

fluidity. nonstop



Overview brochure



AxFlow Systems B.V.
European Engineering
Centre of Excellence.

AxFlow Service
Service workshop for
maintenance and repairs.

AxFlow DC B.V.
AxFlow European
distribution centre.

AxFlow B.V.
Sales office, marketing and
financial administration for
AxFlow in the Netherlands
and Flanders.

AxFlow B.V. was founded in 1960 and has since expanded to become market leader in high-quality positive displacement pumps, mixers, dosing equipment and complete systems.

AxFlow operates in the Netherlands and Flanders from four closely-cooperating divisions:

- AxFlow B.V. - sales office
- AxFlow Service - service, maintenance and repairs
- AxFlow Systems B.V. - engineering
- AxFlow DC B.V. - European distribution centre

AxFlow aims for long-term collaboration with its clients and forms a 'technical bridge' between their system(s) and leading manufacturers that AxFlow represents exclusively in Europe.

Everything under one roof

AxFlow has centralised all its divisions under one roof at the Larserpoort industrial estate on Pascallaan in Lelystad. Operating from one central establishment offers synergy advantages, enabling AxFlow to continuously optimise business processes and services.

AxFlow B.V.

AxFlow B.V. is the AxFlow organisation's sales office in the Netherlands and Flanders. Experienced and enthusiastic AxFlow employees are always ready to offer expert advice on total solutions for diverse pump, agitator and dosing applications. The office sales are coordinated from Lelystad, with the field service being divided into regions and split across the Dutch and Flemish AxFlow regional managers.

AxFlow Systems B.V.

AxFlow Systems B.V. has over 45 years' experience in engineering total solutions in all market segments from compact mobile pump units to complex, extremely advanced and pioneering production systems.

AxFlow Service

AxFlow Service is the AxFlow organisation's service department, which is supported in practice by an external service partner. This strategic cooperation comprises various SCC certified service sites with a total of 120 Service Engineers. This enables AxFlow to guarantee a 24/7 service network offering complete coverage throughout the Netherlands and Flanders.

Read more about AxFlow Service on page 32.

AxFlow DC B.V. European distribution centre

From the AxFlow European distribution centre in Lelystad, AxFlow delivers 95% of A- and B-products directly from stock. The products are delivered in all 25 AxFlow countries within 24 hours. The economies of scale offered by AxFlow's pan-European purchasing enable customers to benefit from extremely competitive product prices.

Read more about AxFlow DC B.V. on page 34.

Since 1990, AxFlow B.V. has formed part of the AxFlow Group, backed by the Swedish multinational Axel Johnson Group.

The AxFlow Group

The AxFlow Group was established in 1989 and has independent branches in 25 European countries. Each branch operates as an autonomous company focusing entirely on the local market. This enables customers to benefit from the economies of scale offered by a pan-European organisation, combined with the advantages of a company that can optimally respond to local needs. Merging international knowledge and experience and cross-border service are important success factors in this, as is the exclusive representation of leading brands. These qualities have resulted in AxFlow gaining prominence in the industry, as well as forming the basis of its market leadership in Europe.

The Axel Johnson Group

The Axel Johnson Group, of which AxFlow Group forms a part, is a fifth generation family company, founded in 1873. This Swedish multinational comprises three corporations: Axel Johnson AB,



Antonia Ax:son Johnson (left, 4th generation Chairman) and Caroline Berg (right, 5th generation Chairman).

Axel Johnson Inc. and AxFast AB. These corporations are extremely successful in founding and developing pioneering companies in diverse market segments. The companies are active in both the consumer and business and industrial markets. In 2015, the Axel Johnson Group achieved a turnover of EUR 7.5 billion and had a global staffing of 23,000.

The joint core values

'Making things happen'
'Good to work with'
'Far-sighted'



fluidity.nonstop

fluidity.nonstop is our promise to our customers to use our know-how and experience and offer top quality products to achieve optimum service levels. Our continued 100% and 24/7 commitment to deliver the highest achievable quality at all levels enables us to retain our position as European market leader in the delivery of pumps, mixers, complete systems and after-sales service across various market segments.

