EZ-fillsmart™

Making your life easier

New significantly improved RTF platform solution

gerresheimer

innovating for a better life

New EZ-fill Smart™ packaging platform
with significant improvements

Gerresheimer is presenting the new and innovative ready-to-fill vial platform, EZ-fill Smart™, a solution designed to improve drug packaging quality, reduce Total Cost of Ownership (TCO), and shorten lead times for customers. The new EZ-fill Smart™ platform is an evolution of the standard EZ-fill platform, and it brings new advancements that drive appreciable improvements for customers amid growing demand for ready-to-fill vials.

The EZ-fill Smart™ platform leverages increased automation throughout the manufacturing flow to increase productivity and reduce human errors. EZ-fill Smart™ comes as a highly standardized platform for streamlined and flexible pharma operations with highest product quality and reduced particle contamination risks, all while ensuring top-tier vial consistency and quality.

De-risking of fill & finish

Risk-free processing and seamless integration into standard fill & finish lines from all major machine vendors

No glass-to-glass and reduced glass-to-metal contact

Sustainability: Reduced CO$_2$ footprint

Reduce CO$_2$ footprint by optimized fill & finish processing and packaging design

Lower particles – improved quality

>90% particle reduction* creating a new gold standard for the benefit of the patient

*Verified by internal testing and external certified laboratory
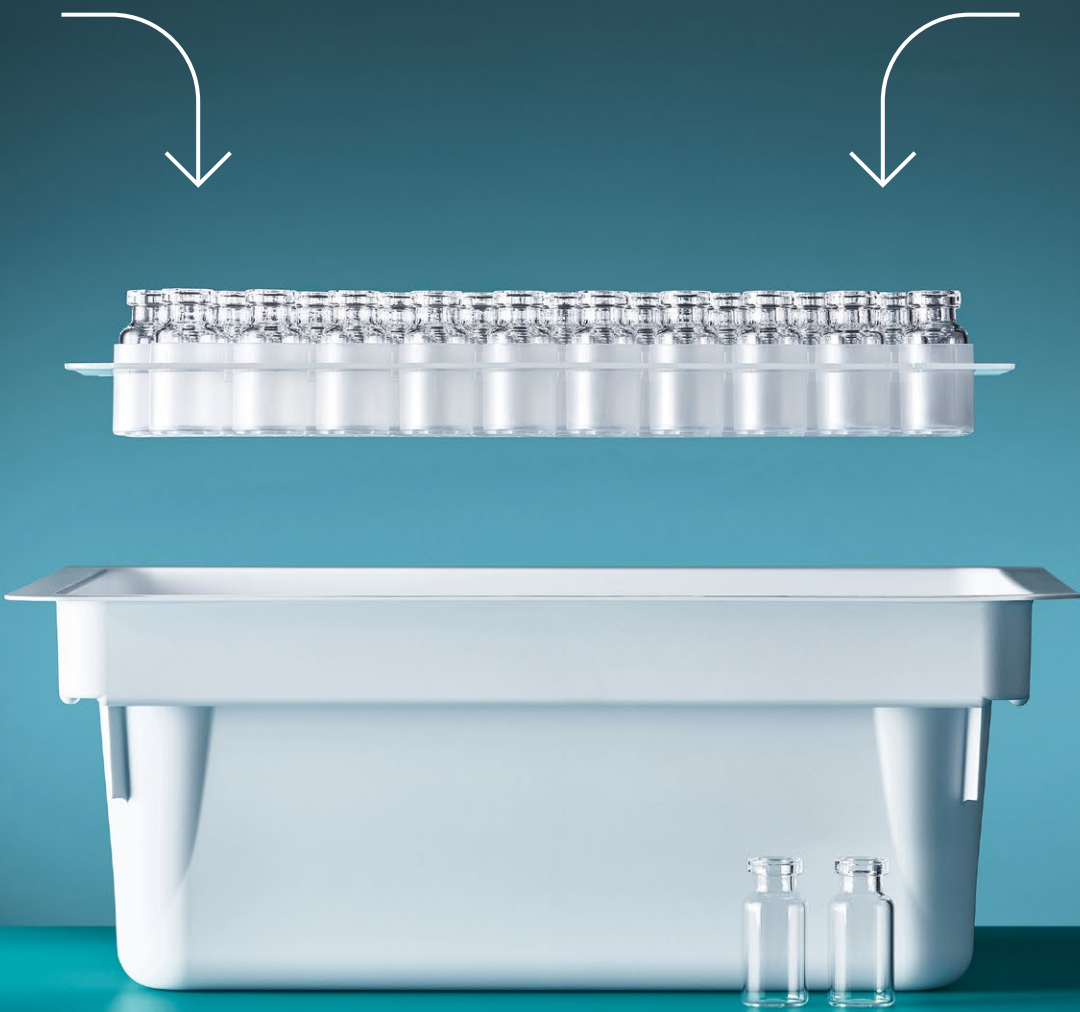
Alternative sterilization

