

Gear pumps from the specialists

Customised | Economical | Flexible



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The best pump for your process!

Each pump is precisely tailored to the customer's process and needs. Our experts develop custom gear pumps for use in standard or limit ranges.

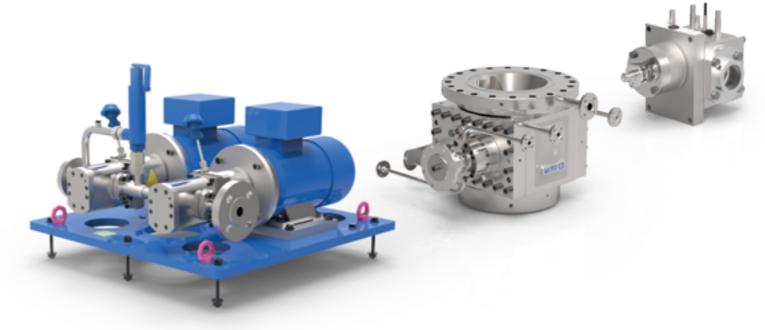
Topic in focus: custom gear pumps

WITTE offers various series for a number of different tasks.

WITTE offers pumps for applications in limit ranges. We develop durable standard or custom solutions that deliver maximum precision. For more than 35 years, WITTE has specialised in developing gear pumps for industry. Our objective has always been to ensure maximum process safety and tailor the pumps precisely to the application and process in question. This way we guarantee the best efficiency and long-lasting quality of our pumps. Reduced maintenance costs and intervals thanks to perfectly matched material pairings mean that investments quickly pay off.

We have been working with well-known companies and innovative drivers from the industry with great success and are constantly developing new solutions.

If we do not have a suitable solution ready to go, we work with our customers to develop the right product for them. In the process, we walk our customers through the entire project from prototypes to the final product. The project and development team has sales, project management and design experts who keep you up to date with the project status at all times. More than 35 years of experience and the knowledge of our expert team are incorporated into each of our pumps.



Corporate brochure for WITTE gear pumps

Topic Topic Topic in focus: custom gear pumps

Industries and expertise Polymers and elastomers



Industries and expertise Compounding and extrusion



Polymers



For over 35 years, we have been working for and with our customers to develop pump solutions for the plastics industry. Our products can serve a wide range of processing stages and a number of media and applications. Pumps from our POLY series run in the world's largest polyamide plant, among others. For the plastics industry, we are not just a supplier and manufacturer of gear pumps, but also a long-standing, reliable technology and development partner.

Compounding

Plastics compounding is a continuous multistage process on extruders, where polymers and additives are mixed in the smelting phase. The raw materials are metered into the extruder. In the extruder, the material is mixed into a homogeneous smelt and then shaped into small pellets during granulation. A gear pump is usually positioned upstream of the granulation process and ensures an even granulate through a constant build-up of pressure. The end products also include filler and fibre-reinforced compounds in addition to monopigment and additive master batches. Large gear pumps are used especially when compounding polyolefins such as LDPE, LLDPE, HDPE and PP.



Elastomers and rubber industry



Elastomers in their original form are very challenging, sensitive media. The special properties have to be taken into account in processing to achieve good quality. Our long-standing collaboration with large rubber processors guarantees pumps of the highest grade and quality that are precisely tailored to the processing stages. The temperature control of the housing – and of the shafts and bearings if needed – compensates for the heat generated by friction and therefore ensures stable process conditions.

Extrusion

Processes in which high pressures are needed for downstream equipment frequently occur in extrusion applications. The high load on the polymer in the extruder often takes a toll on quality. Shearing and heat transfer result in additional strain on the polymer. Extrusion pumps counteract these problems by reducing pulsation, for example. Specially designed for use downstream of the extruder, the pumps significantly increase the efficiency of the line. The high quality and precision of WITTE extrusion pumps are just two reasons why many complete system providers use only WITTE extrusion pumps in conjunction with their own components such as extruders, screen changers or granulators.



