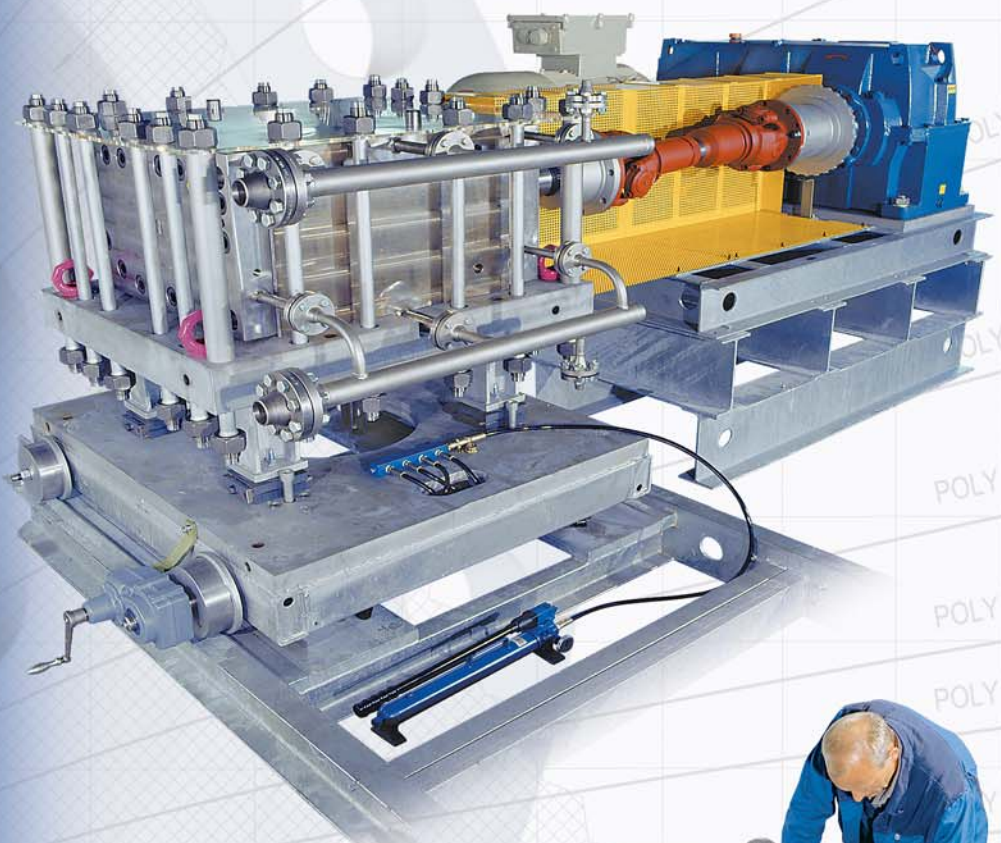


Witte Precision Gear Pumps



POLY 6100 - 11

POLY 3200 - 10

POLY 1482 - 9/1

POLY 716 - 8

POLY 371 - 7

POLY 176 - 6

POLY 92,6 - 5

POLY 46,3 - 4

POLY 25,6 - 3

POLY 10,2 - 2

POLY 4,7 - 1

POLY 2,78 - 1/2

POLY 1,28 - 1/1

speed [rpm]

WITE  [®]
PUMPS & TECHNOLOGY

Company Portrait

WITTE Pumps and Technology GmbH was founded in 1984 at Uetersen near Hamburg, Germany. The aim of the company was to give its customers the maximum of process safety by providing tailor made solutions for gear pumps.

Customers for high-quality WITTE precision gear pumps come from the Plastics, Chemical, Cosmetic and Food-stuffs industries.

Today, WITTE Pumps and Technology not only produces special solutions for industry but also offers a standard range of pumps. The latest technical innovations are incorporated into the model range, thus ensuring a very high standard of technology. In addition to providing services and spare parts for its own pumps, WITTE also provides comprehensive service packages for gear pumps produced by other manufacturers.

WITTE Pumps and Technology is renowned for its innovative drive, which makes it one of the world-leaders in this market.

The WITTE Philosophy

Through its worldwide presence, WITTE strives to maintain an extraordinarily high standard of customer service. Flexibility in solving technical problems and in handling projects are of the utmost significance. The extremely high level of technology and quality of our pumps ensures the trouble-free operation of processing plants.

WITTE also boosts the motivation of its employees and cultivates their working environment. Responsible employees are an important part of the company. The health and safety of its employees is very close to WITTE's heart.

