the syringe cannot be reused.

Gx InnoSafe® provides advantages for pharmaceutical companies in the filling process of ready-to-fill syringes. The safety system is installed during the RTF process entirely automatically and fully checked for any punctures and positioning with a visual inspection. The syringes are then packaged into trays of 100 (nests) and tubs, including the safety system, and are then sealed and sterilized with ethylene oxide gas. They can be processed on existing filling lines without any additional preparation or assembly steps.

The design of the safety mechanism avoids inadvertent activation during filling, packaging, and transport. The flexible needle shield part is available in all standard market elastomers for pharmaceutical applications. With the introduction of the new product line, Gx InnoSafe® is available for the 1.0 ml long RTF glass syringe with ½ "cannula. Further needle variants will follow.

GERRESHEIMER AT CPHI WORLDWIDE 2018

High quality and filling performance

The Gx® Elite vials have set new standards for type 1 borosilicate glass vials. They are the result of comprehensive optimization measures in the conversion process, which have focused on designing out the risk to create product flaws during production including the removal of all glass-to-glass- or glass-to-metal-contact beginning with the tubing material all the way through final packaging. The chemical composition of the borosilicate glass still stays the same.

The best in its class

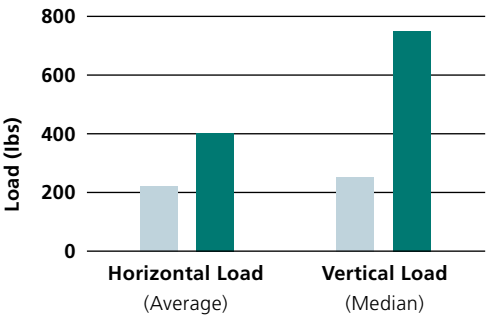
"The Gx® Elite vials are the result of several years of careful product development and our customers are really impressed with them too," says Hans-Ulrich Pieper, Sales Director Europe Tubular Glass Converting at Gerresheimer, emphasizing just how much of an impact avoiding glass-to-glass contact during the production process has on the quality of the vials. The highly shatter-resistant vials are extremely durable and free of cosmetic defects. They also boast an incredibly robust structure, while their resistance to delamination protects the drug inside. Simple handling and a range of packaging options ensure that Gx® Elite vials can be supplied for end-to-end use on various filling lines. This cuts costs while improving quality, as countless past and ongoing tests by notable customers have shown.

Intelligent defect recognition

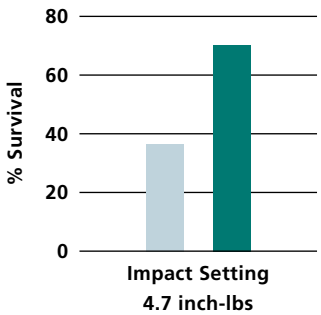
All of Gerresheimer's tubular glass plants that produce vials work with standardized monitoring, inspection, and packaging technologies, which essentially comprise the Gx® G3 and Gx® RHOC systems. The inspection systems, for one, are developed in house and form part of a close-knit testing system that ensures the highest precision and quality assurance in line with the latest standards. Complete with modern HD cameras, the Gx® G3 inspection system makes sure that cosmetic defects are identified reliably, for instance. The intelligent software detects and classifies the defects in a few fractions of a second, while the Gx® RHOC system ensures dimensional quality with HD matrix cameras and a hypercentric ID camera.

Injection vials set the benchmark for primary packaging for parenteral drugs. Gerresheimer's vials come in all sizes and comply with the relevant international standards and pharmacopoeias. The company's range includes solutions for bioengineered drugs and other specialist pharmaceuticals.

Compression Testing



Sidewall Impact Testing



Standard

Gx® Elite

Gx® Elite Vials are a step up from standard products, performing significantly better in compression and side impact tests.

Duma® Pocket fits through many mailboxes

Tablets that you need can be sent directly to your home. The trouble is, the dimensions of your order sometimes mean that it can't fit through your mailbox. This often means you have to go out of your way to collect it – time you'd much rather be using to do something else.

"The Duma® Pocket containers have a flat, oval design," says Niels Düring, Global Executive Vice President Plastic Packaging. "This allows them to fit through most mailboxes in the world so that nobody needs to travel unnecessary distances anymore. That is why we recommend our Duma® Pocket containers to all customers and interested parties that predominantly deliver to their customers by mail."

