

GEA VARIPUMP

GEA SMARTPUMP

GEA Hygienic Pumps

For Gentle Product Handling

Hygienic Pumps

The Heart of GEA Flow Components

GEA GROUP COMPANY

GEA is one of the largest suppliers of process technology for the food industry and for a wide range of other industries. As an international technology group, the company focuses on world-leading process solutions and components for sophisticated production processes.

Gentle product handling, continued reliability and economic efficiency are key characteristics of the state-of-the-art hygienic pumps in the GEA Flow Components range.

GEA Flow Components

The GEA Flow Components Portfolio comprises hygienic pumps, valve technology and cleaning technology. Our products comply with the highest hygiene standards, such as EHEDG and 3-A.

Our customers' success depends on the quality and profitability of their products. That is why they rely on the advanced technology of GEA Flow Components and on our decades of experience in ensuring smooth processing of liquid products. Our sophisticated process components and service offers for everything that flows are available worldwide from the international GEA sales network.



Around one quarter of the milk processed is handled by GEA equipment



Roughly every second liter of beer is brewed using GEA equipment and solutions



Approx. one in three instant coffee lines has been built by GEA



State-of-the-art pump technology, made to our customers' preferences

At the GEA Hilge Hygienic Pumps Competence Center we develop innovative pump products and processes together with our customers. Our decades of up-close experience with operations and systems at our customers' production sites ensure optimum selection and configuration of the right pumps for every application.

Maximum efficiency

Two product lines, GEA VARIPUMP and GEA SMARTPUMP, enable our customers to choose from a highly versatile pump range with a multitude of smart adaption options to achieve simpler operation, higher-quality production, and reduced consumption of valuable resources. Special construction features of our many types of pumps provide for exceptionally gentle product handling, delivering top-quality products to consumers.

Maximum reliability

Our customers rely on the safe, continuous operation of their production systems without unplanned breaks or disturbances. That is why GEA pumps are optimized for uncompromising reliability in all applications. Thanks to their robust design and long service life, they have been named "tireless", also known as "Master Brewer's Pump" for their ease of maintenance and outstanding service, proven over decades, and for the great number of pumps currently in operation. Of course, GEA pumps also comply with all relevant hygiene standards and norms, with continuous documentation and up-to-date certifications safely ensuring judicial security.

Costs under control

Applying GEA pumps to production processes can significantly reduce operational costs. Sensibly rated high-efficiency motors in all required dimensions keep energy consumption as low as possible. Simplified maintenance and servicing makes it less expensive to ensure reliable operation.

Long-term partnership

The GEA Hilge Hygienic Pumps Competence Center in the town of Bodenheim, Germany, is the primary point of contact for our customers and partners to plan individual maximum-benefit solutions. For delivery and service, the worldwide GEA sales and service network takes over. Our customers and partners can thus rely on 360° support from GEA across the entire lifecycle of their pumps.

Applications

- Beverages: beer, juice, smoothies, and more
- Dairy processing: milk, yoghurt, cheese, and more
- Food: sauces, pastes, ketchup, mayonnaise, and more
- Pharma: pharmaceuticals, biotech, cosmetics, health care, and more
- Chemical: fine chemicals, bulk chemicals, cleaning agents, and more

