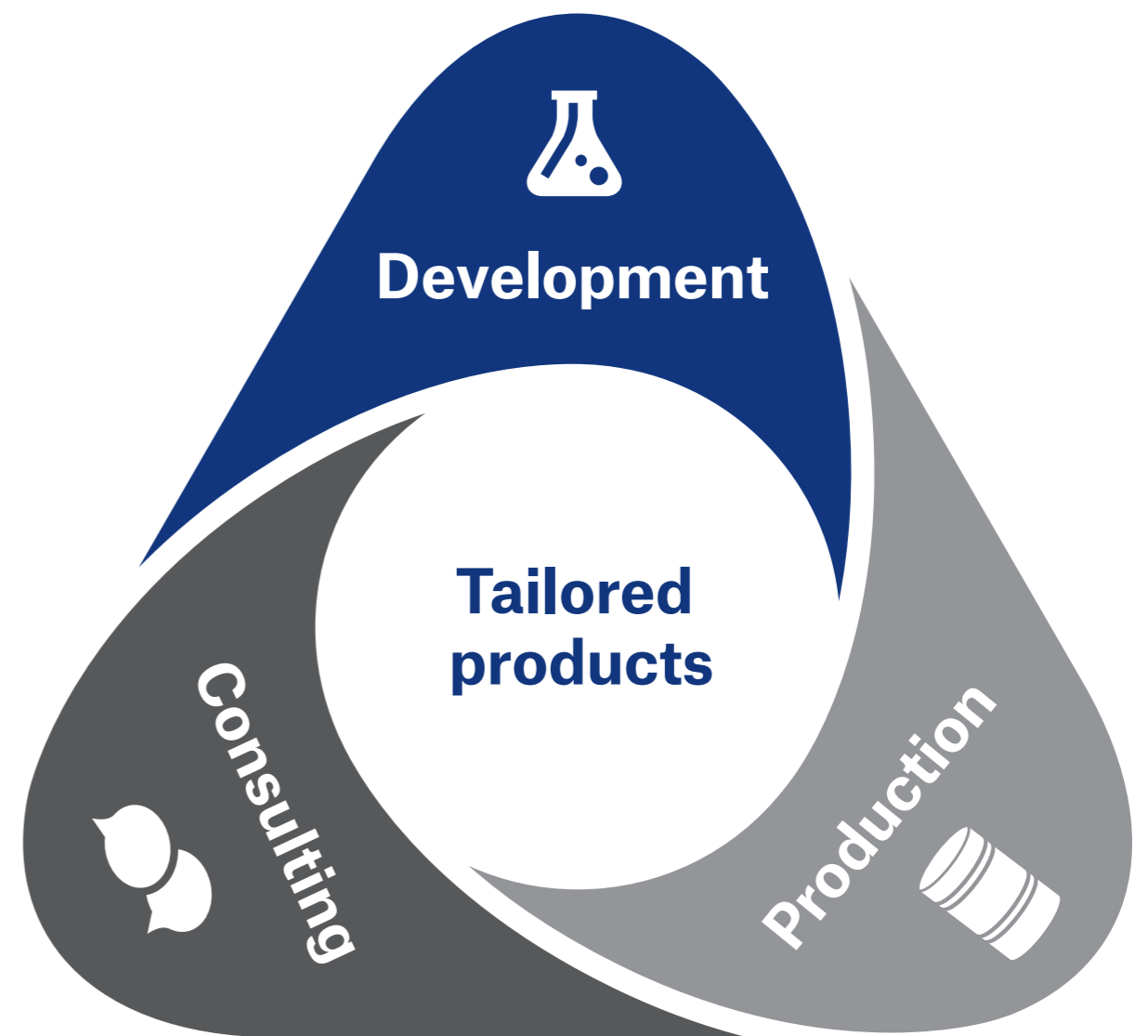




**GREMOLITH**  
Resins & Composites

**Gremolith is your  
production,  
consulting and  
development part-  
ner for polyester,  
casting and phenolic  
resins.**

**Fast. Flexible.  
Confidential.**





# Portrait

Gremolith Ltd. stands for high-quality resins, which are produced fast, individually and environmental friendly.

## High-quality resins for individual applications

For unsaturated polyester resins, furan and phenolic resins as well as polyurethane and epoxy casting resins, Gremolith is your specialized producer. The company stands for fast production and delivery times. It compiles flexible solution concepts and puts great emphasis on a confidential collaboration as a basis for a partnership with its customers.

In the 60s the company already established a good reputation and started to invest in the development and production of resins. In 1976 the innovative actions in the foundry industry led, in collaboration with a German partner, to the founding of ASK Chemicals Gremolith AG. Enrooted in the region the company still has its office and production in Bazenheid and employs approximately 20 well qualified specialists. With their know-how and many years of experience, they develop and produce various resins for individual applications.

