



WELCOME TO PETER GREVEN



The management board (from left to right): Werner Heiliger, Peter Greven, Dr. Hermann Josef Stolz

FOREWORD

(Germany), Venlo (the Netherlands), Penang (Malaysia) and are used throughout the world, this is also the result of consistent through hard work, solid leadership and product-related resourcemarket and product strategies.

Today, when at the production sites in Bad Muenstereifel The soap factory, founded by Peter Greven in 1923, has possibilities. We are, however, also self-confident enough to take Nowadays the company has to assert itself in a time, in which the Detailed information on the following fields of application of our market and the production techniques are changing faster than products can be found in our branch-specific individual brochures: ever. In order to meet this challenge, we are constantly investing the plastic industry, building protection, paper industry, lubricant the cosmetics industry.

The result is the continuous development of our company, which In today's markets we still need to show creativity and the ability we would like to introduce you to in this brochure to provide you to track down new markets. In moving forward we will make with an impression of our product program with its versatile applievery effort to consolidate customer relations and to continually benefits to our customers.



COMPANY HISTORY



Lipolysis equipment was put into operation, in order to cover the increasing demand for fatty acids.



In 1956 the production of metallic soaps began, for which completely new technologies had to be developed.



The Seventies were characterized by basic changes. Apart from a modern administration building new efficient production plants were installed, in order to meet increasing demands for metallic soaps.



We completed the step from conventional batch saponification to a fully automated contisaponification. In addition, we erected a new laboratory and integrated a PPS and logistics system.



We took over the stearate business from the French company Ceca which resulted in the founding of Peter Greven France.

1923 1934 1945 1956 1968 70s 80s

Peter Greven founded the "soap and glycerine factory". Soda, household soap and washing powder production were the main focus. The change from the soap factory to the producer of oleochemical additives and derivates began. In 1968 the production was extended by new production lines for esters.

The use of new, robotcontrolled machinery led to optimization and simplification of the work.









After the acquisition of a production site in Venlo (the Netherlands), the subsidiary Peter Greven Netherland was founded, which exclusively produces vegetable based products.









After entering the Asian market, influence on the American market could also be increased through the founding of the subsidiary Peter Greven US.

Norac Additives was founded in 2017 after Peter Greven acquired the additives business of Norac. That way the presence in America grew further.

90s 2000 2005 2007 2011 2014 2017

The subsidiary Peter Greven Asia was founded in Malaysia, exclusively producing vegetable based products. With the completion of a new administration and laboratory building the continuous development of our company goes on.





LOCATIONS

BAD MÜNSTEREIFEL

Cince its founding in 1923, Bad Münstereifel (Germany) has **J**been the headquarter of our family owned company. Through consistent development and continuous growth we have developed from being a local soap manufacturer to operating as a global producer of oleochemical additives.

Our product portfolio includes metallic soaps and alkaline soaps as well as esters and dispersions. All products are based on natural and renewable raw materials. The applications are diverse and range from the plastic and lubricant industry, to building tries. More than 40 employees ensure that compliance with these protection and the paper and rubber industry.

In Bad Münstereifel, we employ round about 235 people who ensure that our customers are satisfied with our products and services every day.

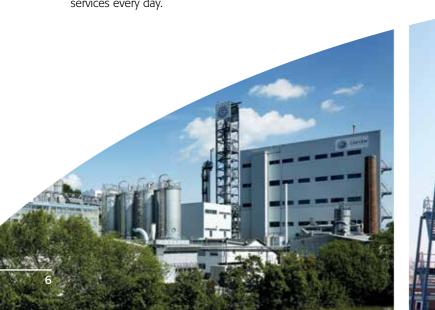
VENLO

∧ *J*ith the foundation of the subsidiary Peter Greven Nederland **V V** in 2000, our first international location in Venlo (the Netherlands) came into being. This site is dedicated to the requirements of the life science sector: All raw materials used are of a purely vegetable nature. Therefore, we can use our metallic soaps, alkaline soaps and dispersions to meet the needs in the industrial sectors pharmaceuticals, food, feed and cosmetics. Our strict adherence to the needs of this customer groups makes it possible to meet the highest quality requirements of these indusrequirements is guaranteed at all times.