The handy Duma® Pocket tablet containers are well-known for being drugs containers that fit into any bag. Because they are oval, they don't take up much space. Another great feature is that it can't open itself when it's inside a bag. This is also beneficial when sending the product to users in the mail. This avoids complaints. Duma® Pocket is a versatile packaging idea by the plastic specialists at Gerresheimer and can be supplied in many variants and sizes (30, 40, 50 and 100 ml). The containers are offered in any color, even in translucent or transparent. Duma® Pocket is manufactured with an injection moulding process under clean conditions.

GERRESHEIMER AT CPHI WORLDWIDE 2018

Gerresheimer to expand its services to include irradiation of primary packaging

Gerresheimer is expanding its range of services to include surface finishing of plastic packaging for ophthalmology and rhinology products with irradiation. As part of this move, the company is drawing on partnerships with selected certified partners.

"We want to make life easier for our customers when it comes to procuring their dropper bottles and, by treating our products with gamma radiation, we are adding in an important work step before filling," says Niels Düring, Global Executive Vice President Plastic Packaging. "To help us in this, we are relying on selected, recognized, and certified partners." The chosen partner companies have the requisite certification in accordance with ISO standards 11137, 11737, and 13004.

Benefits

The benefits of this service speak for themselves: Gerresheimer is assuming responsibility for handling this work step from start to finish, including transport to the irradiation company, monitoring and inspecting its work, and delivering to the location specified by the customer. The inspection processes also involve physically and chemically testing the product characteristics after irradiation. Gerresheimer regulates the validation and revalidation of the entire process, helping to reduce costs for the customer.

Cleanroom production

Gerresheimer's range of ophthalmology and rhinology products encompasses bottles and dropper inserts made from low-density polyethylene (LDPE) with pump systems to match. Irradiation also ensures the products are germ-free. As a specialist in plastic packaging for the pharmaceutical industry, Gerresheimer offers a wide range of innovative packaging solutions for solid, liquid, and opthalmological products. All of the company's primary packaging for the pharmaceutical industry is produced in ISO class 7 and class 8 cleanrooms at its plants in Vaerloese (Denmark) and Bolesławiec (Poland).

Low germ level thanks to ISO-standard irradiation

The population of viable microorganisms on the surface of a product and/or packaging is called the bioburden. The bioburden is determined in accordance with ISO 11737. Raw materials, components, packaging, and medical products are all investigated in order to gather information about the germ composition and level of germ contamination before treatment. A stable bioburden guarantees a successful irradiation process.

PEOPLE

Robert Hayes has been appointed as Senior Director Innovation and Product Management Tubular Glass

Robert Hayes has been appointed as Senior Director Innovation and Product Management Tubular Glass effective from September 1, 2018. Robert joined Gerresheimer in 2010 where he started as Key Account Manager Americas Tubular Glass. In his last function, he was Director Business Development Americas Tubular Glass.

Dr. Wenzel Novak has been appointed as Global Senior Director Business Development Medical Systems

Dr. Wenzel Novak has been appointed as Global Senior Director Business Development Medical Systems effective from September 1, 2018. Wenzel Novak worked for Gerresheimer Bünde from 2001 to 2005 as Head of Production. In his last function, he was Director Market Development at Optima Machinery Corporation. Prior to that, he was Chief Research Officer/Member of Management Board at Groninger.

Jari Tevajarvi has been appointed as Vice President Asia Plastic Packaging

Jari Tevajarvi has been appointed as Vice President Asia Plastic Packaging effective from September 1, 2018. Before joining Gerresheimer Jari held the position of Sales and Marketing Director APAC at Wihuri Oy Wipak in Singapore and China. Prior to that, he worked as Sales Coordinator for Suunto Oy in Finland.

GERRESHEIMER

PEOPLE

Dietmar Siemssen appointed new CEO of Gerresheimer AG

Dietmar Siemssen (55) will join the Management Board of Gerresheimer AG as Chief Executive Officer on November 1, 2018. The Supervisory Board of Gerresheimer AG approved the decision. From 2011 to July 2018, Dietmar Siemssen was CEO of Stabilus and prior to that served for 19 years in various senior management positions at Continental in Germany and abroad, including in Asia.

