



# Process plant

for the pharmaceutical and  
biotechnology industries





# Your vision is our target

Living your visions

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*“The best way  
to predict  
the future is  
to shape it  
yourself.”*

All over the world, medical people and scientists are researching into new ways and means of enhancing the well-being of humankind in every respect.

GEA Diessel is contributing to the acceleration of this project with its innovative and reliable process plant for the pharmaceutical and biotechnology industries. It is not for nothing that, over a period of more than 80 years now, we have always put people at the centre of all our research work and activities.

There are always new challenges to be met, and many tasks to be taken in hand. We provide the yardsticks.

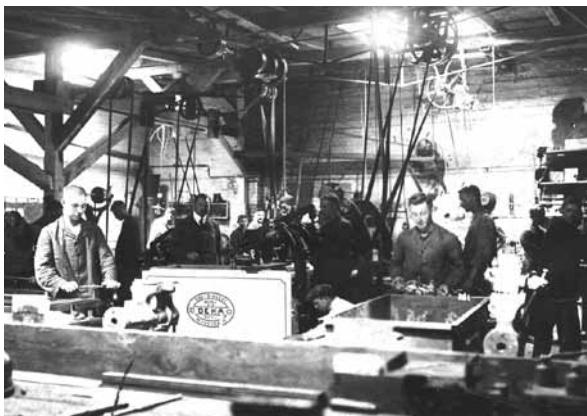
Our course is set towards the future.

# Getting liquids into shape

## Signs of the times

**As long ago as 1924**, Walter and Fritz Diessel laid the foundations for our business in Hildesheim. In all the years since then, the company has consistently continued to build on its strengths and has played a decisive role in developing innovations in sterile process technology.

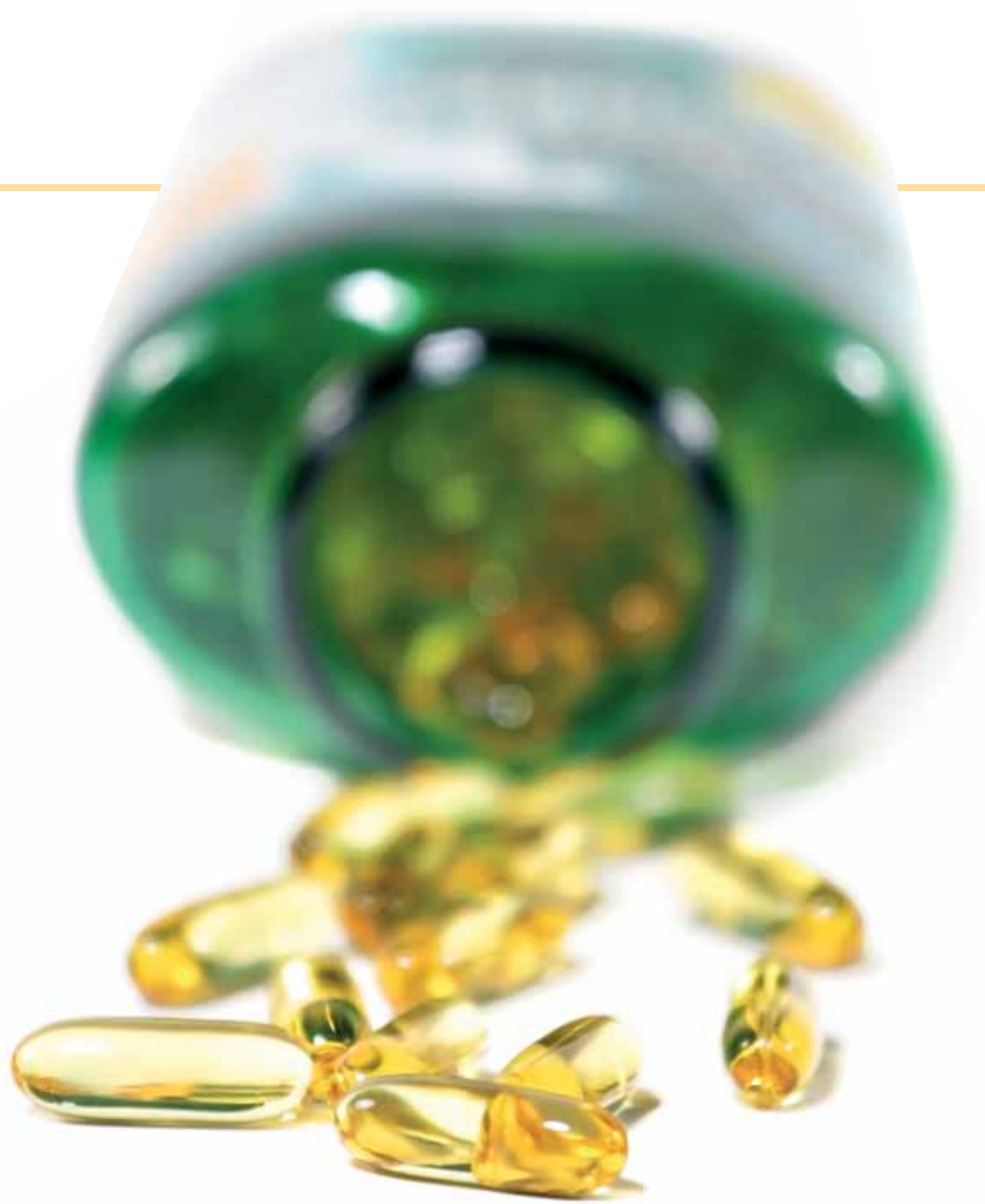
Our entry into biotechnology has been a milestone on a long road, facing us with new challenges and thus leading us on to one new development or solution after another.