PENANG

Through the joint venture Peter Greven Asia, which was founded in 2007, we were able to increase our presence on the Asian market. At our production site in Penang (Malaysia) we produce metallic soaps, alkaline soaps and dispersions that are exclusively based on vegetable raw materials.

Approximately 45 employees are engaged at this location. The main sales markets for these products include Asia, but especially the US and the Middle Fast.





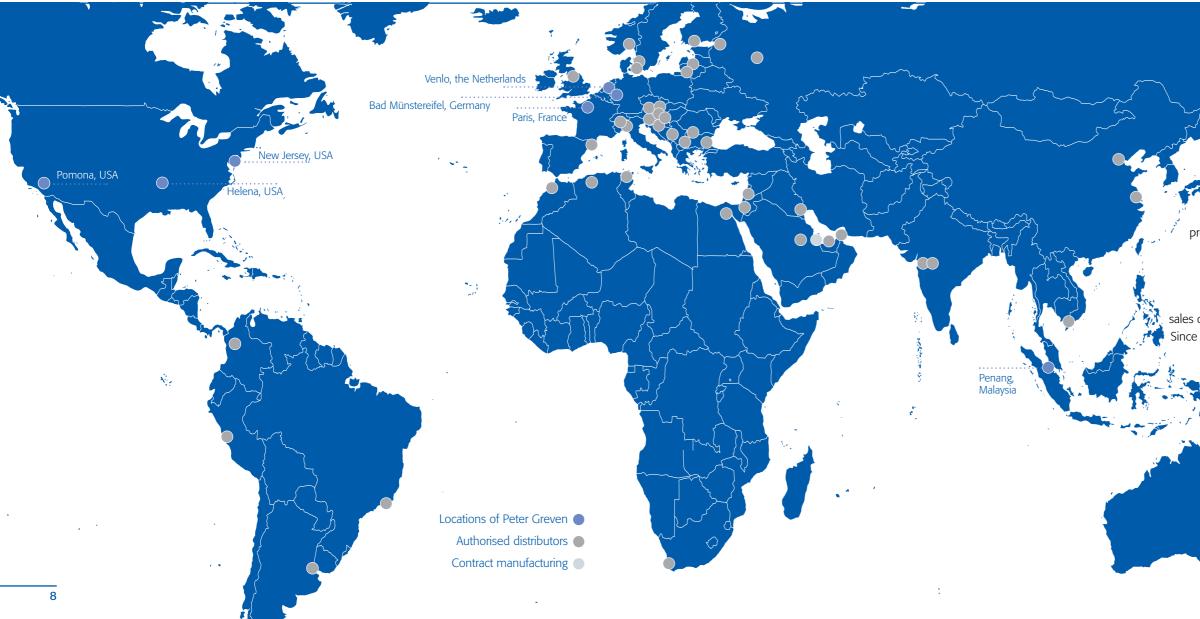


HELENA

C ince the acquisition of the additive business of Norac and the Joundation of Norac Additives in 2017 Peter Greven Group got a third international production site. The site in Helena, Arkansas (USA) employs more than 40 people and is specialised in the production of metallic soaps, esters and stabilizers for the plastics industry.

Through the sound application-technical know-how and the patented production process we can fulfil the requirements of the plastics industry in all respects. In particular, we have profound knowledge of PVC applications.

PETER GREVEN INTERNATIONAL



Even though we are still a middle-sized family owned company, we have developed into a globally active group.

Important steps in this direction were, alongside the opening of our production facilities in the Netherlands, Malaysia and the United States, the founding of our four sales offices: In 2005, Peter Greven France opened as our first international sales office in Paris (France) in order to provide personal on-site customer care. With the founding of our subsidiary Peter Greven Asia in 2007 a sales office in Kuala Lumpur (Malaysia) was set up as well.

To further expand our international presence, we opened our sales office Peter Greven US in Freehold, New Jersey (USA) in 2011. Since the acquisition of Norac and the foundation of Norac Additives in 2017 the office in Pomona, California (USA) also became a part of the Peter Greven Group. That way we can offer our customers individual onsite support despite the geographical distance.

