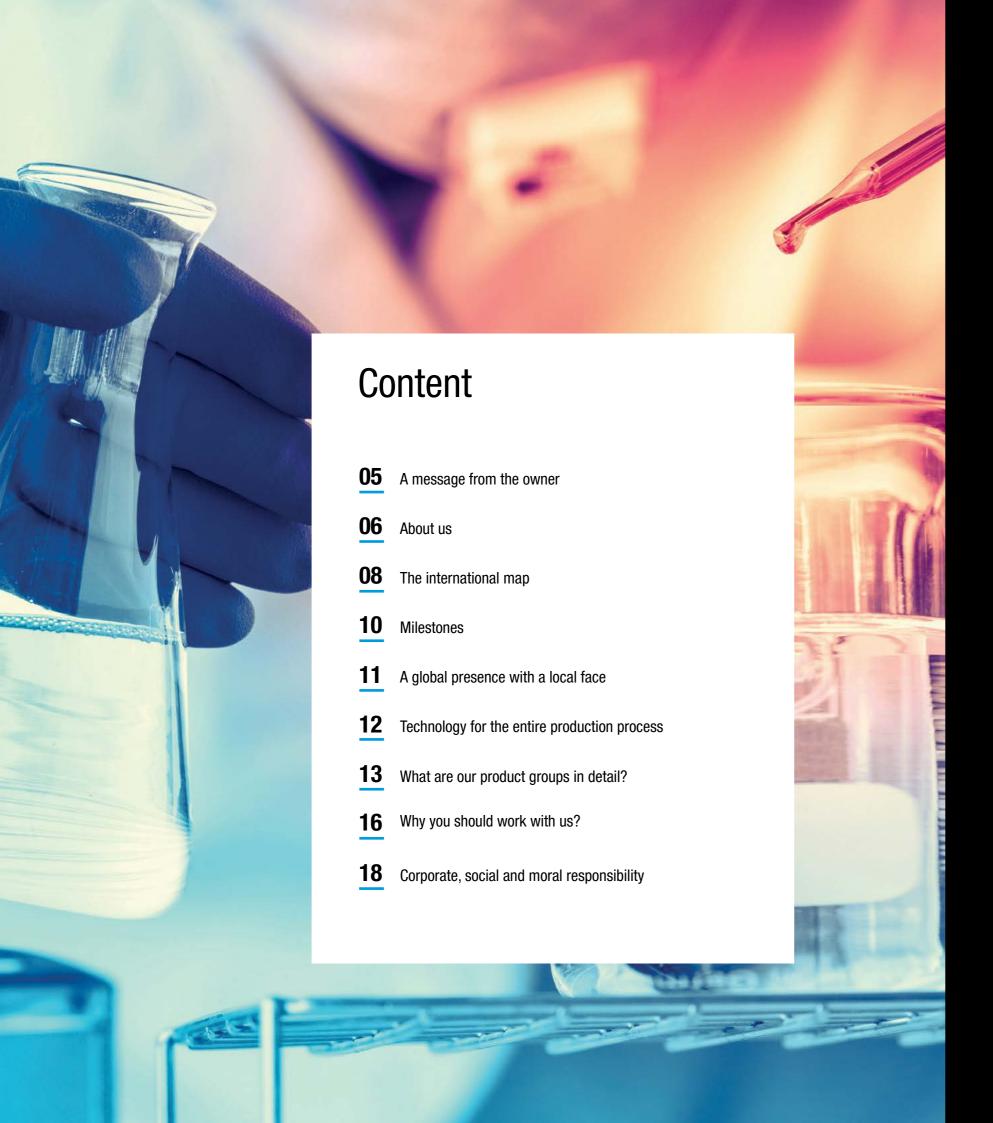


ABOUT US





Advanced process chemicals for industry

PETROFER develops, manufactures and markets innovative process chemicals for the wide spectrum of industrial applications. The internationally operating family owned company is headquartered in Hildesheim, Germany. PETROFER is a leading technical formulator offering a comprehensive range of over 600 advanced chemical products, application expertise, along with local support and service to the end user. As a worldwide company PETROFER runs 14 international manufacturing facilities, with representation in over 50 countries, employs over 1,000 people and is one of the leading companies in the fields of industrial technical speciality chemistry. Whatever you are making, wherever it is produced, PETROFER has the process chemistry and know-how to optimise your operation.