WITTE's Quality Policy

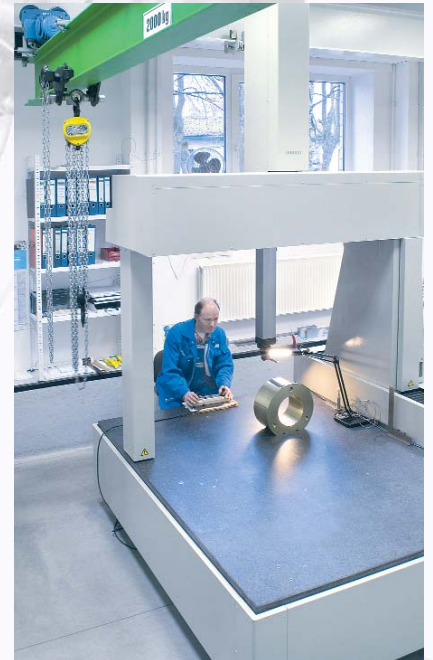
Our quality policy is supported by ISO 9001. The quality policy at WITTE is borne by the following aims:

Increasing the satisfaction of all WITTE customers.

The customer specifies the quality and chooses out products to fulfil his guidelines.

WITTE do their utmost to further the continual process of product and process improvement. A constantly high standard of pumps and spare parts and of the acquisition process is ensured by carefully selecting our suppliers and subjecting them to a continual assessment procedure.

The sustained development of improved products is thus supported. It goes without saying that we fulfil all official and legal requirements.





CHEM
CHEMICALS PUMPS



POLY
DISCHARGE PUMPS



BOOSTER
BOOSTER PUMPS



EXTRU
EXTRUSION PUMPS



METERING SYSTEMS



SPECIAL PUMPS



SPARE PARTS/SERVICE



WITE  [®]
PUMPS & TECHNOLOGY

WITTE PUMPS & TECHNOLOGY

Supply precision gear pumps that conform to the r

WITTE's comprehensive experience in dimensioning gear pumps to match the most diverse challenges of the requirements. State of the art production processes and stringent quality assurance using 3D co-ordinate-me



CHEM

CHEM gear pumps, for the transportation and metering of medium viscosity products, like pre-polymers, monomers and other chemicals. Decades of experience in construction and an optimum selection of materials, make these types of pump suitable for even the most demanding tasks and are convincing in their reliability in both vacuum and high pressure applications. For transporting poisonous, highly inflammable media or media, which crystallise under atmosphere, WITTE also offers this type of pump with a magnetic drive, where the medium is hermetically sealed in the pump. System pressures of up to 700 bar are possible with the CHEM MAGNET. This series is also suitable for the food-stuffs industry, e.g. for transporting butter, margarine, vegetable oils and fudges.

Technical Features

Housing

Stainless steel · Hastelloy · Tantalum · Titanium · and Ceramics

Gearwheels

All workable metals and ceramics · Spur toothed

Friction bearing

Carbon · NiAg · silicon carbide · zirconium oxide tool steel · special materials

Shaft seals

Single- or double-action mechanical seal · stuffing box · Viscoseal · magnetic couplings

Standard applications

Viscosity

0.5 to 10,000,000 Pas

Temperature

up to 450° C

Inlet pressure

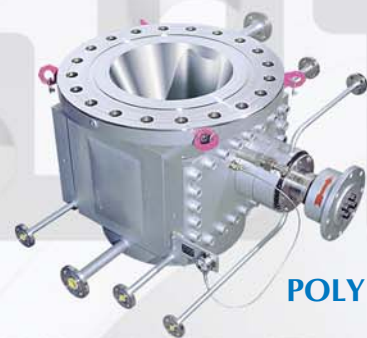
Vacuum to max. 15 bar

Outlet pressure

up to 200 bar

Pump sizes

From 22/6 (1.28 ccm/rev – 20 l/h) to 280/280, intermediate sizes with narrower gearwheels for high-pressure applications are available as standard, e.g. 140/90 (693 ccm/rev).



POLY

POLY high-pressure gear pump for the discharge of medium to high viscosity media from the reactor. The extra large inlet opening guarantees an even flow of product to the gearwheels even under vacuum or extremely low NPSH conditions and flow rates. Offered with either a round inlet port, by means of which the suction flange of the pump is directly connected to the outlet flange of the reactor or as a low NPSH version, where the pump is connected between the pump and reactor flanges, in order to achieve an even larger and shorter inlet port. Typical applications are the transportation of PET, PS, PC, ABS, etc.

Technical Features

Housing

Stainless steel · Hastelloy · cast steel

Gearwheels

Nitrated steel, tool steel · special steel · helical gearing · herringbone gearing

Friction bearing

NiAg · AlBz (aluminium-bronze) · tool steel · special materials

Shaft seals

Single and vacuum viscoseal · mechanical seal · stuffing box · magnetic coupling

Standard applications

Viscosity

up to 40,000 Pas

Temperature

up to 350° C

Inlet pressure

Vacuum to max. 40 bar

Outlet pressure

up to 290 bar with helical gearing

Pump sizes

From 22/22 (4.7 ccm/rev – 10 kg/h) to 280/280 (12,999 ccm/rev – 30,000 kg/h, intermediate sizes with wider gearwheels are available as standard, e.g. 189/270 (4,800 ccm/rev).

most stringent industrial requirements.

ie Chemical, Plastics and Foodstuffs industries ensures optimised pumps and fulfil the highest of quality measuring instruments form the backbone of the WITTE range of gear pumps.