Industries and expertise Food



Industries and expertise Machine building





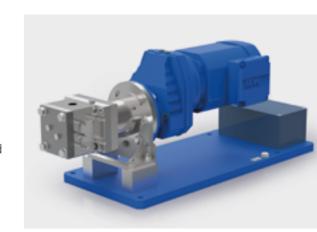
Food

Gear pumps are not as typical in the food industry, but certainly fulfil their purpose in this field and are used at a wide range of points. Application areas include processes such as transferring baking oils or ingredients for chocolate and producing raw mixtures, fats, flavourings or vitamins. Sugar solutions or chewing gum can also be transferred with these stainless-steel pumps. Designed as needed, these pumps can be used for demanding tasks.

Seals, bearings and materials with approvals for food, such as FDA or EN 1935, are available. Gear pumps for the food industry can especially be used where other pump types meet their limits.

Machine building

Machine building is one of the most multifaceted sectors worldwide. All products from daily life are touched by machine building. From the combine harvester for wheat to the automatic oven and the packaging for bread, everything hangs on the inventions of machine building. In the process, it's not just purely mechanical operations that take place: liquids are also pumped. That's where gear pumps come in. Gear pump designs are as versatile as the applications of machine building. Pumps for the food industry, for fibre production or for general plant engineering are just some examples of this. For larger batch sizes or special applications in particular, the gear pumps have to be specially adapted to the machine building process. This is the only way to improve the potential for optimisation. Witte Pumps & Technology caters to both of these situations, with custom solutions for special applications and OEM pumps for larger batch sizes. And global service determines success, since machine building products are used everywhere around the world.







Industries and expertise Chemicals and fibres





Chemical applications

For transferring and metering tasks, pumps are used that guarantee maximum reliability and metering accuracy even under the most challenging process conditions. In many companies in the chemical, pharmaceutical, food and cosmetics industries, WITTE precision gear pumps are longestablished go-to components for these demanding tasks. Media of all types are transferred or metered. Organic or inorganic chemicals, acids, bases or strongly corrosive or abrasive media are no problem for the CHEM series.

The application areas range from conventional transfer and pressure-boost tasks for low-to-medium viscous media to metering tasks and discharging tasks from film evaporators. Based on a modular system for the housing, gears, friction bearings and shaft seals, the pumps are precisely designed for the application in question.

The core components are optimally matched to each other. The housing, gears, friction bearings and shaft seals are available in different materials, designs and combinations so that customer requirements can be met flexibly and individually.

Products for the chemical industry must be absolutely reliable and safe to ensure neither humans nor the environment are harmed. That's why we use magnetic couplings with our gear pumps wherever an especially demanding task arises. This seal is used to transfer toxic or flammable media and fluids, for example. With the hermetically sealed synchronous magnetic coupling, the pump speed matches the drive speed exactly. This is a decisive factor for pump speed control.

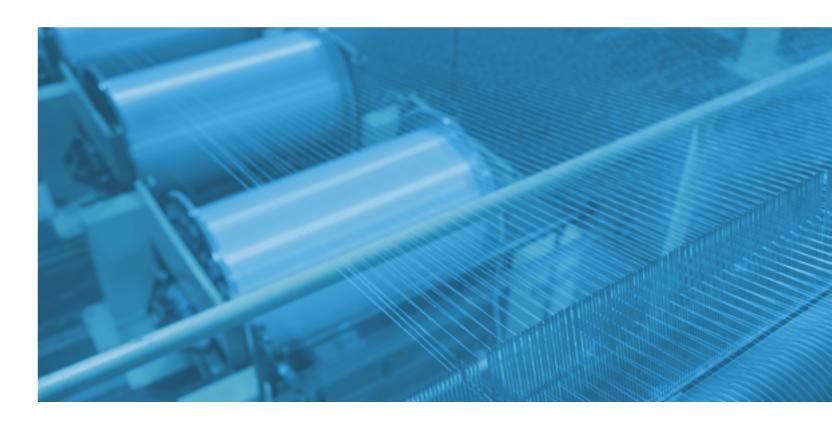
The applications and application areas for the CHEM series are multifaceted and challenging. To ensure safe and leak-free pumping for all processes, applications and media, we have developed a number of different sealing systems. We can also design the CHEM series products to conform to TA Luft requirements upon request.