> Furthermore, our selected distributors helped us to create a global distribution network. Within the scope of our customer focus this network expanded over the years in order to offer customer support worldwide. As a result of the consistent expansion of our global presence we currently supply customers in more than 85 countries worldwide.

RESEARCH AND DEVELOPMENT

In this day and age, the market as well as the applied production techniques are changing very rapidly. Therefore we consider it our duty not to allow ourselves to feel satisfied with the existing success potential. For this reason the areas research and development are very important to us.

In 2014, a new state-of-the-art laboratory was installed at our headquarter in Bad Münstereifel. Every day, our qualified staff work hard to continue to meet changing market requirements. To achieve this, we not only continually endeavour to optimise our existing product portfolio, but highly value the development of new additives.

n this day and age, the market as well as the applied production techniques are changing very rapidly. Therefore we consider it which have to be taken into account during product development.

Within the scope of research and development activities customer requirements are our top priority. It is our endeavour to develop individual solutions for any arising problem in close cooperation with our customers. We are not satisfied until the products meet our customers' needs.



PRODUCT GROUPS

METALLIC SOAPS

Metallic soaps are the water-insoluble salts of fatty acids. We manufacture calcium, zinc, magnesium, aluminum, lithium and barium soaps, predominantly based on C16 /18 fatty acids.

ALKALINE SOAPS

The water-soluble fatty acid salts from sodium and potassium salts are described as soaps or alkaline soaps. We use fatty acids from C8-C22, but mainly C16 /18.

ESTERS

Esters are the reaction product of a (fatty) acid and an alcohol with elimination of water. A wide product range is obtained from the fatty acids C8-C22 with the alcohols (glycerine, fatty alcohol, pentaerythritol, trimethylolpropane, neopentylglycol).

DISPERSIONS

A dispersion is a heterogeneous mixture of at least two substances which do not (chemically) bond with one another. One or more substances (disperse phase) are finely divided into another continuous substance (dispersion medium). We focus on metallic soap dispersions (calcium, zinc, magnesium and aluminum).



FIELDS OF APPLICATION



Plastics

In the plastics industry there are many different areas of application for our products. Metallic soaps are used as PVC stabilisers. This means that our products prevent discoloration or even decomposition of the material when under the influence of heat and UV radiation. In addition. ester lubricants are used during the extrusion of PVC profiles or tubes to ensure smooth material processing. But our products are also used in many other areas of plastic production. For example, calcium stearte is used as an acid scavenger within polyolefins, which means that the product neutralises traces of acids resulting from the production process.



Paper

Alkaline soaps and dispersions are used as collector chemicals and coating lubricants in various sectors of the paper industry. During the so called deinking process, which means when recycling waste paper, sodium soaps remove the printing ink from the waste paper. For high-

quality papers with treated (painted) surface, calcium stearate dispersions function well as lubricants, thus providing a problem-free workability and good printability of the paper.

Lubricants



In the lubricant industry, esters and metallic soaps are used as base oils and additives. They are often used in hydraulic, transmission and chain oils as well as lubricating greases. Customers can also use our esters as base oils to formulate biodegradable lubricants.



Rubber

In the rubber industry, additives are mainly

used as separating agents or lubricants. They improve the rubber's workability and prevent unwanted sticking together of the half finished products during the production process.

Pharmaceutical

Metallic soaps are used as lubricants and separating agents in almost every tablet. They ensure that the tablets can be easily released from their modules during production. Therefore, smooth processing at very high processing speeds and with proper product quality is guaranteed.

Food



The food industry uses stearates for a wide range of purposes: As flowability and anti-caking agents they prevent the product from clumping. In the s form of lubricants and separating agents they ensure that it drops out of the form easily. In addition, stearates with hydrophobic properties are often used in order to extend the shelf life of the products.



Building protection

The construction industry uses metallic or alkaline soaps to create the hydrophobic properties of building materials. Through the use of the products, for example, external plaster becomes water-repellent. Therefore, penetration of water into the layers of plaster is prevented and enables the longevity of the plaster.

Feed



The use of our products in the feed industry is very similar to that of the food industry. Stearates are also used as separating agents and lubricants, flowability or hydrophobing agents. Additionally, they can also be used as carriers.