If people like you,

they'll listen to you,

but if they trust you,

they'll do business with you. - Zig Ziglar





We will become the world's most customer centric solution provider through our entrepreneurship and passion.

Dear friend,

People's requirements on technical progress are ever growing. For us, this results in rapidly increasing demands and challenges, because we have to combine and implement these technical requests with industrial possibility in the most practical, commercial and sustainable way.

Company size alone is no longer enough to remain competitive and fit for the future. We at PETROFER see absolute customer focus as our maxim. Being able to listen well, always recognising the individual and application specific needs of customers, developing client orientated overall solutions, supporting the end user with process optimisation in a spirit of partnership – that is what we want to be measured by!

Our entrepreneurial efforts focus on the development of resource saving supply chain management, new business models and maximum flexibility. Up to now the name PETROFER stands for high supply reliability and the fastest possible delivery - even for short lead time orders. We wouldn't be PETROFER if we sat back and became complacent. We do everything we can to significantly increase our flexibility and reduce response times – because you, the customer, are our focus. Digitalisation also requires us to set a new course – key words for this are agility and rapidity. Internet of things and big data opens up new perspectives. We are working hard every day to provide you, the client, with even better service in the future. Whatever your process problem, wherever you are, count on PETROFER's expertise, quality and dedication. As you can see, we are committed and passionate about customers and stay tuned just for you!

Now we wish you a lot of pleasure reading the latest image brochure from PETROFER. Get an idea of us and how we can help you!

Constantin M. Fischer Managing Director and Owner

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About us

INTERNATIONALLY RECOGNISED INDUSTRIAL CHEMISTRY SPECIALIST

PETROFER is an internationally operating industrial company with headquarters in Hildesheim, Germany. PETROFER has made a name for itself worldwide as a leading manufacturer of industrial chemicals, speciality fluids and process media. PETROFER operates six of it's own production sites, eight further sites produce under Joint Venture licence. The product range comprises over 600 formulated quality chemical products, which are continously developed further through in-house research and development and marketed in over 50 countries.

PETROFER products have achieved top positions in many markets. PETROFER's customer base is wide and includes renowned companies from the automotive industry and its suppliers, heat treatment industry, the paper/tissue industry and such diverse sectors as watch internals, through to wire used in satellites.

The owner managed family business, now in the second generation, employs over 1,000 people worldwide.

EXPERT KNOWLEDGE -RESOURCE SAVING PREMIUM PRODUCTS

PETROFER is a recognised industrial chemistry specialist that is constantly setting new technology standards. The basis for this: decades of intensive research, in-depth expert knowledge and know-how. The results are high-tech, resource saving products with premium quality that optimise customer processes, save costs and protect the environ-

The R&D specialists work continuously on the further development of the products. Their aim: the optimisation of quality standards, production efficiency, performance properties and process reliability. A special aspect is the global responsibility for the environment, ecology and health. The R&D experts are doing everything in their power to further improve the environmental balance and the eco-compatibility of the products.

PETROFER listen to the client first, developing customer specific, precisely engineered product solutions on request. At the same time, the name PETROFER, stands for rapid delivery and supply reliability. Our customer have consistant access to our technical team and if needed PETROFER field service or technical support can be on site within 24 hours.

Improving production performance through meaningful innovation and services. Delivering German excellence wherever you are. For generations.



OUR CRADLE TO GRAVE SOLUTIONS

Customers from all over the world trust and appreciate PETROFER's extensive experience and knowledge. We are recognised for our holistic approach. We provide support along the entire process chain, supplying all the chemicals, lubricants, speciality fluids and consultancy required.

Our customers benefit from our high flexibility and rapid response to enquiries of all kinds. We accompany you reliably from the very beginning, be it a new operation, new project, process development, contact enquiry through to optimisation and constant improvement in the future.

Our customer relationships are always of a long-term nature and go far beyond mere product recommendation and delivery. Whether for technical questions, services such as on-site consulting or customised chemical technology - we are the partner customers trust in.