## From button to international resin producer

In 1941 Gremolith Ltd. was founded in Bazenheid (Switzerland) and in the following years positioned itself successfully in the market. The production and the worldwide distribution of Galalith, an artificial material used in the button industry, provided the basis for the success.

# Unsaturated polyester resins

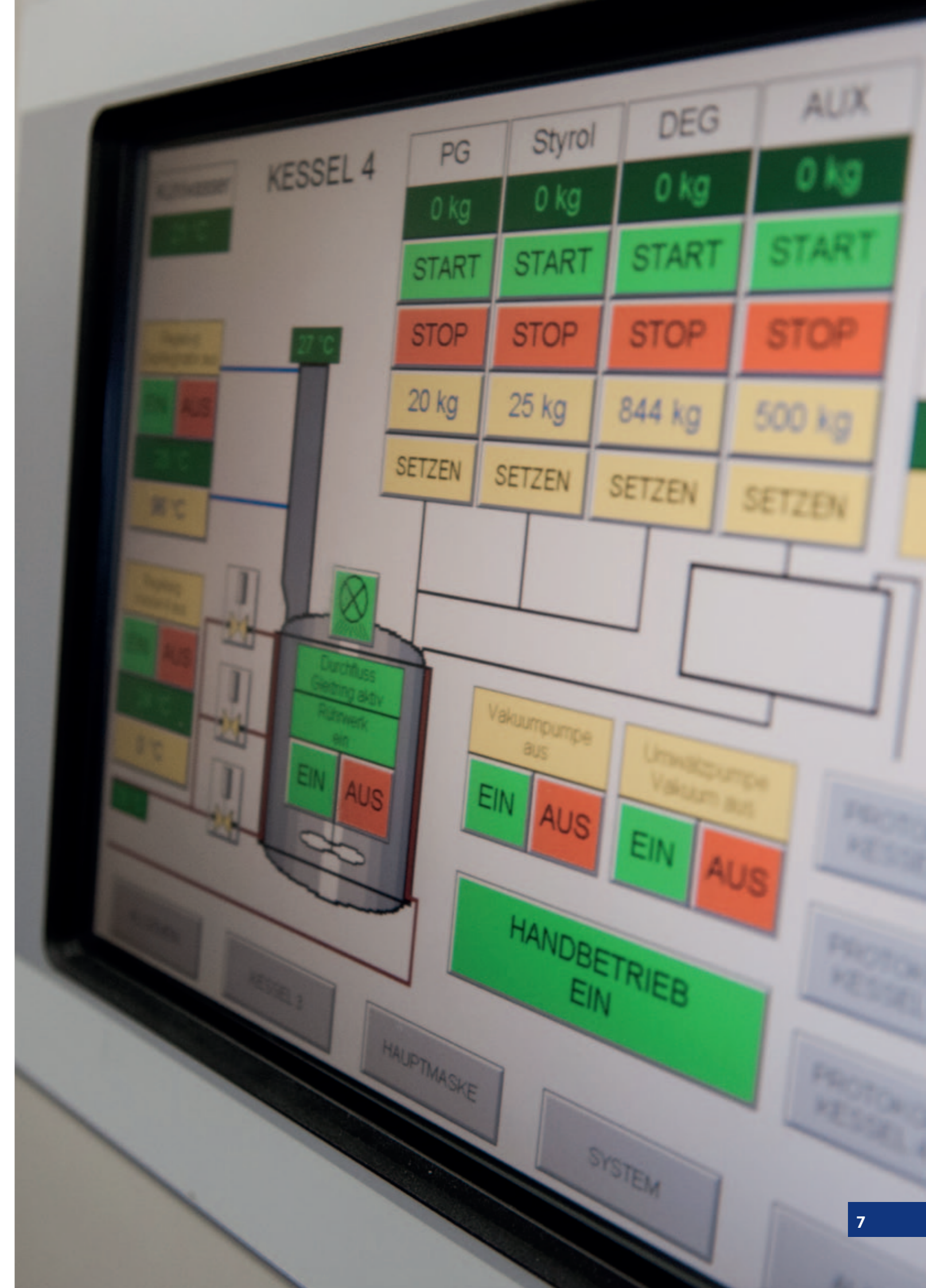
Our customers are producers of fiber-reinforced plastics or industrial companies, which use unsaturated polyester resins (UP resins) in their products.

## Gremopal® – unsaturated polyester resins

One of our strengths is the individual adaptation of unsaturated polyester resins to the customer's individual needs. Systematically we cater to the specific requests of our customers, whether regarding processing and end characteristics or mixtures with special fillers. We also offer a variety of standard polyester resins, which are available at short notice and in various container sizes. In addition to our own product range we offer trading products where the individual consulting is in the foreground as well.