**Today**, GEA Diessel is known all over the world for its individual and tailor-made process plant for the manufacture of free-flowing pharmaceutical and biotechnology products – plant that demonstrates innovative power and great competence in process technology.

Our aim is to develop high-performance and economic process plant and to put it into operation in collaboration and partnership with our customers. We supply plant and systems which fulfil the high standards demanded by the requirements of environmental and operating safety, which we guarantee can be cleaned to perfection, and which are distinguished by a high level of availability.

We want our customers to use our ground-breaking solutions to manufacture even better products in future.



# Good right from the start

## Project management – the key to success

**The manufacture** of drugs and active substances requires very high standards of quality to be maintained in respect of product purity and validated manufacturing processes. We are aware of the great responsibility we bear, and our work is guided by the standards of the international pharmaceutical industry such as the cGMP guidelines and the FDA requirements.

Our expertise in the sector, which arises out of our engineers' many years of experience and is reflected in their imaginativeness, creativity and strength in realisation, provides the guarantee of successful project management. On the basis of tried and tested standards, our project teams devise individual project documentation specific to your individual requirements and realise the projects on time and on budget and to the agreed level of quality.

### GEA Diessel's range of services

#### Consultancy:

- Feasibility studies
- Conceptual design

#### Process engineering:

- Basic and detail engineering
- 3-D planning
- Risk analysis

#### Qualification / Documentation:

- Technical documentation
- IQ and OQ
- PQ support





**Complete process plant** of modular design and also process units and skids can be assembled, tested and qualified in our own production facilities. We perform tests and trial runs with appropriate media to demonstrate the functionality of all components and apparatus before the plant is delivered.

## **GEA Diessel's range of services**

### **Realisation:**

- Production of process plant, process units, skids and vessels
- FAT and prequalification at the factory
- Assembly / calibration / commissioning
- SAT

### **Service:**

- Training
- Servicing and maintenance
- Recalibration

# Good solutions for everything

With GEA Diessel you are well on the way

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**Only automation** enables you to use your process plant as dynamically and flexibly as you would like. In the pharmaceutical and biotechnology industries, the highest degree of precision and all-round experience in qualification and software validation are required in the development of regulating and process control systems. GEA Diessel's software engineers possess the requisite knowledge; and on the basis of it, they develop application-specific and economic solutions jointly with our process technicians.

## GEA Diessel's range of services

### Automation:

- FS, HDS, SDS
- Process control systems / software
- Visualisation / batch systems
- Database / archiving



# A whole spectrum of possibilities

## Flexibility with GEA Diessel

### As a manufacturer of sterile process plant

with many years of experience, GEA Diessel can draw upon sound theoretical knowledge in process technology and competence in its realisation.

On the basis of our comprehensive range of services we can supply you with modern, individual and economic process technology to manufacture new medicines and active substances in a manner that is kind to the ingredients. That is our contribution to enabling people to enjoy longer, healthier and happier lives!



Parenterals



Fermentation and media supply



Syrup and suspensions



Blood plasma



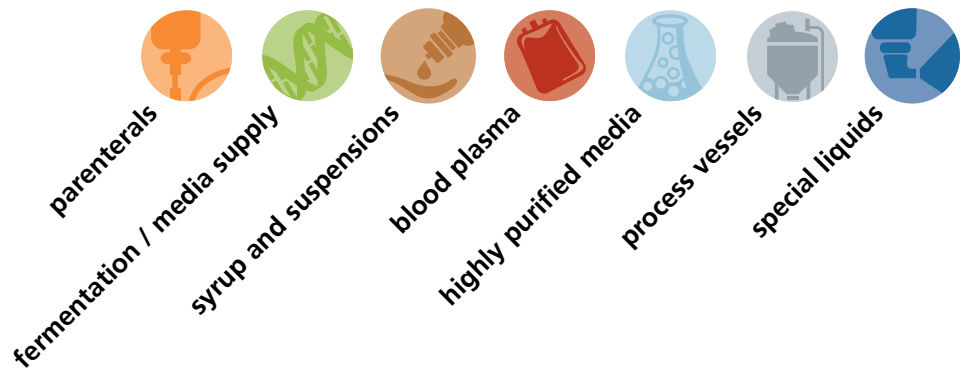
Highly purified media



Process vessels



Special liquids



# Process plant

## for the pharmaceutical and biotechnology industries



*GEA Diessel is the process plant specialist for free-flowing pharmaceutical and biotechnology products.*

*As part of GEA Process Engineering, which is represented in over 50 countries and employs around 4,500 people in all. We can thus offer our customers not only our unsurpassed experience in process plant construction, but also the expertise of the powerful GEA Group with its unrivalled technological resources worldwide. This is the key to technical performance achievements on the highest level which enables us to develop modern and economic solutions for our customers.*



GEA Process Engineering

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