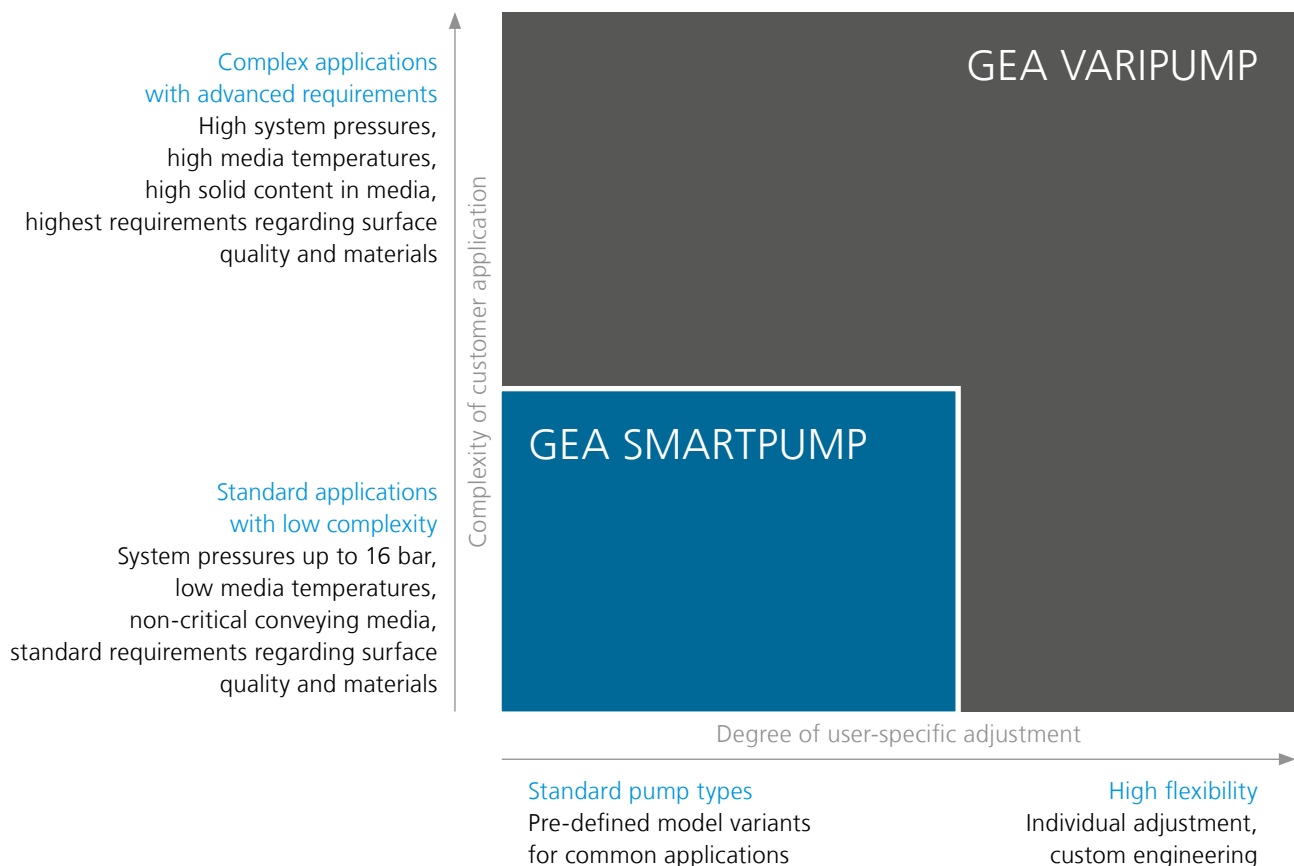
Two Modern Pump Lines

The right solutions – technologically and economically –
for each application

Hygienic pumps are applied to processes at the heart of production, in close contact with the product. Because of that, selecting and configuring the right pump requires great experience. GEA's new selection matrix for the pump lines GEA VARIPUMP und GEA SMARTPUMP is making that task easier. The pump models in these two lines have been developed for different applications and requirements, and they offer the right solutions for every task.

How to select your pump line

The first parameter to check for selecting the right pump is the complexity of the customer application with regard to the respective system pressures, temperatures and product media. The second parameter is the required degree of customer-specific adjustment: The overall system concept determines whether standardized pump types or customized engineering will be required.



GEA VARIPUMP

Choose GEA VARIPUMP if:

- Complex applications pose high demands
- Pumps need to be customized to individual specifications

The pump models in the GEA VARIPUMP line are conceived for extreme application demands and are individually optimized for your task. The high-quality surfaces, the construction entirely without die-cast components and the high-value materials meet highest demands even in the sensitive pharma industry. The same goes for added services, e.g. Witnessed Factory Acceptance Test (FAT). Thanks to a great variety of set-up and customizing options the pumps can adapt to any production process, for lower operational costs and more system efficiency. Your investment in long-life GEA VARIPUMP pumps “Made by GEA” gives you continued benefits over a long time.