Safe and more environmentally friendly method for sterilization of complete system incorporating guidelines given by regulatory bodies

Supply chain security

Risk mitigation through like-for-like standard of two leading global manufacturers and in-house sterilization method

Reduced TCO

Significant reduction in costs for filling companies. Reduced space and capex requirements, increased OEE

EZ-fillsmart™
System description

The new EZ-fill Smart™ packaging platform comes in one size fits all vials in a nest & tub configuration and will also be available for cartridges in the future. A new transparent polymer film replaces the traditional Tyvek* lid and allows for convenient cosmetic view of the interior. Thanks to the new polymer film the particle load generated when opening the tub could be reduced by more than 90%. An impressive success that offers patients even more safety when taking and administering their medication.

Component	Material	Properties / Feature
Transparent peelable polymer lid	Opaque HDPE/PE	– Ensures sterility with a hermetic seal for ultimate product protection – Easy-to-remove peelable design streamlines operations – Reduces particulate contamination during opening
Gx® Elite Glass Vials 2R to 50R	Type 1 Borosilicate	– Flawless appearance and unmatched mechanical strength enhance product reliability. – Precision manufacturing ensures virtually no lot-to-lot and inner-lot variation. – Optimized for maximum production efficiency and minimal reject rates.
Nest	Polypropylene homopolymer	– Prevents glass-to-glass contact for superior protection against breakage – Universal design guarantees compatibility with standard fill & finish lines and common snap cap closure nest – Simplifies production processes with easy integration.
Tub windows	Tyvek HDPE	– Permeable barrier supports multiple sterilization methods – Hermetic sealing ensures closure integrity for sterility assurance – Positioned for compatibility and seamless integration with standard fill & finish equipment
Tub	High impact polypropylene heterophasic copolymer	– ISO 11040-7 compliant design – 3-inch tub for all vial sizes and future cartridges – Holds permeable Tyvek barrier for gas sterilization
Boxes	Polypropylene	– Safeguard packages for handling and transportation – Allow for terminal sterilization by EtO or VHP
Sterilization	EtO, VHP	– Terminal sterility of product to assure SAL – Proved sterility according ISO norms – Compatible with Ethylene Oxide and Vapor Hydrogen Peroxide Sterilization

3D explosion for illustration purposes only; dimensions and details may vary

*Tyvek is a registered trademark of the DuPont company.

Vial sizes and nest & tub configurations

Benefits

Below you see the most frequently requested formats and configurations. Other vial formats are available on request.

Size	Color	Volume	Diameter	Height	Crimp finish	Pcs. per nest
2R	flint	4	16	35	13	100
4R	flint	6	16	45	13	100
6R	flint	10	22	40	20	48
8R	flint	11.5	22	45	20	48
10R	flint	13.5	24	45	20	48
20R	flint	26	30	55	20	24

Optimized TCO

– Reduced processing costs
– Reduced filling line breakage
– Risk-free integrations into existing fill & finish equipment
– Reduced risks of market rejections and recalls
– Minimized investment costs for fill & finish lines by less equipment

Superior quality

– Significantly reduced particle load
– Highly automated manufacturing process
– Increased safety during drug product manufacturing

Advanced sustainability

– Environmentally friendly new sterilization method
– Reduced product carbon footprint
– Vials manufactured with green energy
– Less scrap due to improved quality

Increased process efficiency

– Designed for compatibility with advanced robotics and automation systems
– Simplified integration by standardization
– Platform suitable for all batch sizes

De-risking of fill & finish

– Machinability tested by leading machine vendors
– ISO 11040-7 compliant 3-inch tub for all primary packaging (vials, cartridges, syringes)
– No supply chain risk through uniform standard of two leading suppliers
– Fully compliant with ISO, FDA, and EMA packaging standards, including Annex 1

About Gerresheimer

Gerresheimer is an innovative systems and solutions provider and a global partner for the pharma, biotech and cosmetic industries. The Group offers a comprehensive portfolio of drug containment solutions including closures and accessories, as well as drug delivery systems, medical devices and solutions for the health industry. The product range includes digital solutions for therapy support, medication pumps, syringes, pens, auto-injectors and inhalers as well as vials, cartridges, ampoules, tablet containers, infusion, dropper and syrup bottles and more. Gerresheimer ensures the safe delivery and reliable administration of drugs to the patient. Gerresheimer supports its customers with comprehensive services along the value chain and in addressing the growing demand for enhanced sustainability. With over 40 production sites in 16 countries in Europe, America and Asia, Gerresheimer has a global presence and produces locally for regional markets. The Group generated revenues of around €2bn in 2023 and currently employs around 13,400 people. Gerresheimer AG is listed in the MDAX on the Frankfurt Stock Exchange (ISIN: DE000A0LD6E6).

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