Product development



Market development



Product delivery



Application support



Customer service

The international map

Our locations worldwide

With 50 locations globally PETROFER has successfully positioned itself as a partner to our customers wherever they are.

15 subsidiaries/Joint Ventures, 14 production plants and four licensees underline the international importance and presence of the company, which was founded in Germany in 1948.

In Mexico, Brazil, India, China, Turkey and the Republic of South Africa, we have state of the art production sites that supply the local markets. Production plants are constantly being improved and expanded to meet market demands.



15 SUBSIDIARIES/JOINT VENTURES



14 PRODUCTION PLANTS



4 INTERNATIONAL LICENSEES WITH OWN PRODUCTION PLANTS



OVER 30 EXCLUSIVE DISTRIBUTORS



OVER 50 COUNTRIES WITH SALES ACTIVITIES



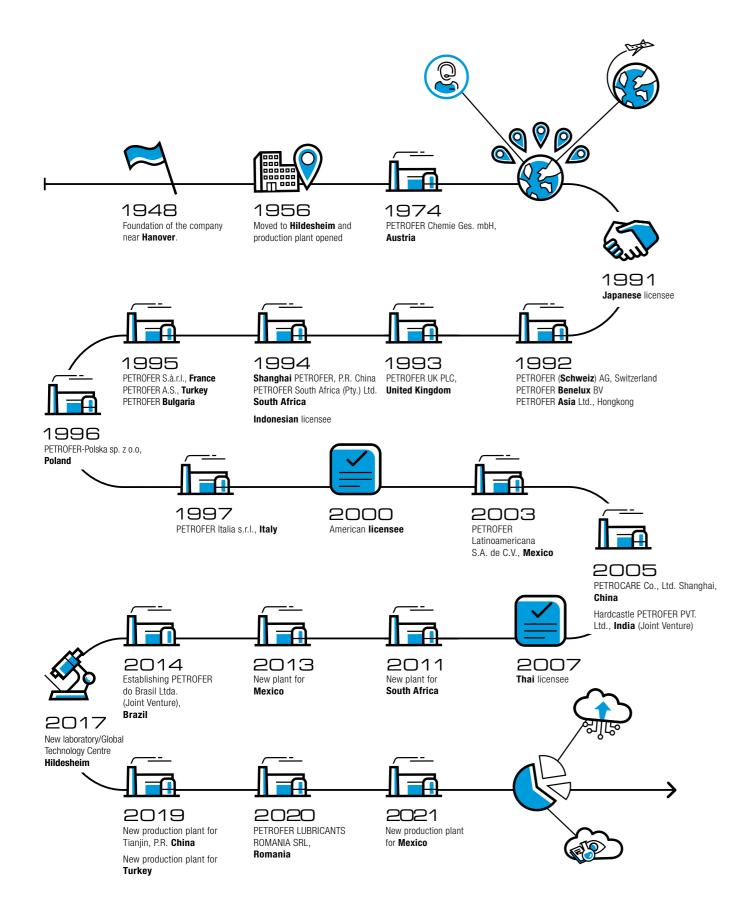
DIRECT CUSTOMERS IN 13 COUNTRIES



4 GLOBAL TECHNOLOGY DEVELOPMENT CENTRES



Milestones



A global presence with a local face

Our identity is a strong global family business with a local face – our subsidiaries offer their regional expertise worldwide, not just giving lip service, but actually taking action, that customers can experience and benefit through a local relationship.

The numerous subsidiaries in Europe, Asia, America and Africa play a key role for our group of companies — they open up new attractive markets, offer specific solutions for the respective local needs, and provide input for research and development of future orientated products.

They offer a comprehensive worldwide service, and are the local face to our customers for our international company. Our regional experts are our first point of contact to access the strengths and support of PETROFER globally. They are ambassadors of PETROFER giving our company truthfulness and identity.

Whether production site, licensee or joint venture — it is our subsidiaries that have made PETROFER what it is today: a naturally grown, strongly customer focussed, ethical with family values, global player within our industry.