Cosmetics

Our products are used in many consumer goods throughout the cosmetics industry. They can be used as gel and consistency forming agents in creams and ointments as well as a hydrophobing agents in mascara in order to make it water resistant. In powder or eye shadow they are used as a separating agent and prevent unwanted clumping.

HUMAN RESOURCES MANAGEMENT

Our employees are the basis of our economic success. We are noted for our specialist know-how and long-time professional experience. To achieve a targeted and future oriented HR management and in ordert to personnel maintain our market competitiveness, it is a fixed component of our quality management.

HR development is provided by internal and external training of specialists and managers, as well as through the youth development. We train our own professionals and strive to develop and apply them internally as managers.

Success has many faces - we invest in each with enthusiasm and foresight.

EMPLOYER BRANDING

n step with the fast-moving markets, the labour market is changing too. The shortage of skilled employees as well as the employee market are challenges for the employers.

Since 2015, we have consistently been working on an employer branding strategy to position and define ourselves as an attractive employer on the market. In order to realise, visualise and communicate this strategy we created our employer brand **"Peter Greven – Personal Commitment. Joint Success."**

We are the region's largest family owned employer with an international orientation. Peter Greven offers secure jobs where the employees are challenged and encouraged.

Personal solidarity and employee retention – that's what makes us a special employer. We are convinced that responsibility, individuality and teamwork as well as diverse perspectives create the best jobs.





CERTIFICATES

QUALITY MANAGEMENT

Since 1994, we have been focusing on systematic quality management according to **DIN EN ISO 9001**.

This makes us one of the first middle-sized companies, which recognised the importance of an appropriate quality management system very early. Since then our quality management has been steadily improved and regularly inspected through the German based institute for quality management system certification (DQS). The inspection is carried out on the basis of audits which are documented with a certificate on successful completion.

Through our quality management our customers are provided with verifiable and consistently high product quality.

HALAL

In Islam, only halal food – this means food according to religious regulations – may be consumed by Muslims. Many of our vegetable based products for the food, feed, and pharmaceutical in-

dustry are available in halal quality. Compliance to the regulations is certified by HALAL CONTROL.



KOSHER

According to Jewish dietary laws there are strict regulations pointing out which ingredients are kosher and which are not kosher. The bulk of our vegetable products for use in the food, feed, or pharmaceutical industry are therefore also available in kosher quality. These products are awarded with the corresponding kosher certificate through the Orthodox Union.

RSPO

The RSPO ("Roundtable on Sustainable Palm Oil") is an association which commits itself to the sustainable recovery of palm oil.

Peter Greven has been an official member of the RSPO since 2010. In Venlo, the membership could be extended to a RSPO SCCS certification in 2013. Our headquarter in Bad Münstereifel also holds this certificate. Both locations can therefore offer RSPO Mass Balance certified goods. In Venlo also RSPO Segregated certified products are available.





EXCiPACT

EXCIPACT is a certification especially for excipients. It aims to ensure that all business units follow the Good Manufacturing Practice (GMP) as well as the Good Distribution Practice (GDP).



standard in 1992 and is a certification for theOur site in Venlo successfully passedfeed industry. Peter Greven is certified accordingEXCIPACT GMP / GDP certification into GMP+ at the Venlo location since 2013.2017

FSSC 22000 (ISO 22000)

FSSC 22000 provides a management system to ensure food safety. The abbreviation FSSC stands for "Food Safety System Certification".

Because the issue of food safety already became increasingly important in the past, this certification system has created an international standard that adheres to the standards of ISO (ISO 22000).

Our subsidiary in Venlo has been declared a certified manufacturer of additives for the food industry according to this system.

GMP+

GMP stands for "Good Manufacturing Practice". The "+" signals the integration of HACCP (Hazard Analysis and Critical Control Points). GMP+ originated from the original GMP







Peter Greven GmbH & Co. KG Peter-Greven-Straße 20–30 · 53902 Bad Muenstereifel, Germany Phone +49 2253 313 - 0 · Fax +49 2253 313 -134 eMail sales@peter-greven.com · www.peter-greven.com