Fibre production

Chemical pumps are preferred in fibre production processes thanks to their precise volumetric metering properties. The even output of the pumps is necessary to guarantee the quality of the fibres. Low-pulsation pumping, constant flow and a number of standard and special materials make this pump type a popular and successful choice. Small metering pumps are also used in extrusion systems. Often additives are metered into the extruder during extrusion. Depending on the extruder size and throughput, however, only tiny amounts are added at the appropriate point.







In good hands at all times:

full transparency throughout the entire process

Research and development

We specialise in custom solutions and one of our core areas of expertise is the research and development of new solutions and approaches. We focus on new bearing geometries, gearing, and materials and material pairings. Through close collaboration with customers, institutes and partners, we are constantly developing innovative and ground-breaking solutions that make some processes possible for the first time ever.

Innovative applications and processes have often only been feasible thanks to special solutions from WITTE. We also use gear pumps in areas where this type of pump is normally not typical. The collaboration among engineers, technicians, mechanics and designers allows for new ideas on a daily basis.

Technical clarification and Advice/optimisation feasibility study Reference to the process Sales partner Quick contact from sales Pump design and quotation Continuous consultation with the customer One contact person for the entirety of the project Order phase: handover to project management Product delivery Commissioning and installation if desired Aftersales service Maintenance, repair, spare part service

Services



Engineering

Development of custom gear pumps. We develop custom gear pumps for our customers based on their wishes and requirements. In doing so, we walk them through the entire process from the idea to the prototype and series production. WITTE is not just a manufacturer and supplier of gear pumps; it is also a valued development and technology partner.



Service

- Technical clarification on site
- Start-up service/commissioning
- Installation
- Expertise for gear pumps in process



Training

- Theoretical knowledge
- Practical application
- Seminars for customers/external parties

Trained personnel is essential to ensure fast and flexible plant maintenance. WITTE offers its customers training on general and special gear pump topics. Depending on the team size, training can take place at Witte's premises or on site at the customer's own plant/workshop.

- Troubleshooting
- Spare part service
- Expertise
- On-site analysis



Topic Research and development / services

Certificates



What drives us



The quality must be right. That's why WITTE PUMPS & TECHNOLOGY GmbH is certified under DIN ISO 9001. Regular internal and external audits ensure continuous improvement. The principles of modern business operations are assured by a code of conduct and compliance directive.

- DIN EN ISO 9001
- AE0
- EAC
- TA Luft
- ATEX

ISO 9001 certificate

We focus on quality. This is the only way our pumps can achieve the best efficiency and reliable performance. We are certified under DIN EN ISO 9001 in order to constantly improve quality and customer satisfaction. All of our processes and our service are regularly audited and optimised. We also perform regular audits and assessments of our suppliers to guarantee reliability and consistently high product quality. Employees and partners of the company are involved in continuous improvement processes to encourage commitment to the cause and team cohesion.

AEO certificate

As an 'Authorised Economic Operator', we guarantee a consistently secure supply chain for our products. This means that everyone involved from the customs office have been certified for reliability.

Our customers benefit from this status because we are able to deliver quickly and reliably thanks to accelerated approval processes and simplified customs procedures. WITTE PUMPS & TECHNOLOGY GmbH was founded in Uetersen near Hamburg in 1984.

As a company, we aim to provide our customers with maximum process safety through tailored gear pumps. We love the challenge of creating solutions that no one else is offering. Our company is a leader today in the field of custom applications. And from our custom work, we've designed a number of standard pumps. We keep the most common sizes constantly in stock. Our subsidiaries in the USA, China, Malaysia and Russia ensure proximity to our customers. In 2014, our company moved into a completely new plant in Tornesch near Hamburg, where operating processes were optimised in order to respond quickly to customer requests.