Please contact your nearest PETROFER company below or our main webpage www.petrofer.com for your local contact details:

ARGENTINA I PETROFER ARGENTINIA S.R.L. www.petrofer.com.br

AUSTRIA | PETROFER AUSTRIA Ges. mbH www.petrofer.at

BRAZIL | PETROFER do Brasil Ltda.

www.petrofer.com.br

CHINA I SHANGHAI PETROFER SPECIAL LUBRICANTS CO. LTD. www.petrofer.com.cn

FRANCE | PETROFER S.à.r.l.

www.petrofer.com/fr

GERMANY | PETROFER Chemie H. R. Fischer GmbH + Co. KG www.petrofer.com/de

INDIA | HARDCASTLE PETROFER PVT. Ltd.

www.hardcastlepetrofer.com

ITALY | PETROFER ITALIA s.r.l.

www.petrofer.com

MEXICO | PETROFER Latinoamericana S.A. de C.V. www.petrofer.com.mx

POLAND | PETROFER-POLSKA sp. z o.o.

www.petrofer.com

ROMANIA | PETROFER Lubricants Romania SRL

www.petrofer.com

SOUTH AFRICA | PETROFER SOUTH AFRICA (PTY) Ltd. www.petrofer.co.za

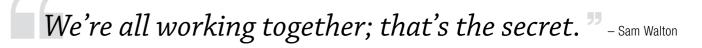
SWITZERLAND | PETROFER (SCHWEIZ) AG

www.petrofer-schweiz.ch

TURKEY | PETROFER ENDÜSTRIYEL YAGLAR SAN. VE TIC A.S. www.petrofer.com.tr

UNITED KINGDOM | PETROFER UK PLC

www.petrofer.co.uk

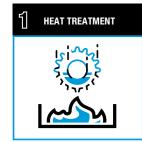


Technology for the entire production process

From raw material to final technical product

As an ISO certified chemical formulator, manufacturer and supplier, PETROFER serves a wide range of industrial sectors – from the automotive industry and supply chain, aerospace, casting, heat treatment, through metalworking process to the paper and tissue industry, wherever something is made we are present.

We support the entire production cycle: from the feed in of the raw material through casting, hardening, machining, forming, washing, corrosion preventing to the point where a finished component can be delivered to the end customer, PETROFER is involved throughout.





















Your benefits:

reduction of total cost of ownership, higher process efficiency and reliability, improvement of the environmental balance - Stuart Gregory, PETROFER

What are our product groups in detail?

PETROFER is one of the worlds's leading suppliers of high quality and innovative lubricants and speciality fluids. As a certified process expert, the company supplies customers all over the world – with a comprehensive range of around 600 premium products. The portfolio is divided into 10 product groups. It contains process simplifying quenching media (1) as well as innovative products around forging processes and die-casting (2). PETROFER develops fire resistant and flame retardant hydraulic fluids (3) for industrial applications. The metal cutting lubricants (4) offer high performance and lower tooling costs. The range of products for forming

and pressing technology (5) offers superior performance. Industrial lubricants (6) are designed precisely for the specific production process, while industrial cleaners (7) offer tailor made individual products and system solutions. A highly effective corrosion prevention is indispensable - here the PETROFER corrosion prevention media (8), provide excellent performance. Renowned customers from the international paper/tissue industry rely on the highly specialised paper chemicals (9). High quality services and support (10) equipment round off the range.



Quenching media are used to harden steel or cast iron after austenising the workpiece. Depending on the material/alloy and the choice of quenching medium (for example oil, water based polymer solution and molten salt), the workpiece cools down at a specified speed and in a controlled manner.

Our products are used for the heat treatment of steel, castiron and aluminium alloys in order to design a specific microstructure, defined hardness and with the lowest possible range of distortion. Typical applications are quenching of fasteners, gears for passenger cars and for wind energy plants. We also have a range of supplementary products for the Heat Treatment process.



From our extensive product portfolio we can offer the complete chemical package for the hot working process and the die-casting machine. Whether high performance casting release agents, piston lubricants, heat transfer media, release agents for drop forging or hot metal extrusion – we have the right product for every requirement. Our highly qualified and experienced application engineers assist in the optimisation of your processes.