BOOSTER

BOOSTER gear pumps for the polymerisation process, to boost the pressure of medium to high viscosity media. This hydraulically heated pump, for use with pre-polymers and polymers, excels through its gentle handling. It transports pre-polymers and polymers, e.g. PS, PET, PVC, PC, PMMA any many more, very gently The heating can be provided by heat transfer oil or steam.

Technical Features

Housing

Stainless steel · Hastelloy · cast steel

Gearwheels

Nitrated steel · tool steel · special steel · helical gearing · herringbone gearing

Friction bearing

NiAg · AlBz (aluminium-bronze) · tool steel · special materials

Shaft seals

Viscoseal · stuffing box

Standard applications

Viscosity

up to 40,000 Pas

Temperature

up to 350° C

Inlet pressure

Vacuum to max. 100 bar

Outlet pressure

up to 350 bar with helical gearing

Pump sizes

From 22/22 (4.7 ccm/rev – 10kg/h) to 280/280.



EXTRU

EXTRU gear pump for the extrusion and pressure boosting of medium to high viscosity media. These hydraulically or electrically heated pumps are used in processes with high suction pressures, in which an increase in pressure is desirable, because of the loss of pressure in follow-on filters and melting pipes. Suitable for polymers like PS, PET, PVC, PC, PMMA etc.

The WITTE EXTRU gear pump is also suitable for foodstuff applications, e.g. liquorice or chewing gum.

Technical Features

Housing

Steel · stainless steel for PVC applications

Gearwheels

Nitrated steel · spur gearing · helical gearing · herringbone gearing

Friction bearing

NiAg · tool steel · ceramic · AlBz (aluminium-bronze) · special materials

Shaft seals

Viscoseal · stuffing boxes

Standard applications

Viscosity

From 1 to 40,000 Pas

Temperature

up to 450° C

Inlet pressure

Vacuum to max. 200 bar

Outlet pressure

up to 700 bar

Pump sizes

From 22/22 (4.7 ccm/rev -5 kg/h) to 280/280, intermediate sizes with narrower gearwheels for high-pressure applications are available as standard, e.g. 140/90 (693 ccm/rev).

WITTE PROGRAM
PUMP

SPECIAL PUMPS METERING SYSTEMS

Metering Systems

The WITTE metering system (WDS) enable precise volumetric metering of low to high viscosity media with gear pumps, even at high temperatures and pressures. Two series connected gear pumps and one measuring and pressure boosting pump are precisely controlled by a PLC control system, such that a precision of better than 0.01% is achieved, depending upon the medium.



Special Pumps

In addition to our standard range of pumps, we offer a range of special pumps, e.g. made of ceramic, tantalum, titanium or immersion pumps. Many of these pumps are custom built to suit the application in question and its specific operating parameters. WITTE for example produced one such pump, made completely of ceramic, for transporting a highly corrosive medium at temperature 55° C.

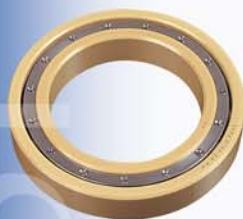
Magnetic drive



Tantalum pump



Ceramic pumps



Gear pumps

Spare parts, repairs and optimisation

WITTE spare parts are available world-wide. Extensive storage facilities in Europe, USA and China guarantee the quickest possible delivery of spare parts.

WITTE also supplies spare parts for other brands of gear pump. The range of sizes varies between 22/6 and 280/280 (and for larger pumps upon request).

Send your gear pump to WITTE for refurbishment or repair. Your pump is in the very best of hands, with our highly qualified service engineers. We will make you an attractive offer for the repair, based on a precise itemisation and analysis of the damage. It goes without saying that the stringent quality criteria which apply for our pumps also apply for our spare parts.

You can profit from our comprehensive specialist knowledge in the field of gear pumps not only through repair work. In addition to repair work, we can also help you to optimise your existing gear pump. Our experts will gladly discuss the options open for optimising your pump, starting with the WITTE viscoseal technology, which has proven itself over two decades, up to small but extremely effective detailed solutions on the pump itself.

Simply give us a call and we will make you a non-binding offer. Either we personally or one of our countless local representatives, will be pleased to discuss your problems in person.



WITTE  [®]
PUMPS & TECHNOLOGY

SPARE PARTS, REPAIRS and OPTIMISATION
GEAR PUMPS

WITTE Presence World-Wide

Visit us at: www.witte-pumps.com



April 2006, Revision A

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PUMPS & TECHNOLOGY

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