The product range

We have an extensive product range of pump types, selected from the very best products available from leading manufacturers, which we represent exclusively. Our customers can thus always use the most appropriate products for their processes, irrespective of the market segment.

This overview brochure presents the AxFlow product range, based on the various pump types per market segment (product/market combinations). We have focused here on the five biggest market segments in the liquid processing industry:

- Food and beverage industry
- Chemical industry
- Petrochemical industry
- Pharmaceutical industry
- Water and wastewater treatment

AxFlow B.V. team and AxFlow Systems B.V.

The AxFlow team

AxFlow is a company of people in which experience counts and talent can flourish. AxFlow is extremely strong technically and the company from Lelystad is also among the best commercially.

The regard with which our many years' commercial commitment and exceptional sales results are held, led to AxFlow being selected as the global Axel Johnson International Sales Team of the Year in 2015. With exceptional performance from the entire team – from management, sales, marketing, order processing to administration and service – AxFlow can easily match the competition in the Dutch and Flemish markets.



More information about fluidity.nonstop solutions per market segment:



Food and beverage industry
Pages 6-11



Chemical industry
Pages 12-17



Petrochemical industry
Pages 18-23



Pharmaceutical industry
Pages 24-27



Water and wastewater treatment
Pages 28-31

More information about AxFlow's added value:



AxFlow Systems
Pages 10, 11, 17, 23, 27, 31



AxFlow Service
Pages 32-33



AxFlow European distribution centre
Page 34



Corporate social responsibility
Page 35



The food and beverage industry is confronted with numerous challenges, including products requiring a longer shelf life and the production of high-quality products within tighter margins. Regulations are also becoming stricter and the market continuously demands new, innovative and versatile products.

Shelf-life is one of the most important food and beverage industry themes. The less perishable a product is, the longer it can be kept in stock. But this also has consequences for sales channels as the lead time increases. This affects logistics, which need to safeguard consistent product quality for longer. In short, longer shelf life offers added value for foodstuffs but does result in logistical challenges.

fluidity.nonstop solutions offer an immediate significant advantage over the competition including in the production of:

- Dairy
- Meat
- Ready meals
- Drinks
- Dough and sugar products
- Oils, fats and sauces



CIRCUMFERENTIAL PISTON PUMPS

Waukesha circumferential piston pumps

The standard in the food and beverage industry

The Waukesha Cherry-Burrell's Universal series' circumferential piston pumps have several specific features that make them extremely suitable for food and beverage industry applications. The pumps have a stainless steel carter as standard and are 3A, FDA, EHEDG and ATEX certified. They can also be cleaned completely and easily according to the Cleaning-In-Place (CIP) and Steaming-In-Place (SIP) principle.



The Universal series is supplied as standard with a stainless steel carter and can be assembled into a complete pump unit (pump, drive, coupling and frame).



Configuration for pumping meat paste using a Waukesha Universal pump to Waukesha Cherry-Burrell heat exchangers (Votators).

To prevent damage to shear-sensitive products such as yoghurt and curd, Waukesha circumferential piston pumps are provided with double-blade rotors, manufactured from Alloy 88. Alloy 88 is a nickel-based alloy, a fraction softer than stainless steel 316. This prevents galling in the event of inadvertent contact between the rotor and pump housing. Due to the form of the rotors, combined with the special pump housing and tolerances of less than 0.1 [mm], the pump's volumetric efficiency will always be 100% above 100 [cPs]. No slippage or additional shear can be created to negatively influence the product and viscosity.



SCREW SPINDLE PUMPS

Waukesha twin screw pumps

For hygienic and fully aseptic applications

The Waukesha twin screw pump has been tried and tested intensively in practice. A feature of this in-house design is the use of the carter from the Universal pump series, enabling this to be placed directly on the frame of these pumps.