"By bringing Dietmar Siemssen on board, we have gained a seasoned manager with international experience to lead Gerresheimer AG for some time to come. He was instrumental in growing Stabilus' business as well as successfully taking the company public and completing a major acquisition. I am confident that, under his leadership, Gerresheimer will continue on its current growth trajectory and effectively execute the strategic expansion plans underway," explains Dr. Axel Herberg, Chairman of the Supervisory Board of Gerresheimer AG.

"Gerresheimer AG is a well-respected, internationally positioned company. As a key partner to the pharmaceuticals, healthcare and cosmetics industries the future holds great promise and a wealth of opportunities. I am very optimistic as I look ahead to this exciting new mission," adds Dietmar Siemssen.

Dietmar Siemssen joined international automotive supplier Stabilus as CEO in 2011. Mr. Siemssen led the company out of the crisis and put it on track for growth. Under his management, the company transitioned from a component manufacturer into a systems supplier. Its operations expanded internationally, particularly in North America and Asia, and the portfolio was diversified beyond the automotive industry. Thanks to the growth strategy he shaped, along with a major acquisition, the company's revenue grew from around EUR 360m to just under EUR 1bn recently. He led the drive to convert Stabilus into a European public company that has been listed on the SDAX since 2014. Its share price has quadrupled since its first trading day.

After completing his university studies, Dietmar Siemssen worked in various management positions at Continental from 1994 to 2011, ultimately as head of a joint venture between Continental and Nisshimbo in Yokohama, Japan, and as head of the Chassis and Safety division in Asia. Dietmar Siemssen's studies included a time at Technical University of Darmstadt, where he gained a diploma in industrial engineering specializing in mechanical engineering. He is married with two children and enjoys doing endurance sports.

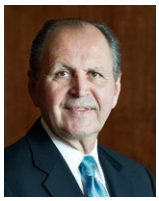
Speaker of the Management Board and CFO Rainer Beaujean

… has informed the Supervisory Board that he will not serve the additional three-year term of office offered to him by the Supervisory Board.

"I did not accept the Supervisory Board's offer to extend my contract for another three years," states Rainer Beaujean. "Gerresheimer's positioning is excellent, and the major strategic direction of the company has been set. After six years as Gerresheimer CFO, the last seven months of which I spent as Speaker of the Management Board, I have decided to take on new professional challenges. It goes without saying that I will fulfill all obligations under my contract until the end of April."

Supervisory Board Chairman Dr. Axel Herberg comments: "We regret Mr. Beaujean's decision, but we respect the choice he has made. Many thanks to Mr. Beaujean for his outstanding service over the past six years. In addition to his role as CFO, he accepted the position of Speaker of the Management Board in February of this year after the surprising departure of the then-CEO. The acquisition of Sensile Medical occurred during this time, a smart strategic move that will allow the company to move forward."

Roger Kurinsky leaves the company



On June 30, 2018, Roger Kurinsky, Senior Vice President PPG Americas, has left after working at Gerresheimer for 14 years. An excellent leader and driver of our American business retired.

During his time at Gerresheimer he and his team strengthened our leadership position in the North American markets. All facilities have seen significant investment and technology upgrades in recent years. Roger also played instrumental role in the establishment of our Tubular Glass joint venture in China and was involved in site selection and engineering for the Tubular Glass factory in India. In addition to his job as Head of PPG Americas in December 2017 Roger took over the role of President of Glass Inc.

GERRESHEIMER
EVENT CALENDAR

OCTOBER 09 – 11, 2018
CPhI Worldwide
Madrid, Spain
Ifema | Booth 4C30

OCTOBER 14 – 17, 2018
Pack Expo
Chicago, USA
McCormick Place | Booth W-964

OCTOBER 17, 2018 | 2:00–6:00 PM
PODD Boston
Presentation: Injectable Formulation & Device Technologies
Aron Haber, Sales Manager
Gerresheimer Peachtree City USA

OCTOBER 29 – NOVEMBER 01, 2018
CMEF
Shenzhen Chi, China
Shenzhen Convention & Exhibition Center

NOVEMBER 12 – 15, 2018
Compamed/Medica
Düsseldorf, Germany | Messe Düsseldorf

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