Our products are used for all kinds of high pressure die-casted parts from automotive sector to medical technology up to domestic goods.



Hydraulic fluids are commonly made of flammable mineral oils. In areas with a high risk of fire or explosion, mineral oils represent a significant safety hazard thus fire resistant hydraulic fluids are required. The liquids are divided into anhydrous synthetic and water containing products. Fire resistant hydraulic fluids have to fulfil a multitude of tasks in the systems. The primary task is the transmission of pressure, energy or forces in the hydraulic system.

Our products are mainly used in die-casting shops in high pressure die-casting machines (HPDC) and steel mills, but there are also applications in the mining industry, marine and hydroforming processes, depending on the level of fire resistance required.



Our metal working fluids offer significantly improved tool life, cutting efficiency, surface finish, rust prevention and fluid life, thus making the manufacturing process more efficient. Cutting fluid technology can enormously improve surface finishes, component cleanliness and accuracy such that costs for post-production operations can be reduced. Our coolants are subdivided into water soluble and non-water soluble, both types reduce friction and wear.

Our products are used for all kinds of machining operations in a high variety of application fields, for example; automotive and its supplier industry as well as aerospace or bearing sectors. From light up to heavy duty maching operations we have metalworking fluids for the material and process.



PETROFER offers a comprehensive range of industrial cleaners for the cleaning of most surfaces and materials and suitable for all types of washing processes. PETROFER can offer technology whether as an individual product or as a tailor made system solution for a single production process. All industrial cleaners from PETROFER enable a long service life with low maintenance.

Our products are used for example in the bearing industry for very small balls up to huge parts in the railway industry. They cover applications as diverse as floor cleaning up to high precision lenses for medical use.



Our rust preventives are highly effective in all industrial processes, and particularly for protecting finish machined high value components. Our range comprises oils, water dilutable products, dewatering fluids, wax containing fluids and special products. All products are barium free, some are VOC free and so are an environmentally preferable solution.

Our rust preventives are used for the protection of high volume products like bolts and nuts up to very long high precision shafts for steering systems. Short term protection for intermediate use in production lines like camshafts or crankshafts up to long term protection for spare parts for the automotive industry is achievable.



The extensive product range includes high quality forming lubricants for wire drawing, cold forming, fine blanking, fine stamping, piercing, perforating, deep drawing and rolling. All products are specially tailored to the application and the special criteria of the forming process. In this way PETRO-FER guarantees highest productivity in metal forming operations.

Our metal forming fluids are suitable for all forming operations and in a high variety of industrial sectors, for example wire and cable, fasteners, car driveline and heat exchangers.



INDUSTRIAL LUBRICANTS

PETROFER meets the constantly growing requirements and demands of machinery with modern, specially formulated lubricants. Especially in hydraulics, transmissions, spindle lubricating and cooling, as well as for bed and slideway lubrication PETROFER offers individual, tailor made solutions with highly specialised premium products. Wherever equipment or machinery requires a lubricant we have the product of choice. Industrial greases are also available in certain countries.

Our products are used in hydraulic applications with low risk of fire, industrial gear boxes, for spindle lubricating and cooling systems. Products for slideway lubrication round off the range of industrial lubricants.



PAPER CHEMICALS

Our advanced chemicals are used for paper, tissue, towel and board production, along with a speciality range of products for all converting industries. PETROFER coating and release agents are formulated for all types of Yankee cylinder found in the tissue industry enabling production of superior quality papers. In the board industry debonders, stiffness improvers, biocides, adhesives and other technical products are available.

For the converting of paper, tissue, and board PETROFER offers an extensive range of products to assist slitting, core manufacture and bonding, blade grinding, topical softeners and many other applications.



SUPPORT

PETROFER offers a broad range of services ranging from on-site technical support, technical training for our customers up to fluid management services. Fluid management has many variations in industry, PETROFER has experience to understand your requirements and customise a package accordingly.

We also offer a comprehensive range of technical equipment, for example dosing and mixing systems, Fluid Control Units to ease handling of the respective fluid, chemical concentrate measuring equipment, pH meter, conductivity meter, refractometer and quench testing systems, to mention a few.