The functional principles of the twin screw pump are the result of ingenuity and meticulous research; the construction is of such a nature that technical limitations no longer occur. A sophisticated method of attaching the rotor enables this Waukesha pump to rotate in two directions. As the Waukesha alloy 88 material is used, the tolerances can be kept to a

minimum. If necessary, the components that come into contact with the pumped product can be polished electrolytically so that these satisfy the highest food and beverage and pharmaceutical industry standards.

The pumps run silently. They also require very little maintenance and are easy to repair. Waukesha offers a new guaranteed standard for this type of positive displacement pump in hygienic and fully aseptic applications up to 150 [°C]. The units are 3A, EHEDG and FDA certified.



Waukesha Twin Screw.





CENTRIFUGAL PUMPS

Hygienic centrifugal pumps

High-quality, reliable and extremely efficient

The Waukesha Cherry-Burrell stainless steel centrifugal pumps offer the right solutions for numerous hygienic and industrial applications. The Universal Centrifugal series satisfies the highest hygiene standards and is EHEDG, 3A, FDA and U.S.D.A. certified. The Waukesha 200 series is a robust centrifugal pump for heavy duty applications. The C series is extremely functional, reliable and particularly suitable for such applications as CIP cleaning systems.



On the right, the Universal Centrifugal from the UC series and on the left, the C series centrifugal pump.



PERISTALTIC PUMPS

Bredel peristaltic pumps

Pump high viscosity and abrasive products

The peristaltic pump is the fastest-growing pump in hygienic industries, including the food and beverage and pharmaceutical industries. The low-shear design of the Bredel peristaltic pumps provides superior processing of solids that are abrasive, corrosive or viscous. This reduces wastage, keeps waste to the minimum and results in an end product of high quality.

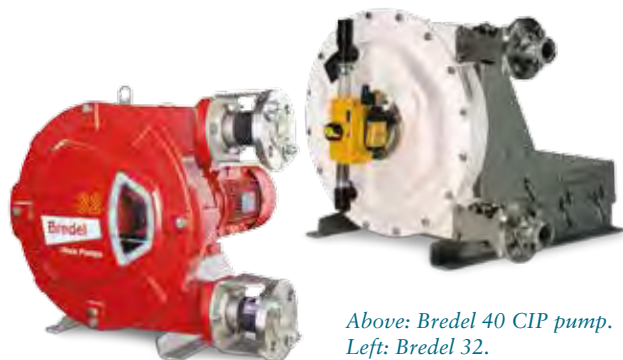
The F-NBR hose with white inner layer, certified for food and beverage applications.



AxFlow's precise, hygienic, almost maintenance-free pumps offer industry the most reliable solutions, for example for dosing flavourings, colourings and additives, as well as for processing abrasive and high-viscosity, shear-sensitive liquids and for pumping wastewater.

Bredel developed the F-NBR high-pressure tube (up to 16 bar) especially for the food and beverage industry. This pump hose has the necessary food grade certificates* for applications in which food grade standards are required. The F-NBR pump hose has a white inner layer, which is particularly suitable for contact with foodstuffs, including vegetable oils and fats. Of course, cleaning up to 90 [°C] is no problem.

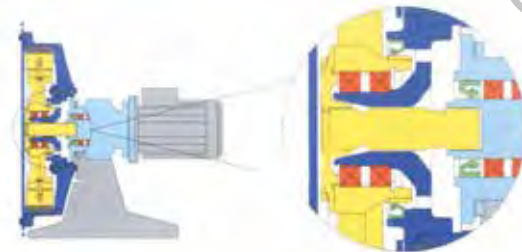
*FDA 21CFR177.2600, EC 1935/2004 and BfR XXI cat. 4



Above: Bredel 40 CIP pump. Left: Bredel 32.

The direct-coupled Bredel design

The Bredel patented design contains a heavy-duty bearing and a flexible coupling in the centre of the pump. This robust and flexible combination ensures that the drive bearings do not have to absorb the forces resulting from the mechanical load to the pump. The drive is coupled directly to the pump housing and an innovative buffer zone protects the gear unit.