## Field of application for UP resins

Unsaturated polyester resins are used for the production of glass fiber reinforced parts, which are found in the manufacturing of machines, automobiles and ships as well as in the building industry and sanitary market. There they are processed into corrosion-resistant lightweight plastic pieces, partly with flame-retardant characteristics. They are particularly used as catch tanks, pipes, baths, boat bodies or covers. As liquid material they serve as binders for putties, mortar and body fillers.



# Casting resins

Casting resins are mainly applied in model and mould construction to manufacture patterns, negatives and core boxes. They are also suitable for design models or moulding tools.

## **Gremothan® – Polyurethane and epoxy casting resins**

Our wide range of casting resins, based on polyurethane and epoxy resin, offers various methods of application. They are ideal for the fast and cost-effective production of manufacturing equipment, such as foam, RIM and vacuum moulding forms or foundry and metal sheet tools. For the manufacturing of auxiliaries like models, core models or negatives there are also respective casting resins. The choice of system depends on the particular casting procedure, for instance, massive casting, backfill or face casting.

Epoxies are furthermore used for casting of components for motors and insulators in the electrical industry or for coatings. The shrinkage during the hardening process is minor, which makes them predestinated for the application as casting resins.



# Phenolic resin

With more than 30 years of experience we develop and produce special phenolic and furan resins. During each production step we focus on high quality standards.

## **Gremodur® – Phenolic resin**

Phenolic resin is a polycondensate, which is produced from phenol and formaldehyde. It is used in adhesives, impregnation, electrical isolations, coatings and composites. Thanks to its extraordinary heat and fire resistant features phenolic resins are ideal for the production of non-flammable plastic parts in the rail, automobile and ship industry.

# Toll production

Straightforward, corporate-independent and experienced in engineering and process development: This is how we describe ourselves as a toll production partner.

## **Independent, experienced and absolutely confidential**

Our customers are producers of paints, varnishes, adhesives and building chemicals. The production site in Bazenheid has a significant amount of reactors available, with a volume of 500 to 8000 liters per batch. Reaction temperatures for condensation resins can reach up to 280°C. Furthermore, we are able to homogenize and fill resins as well as other liquids with respective fillers, additives or pigments into either an 800 or 5000 liter vacuum mixer. For storage of raw materials and finished products we have appropriate tanks and warehouses.

Together with the customer we discuss his needs, demands and requirements. Subsequently, we clarify the feasibility in regard to technical challenges, availability of raw materials, production capacity, safety and packaging. Then further parameters are examined and incorporated into process. Depending on the situation non-disclosure, quantity of delivery or maximal capacity is agreed upon. If required, respective production processes are developed or optimized by us.



## Application consulting

In application consulting we function as producer as well as consultant: We advise our customers regarding their applications and search for the perfect solution together. Our experienced specialists for application technique accompany our customers during the development of their individual solution. This is the basis for the development of our tailored products.



## Development

Our strength is customer-specific product development, which, in a second step, leads to production of individual resins for various applications. To provide our customers with high standard quality products, we employ well qualified specialists, who use their expert knowledge and competence in the development and production of resins. A close customer relation is key for us: Together with our customers we strive for continued use of our strength in developing and producing special products. Our work distinguishes itself through our flexibility and the possibility for individualization.



Leonhard Grämiger; Geschäftsführer

# Quality

Since the company was established we put emphasis on the securing of consistent high quality for our customers. In 2007 we received the quality certificate ISO 9001.

## Certified and performing quality requirement

Throughout the production chain we require high quality standards, may it be for the products, services, safety or environmental protection. In 2007 we were recognized with the quality certificate ISO 9001. Our well educated specialists are permanently attentive to guarantee a consistent high quality for our customers. Thanks to continued advancement and motivated employees, we provide our customers with specific products, which are implemented fast and competent. Only the best is good enough: We live by this policy, which is why our customers' individual requirements have top priority and are handled with utmost care.



# Ecology

For years we have acknowledged the sustainability of the environment. The environmental certificate ISO 14001, approving the management system of our company, documents and acknowledges this.

## Our contribution to the environment

In our work we consciously dedicate ourselves to the protection of the environment, which is why great emphasis is put on sustainability during the entire production process. As a result, we received the environmental certificate ISO 14001 in 2008. This certificate is given to companies who commit themselves to a continuous improvement process in regard to environmental performance. We contribute to the environment, for example, by continuously making specific investments in energy efficiency and reducing our CO2 emissions. In order to better protect the environment, we are dedicated to continuously improve our processes. Thanks to constant technological progress and the extensive know-how of our employees we are able to meet our goals.