Corporate brochure for WITTE gear pumps

Topic Certificates and history

Memberships











VDMA

WITTE has been a member of the German Mechanical Engineering Industry Association (VDMA) for years and has representatives in different professional forums.

Blue Competence

We live sustainability. Environmental protection and energy efficiency are incredibly important to us and firmly anchored in the company and our products. WITTE is committed to the VDMA sustainability initiative.

SPI: The Plastics Industry Association

The American Plastics Industry Association unites all segments of the process chain. WITTE has been a member of this association for many years and plays an active role in connecting the plastics industry.

Premium partner of 'Der Echte Norden'

Connected to the region. We are proud to be an active brand ambassador for Schleswig-Holstein, the 'Echte Norden' or 'true north' of the country. The region is shaped by innovative companies and ideas, and not just when it comes to renewable and regenerative energy such as wind power. With short distances to logistics connections to the motorway, airports and the Port of Hamburg, and close proximity to the North and Baltic Seas, this area offers decisive advantages to employees and customers.

International chambers of commerce

International trade is the engine that drives machine building. WITTE pumps are used internationally, taking care of the most demanding tasks in plants all over the world. It's therefore only logical to promote international trade and make gear pumps of the best quality and highest process safety available everywhere on earth. We are members in different international chambers of commerce for our core markets with the aim of promoting global trade.

Personnel and responsibility

Training and continuing professional development

WITTE is an accredited training organisation and offers young people and school-leavers a qualified education in a modern environment. Training places for industrial mechanics, industrial salespeople and technical product designers are regularly filled. We don't just recruit our specialists from the ranks of the young, however: we are happy to give unsolicited applications a chance as well. We offer school pupils and university students traineeships or places on projects in the company. Qualified personnel is our capital and the key to our success.

Continuous development and training for our employees and partners takes top priority. We greatly value active transfer of knowledge within our company. Naturally we treat each other with respect and push for innovative ideas and teamwork. Having a high number of training places offers lots of young people the opportunity to start their careers in a commercial or technical field. The immediate proximity to Hamburg means that employees can enjoy an interesting environment.

Social responsibility

Since our founding, we have always been cognisant of our responsibility for our actions and have made it a priority to treat humans, nature and the environment with respect. We want to leave behind an intact environment for later generations and place strict controls on all of our products and processes in order to ensure that no unnecessary risk is taken. All components come from reliable and fair partners. Every supplier is regularly audited in accordance with applicable quality standards.

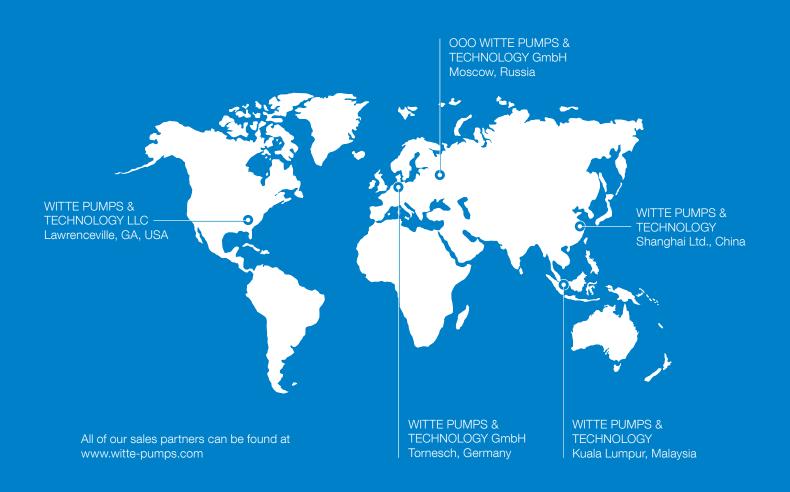


Corporate brochure for WITTE gear pumps

Topic Memberships, personnel and responsibility



WITTE WORLDWIDE



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