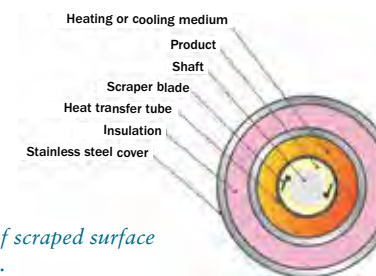


SCRAPED SURFACE HEAT EXCHANGERS

Heat exchangers

Rapid cooling or heating

The quality of an end product can be influenced significantly by the temperature during the production process. Having control of the various temperature differences during the process results in an end product of consistent quality.



The operation of scraped surface heat exchangers.

Votators are used for cooling and heating products including chip sauce, meat, chewing gum, ketchup, fruit concentrates and clarified butter. This unit is also the best choice for products such as margarine, chocolate or cheese spread.

Waukesha heat exchangers are also suitable for immediate cooling using ammonia, Freon and CO₂, as well as being suitable for glycol or ice water. Heating takes place using hot water or steam up to 10 [bar]. The cooling or heating media do not come into contact with the product.



Waukesha Cherry-Burrell Votator II, horizontal version.

Waukesha Cherry-Burrell Votator scraped surface heat exchangers offer the right solution for every process involving controlled cooling or heating of ingredients/raw materials during the production process, whether this concerns a single batch or a continuous process.



Waukesha Cherry-Burrell Votator LD, horizontal and vertical versions.

No oil layer on peanut butter?

At AxFlow, we enjoy working with our customers. The customer's expertise in producing foodstuffs, combined with AxFlow's pump and liquid processing systems' know-how provide the opportunity to create successful innovative solutions.

AxFlow developed a total solution for the world's biggest peanut butter producer, involving a smart process to handle the crystallisation process in peanut butter. Controlled re-cooling of the heated peanut butter recipe using Waukesha scraped surface heat exchangers creates the desired crystallisation. With this, the Votator system ensures that once the peanut butter has been produced, no oil layer appears on top of the product in the jar; even after a few months of the jar standing in the consumer's cupboard. Such essential visual aspects are particularly important factors for the food industry when assessing the end product.



Waukesha Cherry-Burrell scraped surface heat exchangers for re-cooling heated peanut butter.





Nettco S series from Lightnin

Hygienic top entry mixers

The compact, hygienic Nettco S series Lightnin mixers are manufactured entirely from stainless steel. The various assembly options allow for easy fitting of the mixers to new and existing tanks from 0.1 to 20 [m³].

If desired, the top entry mixers from the Nettco S series can be provided with impellers to match every type of application. The agitator is 3A and CE certified and is comes with a lubricant that complies with the strictest food grade standards.



Various flanges for fitting the Lightnin Nettco S series.

AxFlow Systems offers custom-built agitator stands for even more flexible production. An agitator stand is used when working with alternating tanks.

It is then vital that the agitator can be positioned in and out of the tank in the correct place quickly, safely and with precision.

The AxFlow Systems mobile stands are manufactured entirely from stainless steel, making these stands extremely suitable for use in hygienic processes.



COMPLETE SYSTEMS

Total solutions for the food industry

Dosing systems for colourings and flavourings

The so-called in-line dosing and mixing of colourings and flavourings via a smart, integrated system design safeguards a perfect colour and flavour of the end product, even when the production runs to extremely high volumes. AxFlow Systems B.V. designs custom-built systems, entirely according to customer specifications.



AxFlow produces complete custom-built systems in compliance with food and beverage industry specifications.

Custom-built means: storage tanks, mixing tanks, dosing pumps, dynamic mixers, valves, instrumentation and the complete piping, cabling and control cabinet with programmable microprocessor (PLC), if necessary linked to the existing on-site SCADA computer system (supervisory control and data acquisition). All combined into one total solution and implemented by one supplier.



