



Design and product development for patients

One-stop service provider – product development by Gerresheimer

From the first idea through to large-scale production of millions of parts, Gerresheimer Medical Plastic Systems integrates all stages of the value added chain. Our experts from mold engineering, injection molding and assembly are involved from the beginning, during product design and concept studies, in order to ensure that the concept is suitable for large-scale plastics production.

Focus on the whole process

First our product designers consider the needs of the user, i.e. the patient, doctor or other medical staff. In a next step, concepts are assessed in terms of feasibility, i.e. its suitability for plastics production – because the best ergonomic design is useless if it is not suitable for industrial production. We develop medical systems for large-scale production. This way, we economize on development times and reduce both development costs and project risks.

Individual service package:

- From initial idea and optimization for plastics production right through to completely new developments
- Flexible opting-in and opting-out at every phase of the project

From the initial idea to clearly defined product specifications

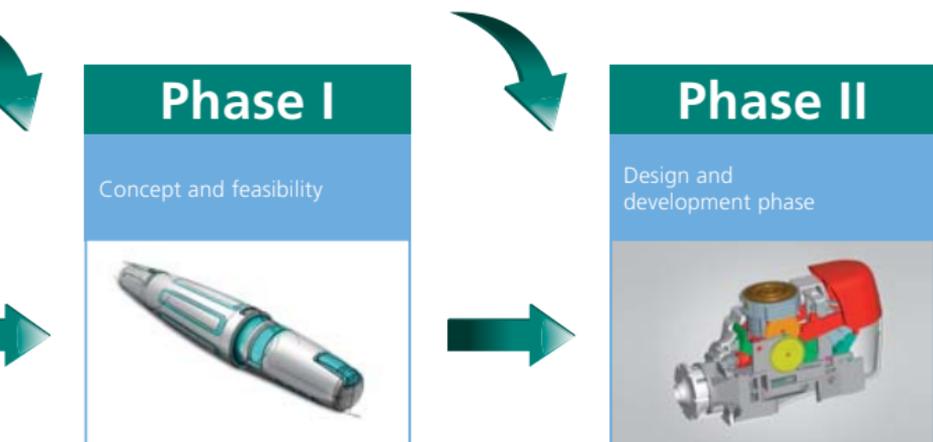
At the outset of every new project, we ask questions such as: What helps doctors and patients? What are the demands of the market? If you are investing in a product idea, we are your ideal partner. Our specialists from industrial design, mechanical engineering and polymer processing approach the issue of product design and product development from many different angles. Based on our intelligence of the market, competition, indication and patent situation, we set up innovation workshops to define functional and technical product specifications that are feasible for production.

Lifestyle and compliance in equilibrium

Numerous diseases involve the daily use of drug delivery devices such as injection pens or inhalers. With an attractive design, easy operation and reliable functionality, we positively affect the decision of patients about which product to purchase and help guarantee maximum patient compliance.

Design for manufacturing and assembly

One part of our concept is planning different aspects of technical feasibility such as suitability for large-scale production of all materials, assembly, auditability, availability of suppliers, adherence to target budgets, production sites etc.



From the validation of prototypes to test series

As we specialize in the production of medical products such as drug delivery devices and pharmaceutical primary packaging applications, we are familiar with relevant regulations and directives (e. g. MDD 2007/47/EG, ISO 13485, FDA 21 CFR 820). We will handle the verification and validation of all relevant processes, production and measuring equipment – for all parts, from structural assemblies to complete products.

Prototypes

We optimize the part design for injection molding – including the selection of materials, integration of electronic equipment or software and design of the corresponding packaging solution. After this, we test the results of all development stages and verify them with the help of functional models, test models, prototypes, pilot models and sample specimens for clinical studies.

Industrialization

In addition to the product we also design the entire process including production equipment such as molds and corresponding automation technology. If required, Gerresheimer Medical Plastic Systems will supply you with complete solutions such as in-line handling systems, cavity-specific removal systems or automatic assembly and packaging systems.