There are many oil and chemical companies, but which is the right one for you? From customer focus to improved environmental performance: we give you six strong arguments why you should work with PETROFEF



Passionate about our customers needs

We think and act: application, customer requirements and market demand. The focus is not only on the products, but on our customers, their needs and their future success. Our target is to meet and exceed the demands and expectations of our clients. PETROFER has positioned itself for the future and is in the best condition to serve the needs of different market segments.

The result: we empathise to customers now and in the future!



Provide process expertise and solutions along the entire production chain

PETROFER is involved in all industrial processes. We have an extensive product portfolio and can supply most application requirements. As an internationally recognised chemical formulator and supplier, we can offer everything required for production to the finished product.

The result: a one-stop shop supplier of product and expertise!



Increase your efficiency and profitability

Our products and services help customers to reduce overall costs and increase process performance. They extend tool life, increase production efficiency and thus minimising maintenance costs. In addition extending the life of process fluids reducing disposal costs, environmental impact, downtime, process cost.

The result: customer profits increase!



Innovate and develop together

Over 20 % of our employees globally work in research and development. As a formulated chemical supplier, we continuously develop our products in our own laboratories. We deliberately concentrate on optimising economic efficiency, improving performance properties, saving energy and using sustainable raw materials.

The result: constantly developing technology to meet an ever changing world!



Improve your process reliability

The excellent performance of our products and services reduces the stress on the production process and people while producing superior quality components. This provides a stable, reliable, robust, safer production process.

We listen. We develop. We deliver.

The result: more efficient production and happy workforce!



Have environmental and social responsibility

PETROFER is focussed on improving its ecological footprint, by using carefully selected raw materials. It has efficient manufacturing processes globally and is constantly searching for more sustainable environmentally friendly products and technologies. PETROFER also continually invests in its people and processes, and has ethical, social and moral responsibility to society.

The result: a family owned supplier you can trust!

Experience the difference in performance using PETROFER as a partner.

Corporate, social and moral responsibility

As one of the world's leading suppliers of high quality lubricants, specialised fluids and process technologies, we understand our responsibility towards our fellow citizens, nature and the environment. As a holder of ISO 14000, ISO 9001 and ISO 50001 certifications, sustainability defines our strategies, our actions, and our commitment to the society in which we operate.

We are strongly connected to society today and committed to improve tomorrow — and we know that we can only retain our position as a preferred partner for high quality products and services for decades to come by staying true to these values.

By doing business sustainably, we aim to achieve ecological, economic and social balance. In our day-to-day operations, this means that we: protect natural resources, prevent environmental damage, use ecologically friendly and energy-efficient processes and take quality and environmental considerations into account when we select our suppliers. Our creative and motivated colleagues are the basis for our corporate success.

PETROFER empowers its employees with freedom in their daily work and for all their actions. Transparent, flat hierarchies, a long-term corporate policy and the right balance between tradition and future innovation are in the foreground.





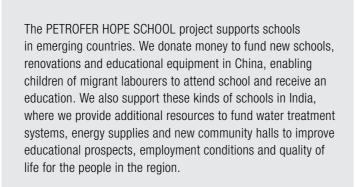
PETROFER HOPE SCHOOLS

Project started 2008 with to date:

- $\;\blacksquare\;$ 20 supported schools in China and India
- 10 renovated school buildings
- 3 new school buildings
- more than 100 PC workstations

Further activities:

Donations for teaching materials, furniture, windows, installations for water and power supply



PETROFER BEE PROJECT

Project started 2017 with to date:

- 10 total colonies of bees in Austria
- 2 bee colonies in Hildesheim, more are planned
- 15 trained employees for support of bees in Hildesheim



PETROFER is involved in projects for the protection of bees, nature and environment, and is committed to species appropriate, near natural husbandry of the bee population. We will continue our commitment to projects that aim to protect the environment, preserve human health and conserve natural resources.





View our complete list of projects at: PETROFER – Our Social Responsibility

The brands that will be big in the future
will be those that tap
into the social changes
that are taking place. - Sir Michael Perry

Wherever you are,
count on PETROFER's expertise,
quality and dedication.
We listen. We develop. We deliver. — Constantin M. Fischer, PETROFER