COMPLETE SYSTEMS

CIP/SIP systems

Controlled cleaning is faster and more efficient

As well as dosing and mixing of colourings and flavourings, the food industry is also confronted specifically with the crucial 'hygiene' aspect and the requirement for rapid cleaning following product change. It is vital here that product loss is minimal and that minimum cleaning agents are used.

Controlled cleaning via Cleaning-In-Place (CIP) or Steaming-In-Place (SIP) is not only faster and more efficient, it is also easier to predict and control and offers a high level of reliability.



The AxFlow CIP systems are risk-free enabling continuous guaranteed, total and hygienic cleaning of pipelines, pumps, tanks and filling machines.

AxFlow discusses the process and the desired result together with the customer. This and other customer-dependent specifications are converted into a CIP process that offers a seamless connection to the existing system and available space. This can vary from a single (mobile) tank with electric heating to a fixed 2 or 3 stage system for large capacities. Storage and dosing of the chemicals to be used is another AxFlow speciality.



Dosing unit for chemicals.

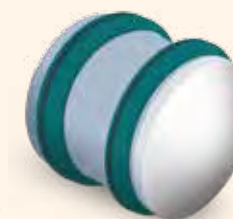


Storage tanks for chemicals.

Long-term money-saving solutions with a 'mole'

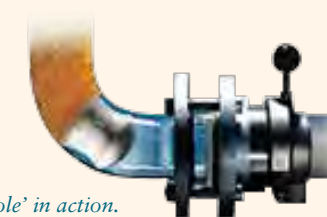
The AxFlow Systems so-called mole system is the perfect solution for anyone who places high value on socially-responsible processes that minimise environmental pollution.

AxFlow Systems helps retrieve products from your pipelines before you start cleaning. Your process system can be modified for this. The modification enables a PIG, sometimes called a mole, to be guided through the pipeline. PIG stands for *Pipeline Inspection Gauge*, an instrument used to inspect pipelines.



The 'mole'.

The specially-modified mole or PIG pushes any residual product out of the pipelines after the production run. Your expensive product is no longer rinsed away and can be used as end product. Hardly any product traces remain after the mole has been pushed through the pipelines. This means that the rinsing phase can be reduced considerably, minimising the amount of contaminated cleaning water and achieving substantial savings on chemical and energy consumption.



The 'mole' in action.

The water purification system will also need to be used much less, resulting in further savings on chemicals and energy.

An AxFlow Systems mole system is microprocessor-controlled with a built-in mole detector that informs the user of the mole's position in the pipeline at all times.





The chemical industry produces and processes products by changing the chemical composition of existing substances. In the basic chemicals, food ingredients, coatings and high-performance material categories, the Netherlands is among the best in the world.

The world is facing huge challenges. Raw materials are becoming increasingly scarce. Economy and nature are at odds with each other. The challenge is to work in a sustainable and cost-saving way, using smart materials, products and systems, and preferably with a partner that offers total solutions.

fluidity.nonstop solutions offer a competitive advantage and provide greater advantages in terms of the production of:

- Plastics
- Paints and coatings
- Adhesives
- Soap and detergents
- Fertilisers
- Applications with pigments and colourings



Viking gear pumps

High-quality gear pumps

The simple principle of a *gear within a gear* (internal gear pump) with just two rotating parts ensures that this pump will form a reliable part of your system. That is why the Viking pump is used for many liquids in almost all industries, making it the most widely-accepted pump.

Viking gear pumps are:

- Extremely suitable for pumping: LPG, Freon, oils, fats, resins, chemicals, additives, solvents, asphalt, paints, chocolate, cocoa mass, detergents, molasses, soaps, inks, etc.
- Available in cast iron, modular cast iron, steel and stainless steel.
- Available with a gland packing, a lip shaft seal (*lip seal*), a *mechanical seal* or magnetic coupling.
- This makes it suitable for very heavy duty applications with pressures up to 170 [bar], extremely high viscosity up to 750,000 [cPs] and extreme temperatures up to 450 [°C].