From clinical study to high-volume production

Following the design verification process we prepare the product for a successful market launch. To this end, we manufacture pilot molds and systems and produce the pilot parts. After this, we develop the concept for large-scale production.

Gerresheimer Medical Plastic Systems is your one-stop service provider. We carry out pilot production runs for design verification, clinical studies and stability batches in an ISO class 8 cleanroom at our Technical Competence Center in Wackersdorf. Integrated laminar-flow hoods create a class 7 cleanroom environment for injection molding processes.



Phase V

Product launch and lifecycle management



Your benefits from product development with Gerresheimer Medical Plastics



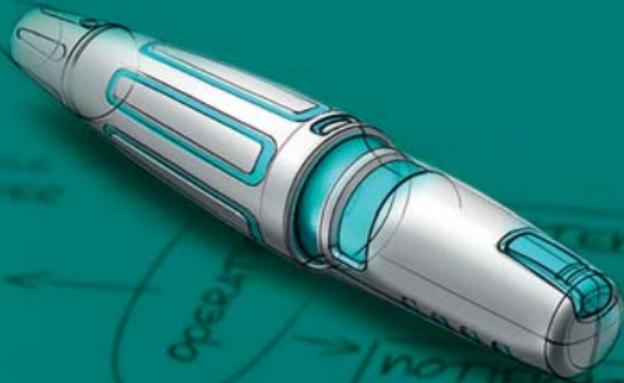
From initial idea through to large-scale production:

- Thirty-five years experience in design and engineering of pharmaceutical and medical technology products
- Short development times, design to cost, design for manufacturing, one-stop service provider
- Minimized project risk through optimization for high-volume plastics production



Industrialization included:

- Designers and product developer work hand in hand with industrialization specialists
- Technical Competence Centers in Germany, the US and China
- Validation, prototyping and industrialization under one roof

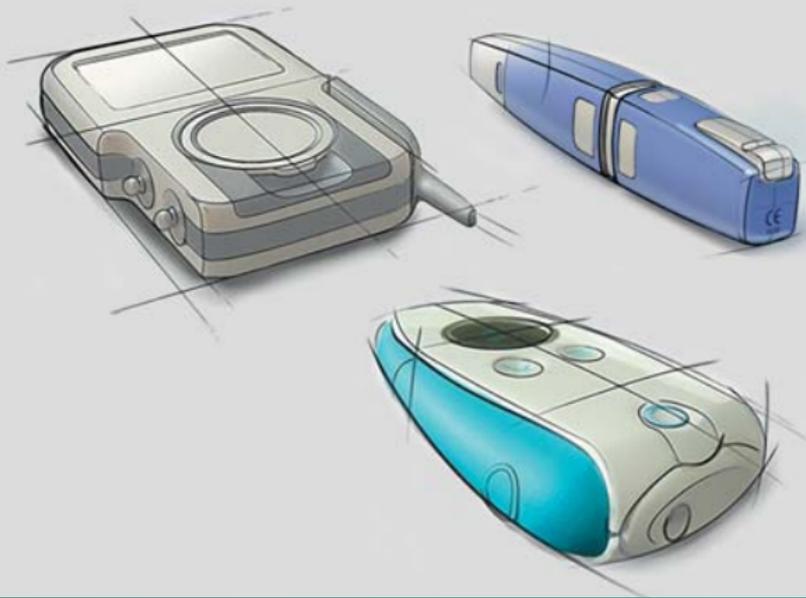


Medical devices and drug delivery systems:

- Extensive expertise and many years of experience with various medical areas of application
- Compliance with all important regulations and directives (z. B. MDD 2007/47/EG, ISO 13485, FDA 21 CFR 820)
- Experience with all standard materials and processes

Resources:

- More than eighty professionals in product, process and plant development
- More than thirty-five CAD workstations
- Part of a network of universities, research institutes and business partners for electronic equipment, software and many more
- Small-series production in class 7 and 8 cleanroom to GMP, including pharmaceutical packaging/assembly



Talk to us, we will help
with your challenges:

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