Characteristics of the GEA VARIPUMP line:

- Developed for advanced application conditions
- Project-specific customization
- Surface roughness up to $R_a \leq 0.4 \mu\text{m}$
- Selection of materials in contact with product according to specific requirements (e.g. no die-cast components, $\text{Fe} \leq 1\%$)

GEA SMARTPUMP

Choose GEA SMARTPUMP if:

- Complexity of your application is low
- Pre-defined pump variants can cope with your tasks

The GEA SMARTPUMP line covers common, often-used applications at standard conditions. The pumps are highly standardized and attractively priced, easy to select and ready for fast delivery. Within the pre-defined parameters, the standard variants can be configured to individual tasks as planned. The modular construction using high-value materials, the proven “Hygienic Design” and the easy-to-apply, standardized spare parts are great reasons to apply GEA SMARTPUMP pumps in cost-critical production systems – at no compromise in terms of quality.

Characteristics of the GEA SMARTPUMP line:

- Application for common and clearly defined “standard” process tasks
- Simple selection and configuration
- Fast delivery
- Standardized spare parts

Overview of Pump Types

GEA Hilge HYGIA

The "Swiss Knife" among the hygienic pumps. Premium quality and highest flexibility of customization ensure successful application in the food, beverage, and pharma industries.

Technical data	50 Hz	60 Hz
Flow rate	110 m ³ /h	110 m ³ /h
Flow head	70 m	90 m
System pressure	16 bar up to max. 25 bar	

GEA Hilge MAXA

A single-stage centrifugal pump designed for heavy-duty operation in industrial processes. The major dimensions and characteristics of these pumps correspond to DIN EN 733 and DIN EN 22858.

Technical data	50 Hz	60 Hz
Flow rate	1,400 m ³ /h	1,400 m ³ /h
Flow head	100 m	100 m
System pressure	10 bar	

GEA VARIPUMP

Wide model range with numerous variants. Customization to specific customer requirements

GEA Hilge HYGIA



GEA Hilge MAXA



Single-stage end-suction centrifugal pumps

GEA SMARTPUMP

Clearly defined list of models, limited to standard requirements, no other variants

GEA Hilge TP



GEA Hilge TP

The GEA Hilge TP is the smart solution for standard applications. The single-stage centrifugal pump suits a wide range of applications and offers uncompromising hygiene and quality.

Technical data	50 Hz	60 Hz
Flow rate	220 m ³ /h	240 m ³ /h
Flow head	95 m	130 m
System pressure	16 bar	

GEA Hilge SIPLA

A single-stage self-priming side channel pump, especially suited for SIP/CIP return systems and applications with high gas content. Right- and left-hand rotation can be freely adjusted for additional application options.

Technical data	50 Hz	60 Hz
Flow rate	80 m ³ /h	65 m ³ /h
Flow head	50 m	60 m
System pressure	10 bar	

GEA Hilge SIPLA



Single-stage self-priming centrifugal pumps

GEA Hilge TPS



GEA Hilge TPS

This self-priming centrifugal pump is the solution of choice especially for emptying tanks as well as for conveying products containing gas, e.g. CIP return systems.

Technical data	50 Hz	60 Hz
Flow rate	100 m ³ /h	120 m ³ /h
Flow head	90 m	100 m
System pressure	16 bar	

GEA Hilge CONTRA

Single- and multi-stage centrifugal pumps are available in this series. The hygienic design in every detail provides for perfect solutions to numerous tasks in sterile and hygienic processes.

Technical data	50 Hz	60 Hz
Flow rate	40 m ³ /h	35 m ³ /h
Flow head	160 m	260 m
System pressure	25 bar	

GEA Hilge CONTRA



Multi-stage centrifugal pumps

GEA Hilge DURIETTA



GEA Hilge DURIETTA

This end-suction single- or multi-stage centrifugal pump in a very compact design has been created for applications with low flow rates at high flow heads.

Technical data	50 Hz	60 Hz
Flow rate	8 m ³ /h	8 m ³ /h
Flow head	70 m	40 m
System pressure	8 bar	

GEA Hilge NOVALOBE

This rotary lobe pump has been specifically designed for viscous media – and for applications where gentle pumping or dosing is required. The pump is fully drainable and EHEDG certified.

Technical data	50 Hz
Cavity volume	1.29 l/U
System pressure	25 bar

GEA Hilge NOVALOBE



Rotary lobe pumps



We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX® Europe 600 Index.

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