Viking Universal Mag Drive.

The Viking Universal Mag Drive (UMD) is a seal-free pump, specially developed for difficult to seal, hazardous and poisonous applications, such as pumping isocyanates, polyols, polymers, Freon, LPG, adhesives and chemicals. This robust, magnetically coupled gear pump is hermetically sealed and entirely leak-free. AxFlow guarantees exceptionally high reliability regarding this pump's lifespan.



The Viking Abrasive Liquid pump series has a hard metal bearing bush and pin (tungsten carbide) and a mechanical seal with hard metal sealing surfaces (silicon carbide), making this pump very suitable for pumping extremely abrasive liquids.



Solutions for polyurethane foam production

The production of polyurethane foam (PU foam) with main components diisocyanate and polyol, is one of AxFlow's main application areas for the Viking gear pumps.

Polyol

Polyol is a highly lubricant product, the viscosity of which can lie between 400 and 30,000 [cPs]. Polyol is not aggressive and can be pumped excellently using the cast iron Viking gear pumps (Series 124A). In general, a gland packing is the correct shaft seal for polyol, certainly with higher viscosity. One single mechanical seal is sufficient if the viscosity is not too high (approx 2500 cPs). Heatable pumps can be used to reduce the viscosity (series 224A). Gear pumps running on polyol are not very susceptible to damage and also have an extremely long lifespan.

Isocyanate

The viscosity of isocyanate varies from watery to 500 [cPs]. It is mostly not aggressive but this product does harden immediately on exposure to air. In the past, the shaft seal for this product was a considerable concern. The magnetically coupled Viking gear pumps resolve this shortcoming entirely, making sealing problems for isocyanate pumps a thing of the past.



PROGRESSIVE
CAVITY PUMPS

Mono dosing pump

Low flow, at extremely high pressure

The Mono Dosing L Range was designed as successor to the successful LF Range. The excellent performance at low capacity, combined with high pressure up to 72 [bar], makes the Mono L Range extremely suitable for precise dosing processes, as well as for high temperatures up to 120 [°C].

This dosing pump is an excellent alternative for the more expensive pump types. In this type, Mono uses some parts from the smaller Compact Range pumps, making the parts interchangeable. Using new materi-



Mono Dosing L Range.

als for the suction casing and seal chamber contributes to excellent chemical resistance to aggressive chemical liquids.



PERISTALTIC PUMPS

Bredel APEX series

Industrial peristaltic pumps for light and medium-duty applications

The APEX series was designed in accordance with the unique, patented, direct-coupled Bredel design. This design comprises a heavy-duty bearing and a flexible coupling in the centre of the pump. Together these ensure that the drive bearings do not have to absorb the pump's mechanical load. The drive is coupled directly to the pump housing and an innovative buffer zone protects the gear unit.

The Bredel APEX series is extremely suitable for low and medium-pressure applications up to 8 bar in pumping abrasive, shear-sensitive, corrosive and high and low viscosity liquids.

The APEX10, APEX15 and APEX20

A revolutionary universal pump housing was developed for these models. This pump housing is manufactured from cast aluminium with additional reinforcement for optimum rigidity. This makes it lighter in weight with a larger cooling surface. The improved cooling offers the opportunity to run at higher revs, for both continuous as well as intermittent processes.

The APEX28 and APEX35

The APEX28 and APEX35 have a patented, innovative hose connection design without hose clamps. Hose changes can be carried out quickly and easily by means of a flexible compression ring. The limited number of required services results in minimum maintenance costs.



The complete Bredel APEX series industrial peristaltic pumps.



AIR OPERATED
DIAPHRAGM PUMPS

SandPiper air operated double diaphragm pumps

Broad application

SandPiper is an established name in the world of air operated diaphragm pumps. This is largely due to SandPiper's innovative strength, in which quality and user-convenience are core concepts.

From standard to heavy duty

The SandPiper range comprises four types: Standard Duty, Containment Duty, Heavy Duty Flap and Heavy Duty Ball. Each pump type has its own special features intended for specific applications. All versions are also fitted with the so-called Externally Serviceable Air Distribution System. This system prevents the pump remaining in its midpoint. The system can also be maintained easily from the outside, without having to disassemble the pump or disconnect it from the piping. This makes the SandPiper pumps unique.



SandPiper Heavy Duty Flap. SandPiper Spill Containment.

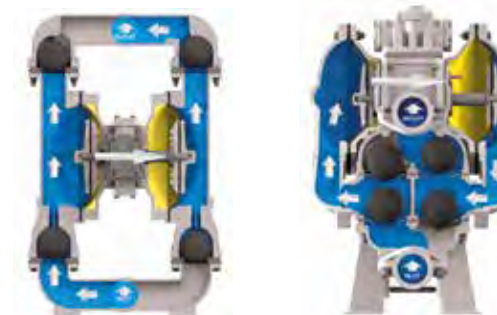
dients that settle quickly. A feature of this version is the external ball construction. The balls are fitted to the lowest point of the pump so that solids from the sludge are not deposited in the diaphragm units. This not only prevents the pump from blocking on start-up but also prevents the diaphragm from tearing.

Ball-free

A unique development is the Flap Valve pump with valves instead of balls. These valves prevent larger solids clogging the pump. The Flap Valve is widely used in abattoirs, for instance, where literally everything needs to be pumped away, including blood and water and solid matter. Everything that can pass through the pump's inlet opening can be pumped away.

Finally, the Containment Duty is suitable for pumping hazardous products including hydrochloric acid and methanol, which may not be realised into the environment.

For this reason, this pump is provided with a double diaphragm construction. Should the diaphragm fail on the liquid side, pumping can continue safely and there is sufficient time available to plan the necessary maintenance. A faulty diaphragm can be automatically detected and reported in various ways.



SandPiper Standard Duty Ball. SandPiper Heavy Duty Ball.

The standard version from the SandPiper pump series can be used universally with the suction connection below and the pressure connection above. The Heavy Duty Ball is much heavier and more robust, making it suitable for pumping sludge containing heavy ingre-





GEAR PUMPS

Micropump

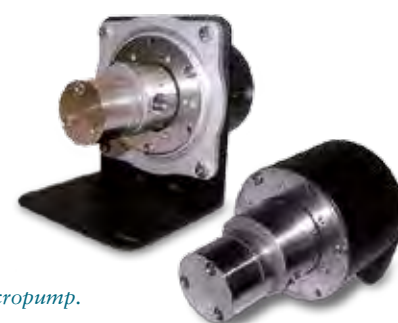
Extremely precise, pulsation-free flow

The Micropump pumps dose and transport smaller liquid quantities of 5 [ml] per minute with high precision. Available in pump versions that work according to the positive displacement pump principle or according to the unique Micropump-developed, self-correcting *suction shoe* principle. Both versions offer a pulsation-free flow.

All pumps are provided with a magnetic coupling, which guarantees a reliable and leak-free pump. The robust housing enables several models to be used for system pressures up to 103 [bar]. The wide selection of

Guaranteed leak-free Micropump.

materials for the gears and pump housing means that these pumps are suitable for almost every application. Micropump pumps are extremely compact and are available with a wide variety of drives: small DC or AC motors, industrial motors or even air motors. A Micropump is available in accordance with ATEX guidelines for explosion-hazardous environments.



Slack & Parr gear pump

High precision gear pumps

With Slack & Parr, AxFlow offers a high product and knowledge level in the area of precision gear pumps, enabling AxFlow to offer customers the opportunity to save costs and stay ahead of the competition.



Slack & Parr is responsible for various important innovations. The development and successful introduction of planetary polymer gear pumps and spin finish dosing pumps are important examples of this. Slack & Parr continuously introduces improvements to the standard products in order to improve quality and cost-efficiency. Certain applications require a specialised design, which is why AxFlow offers customised solutions that comply fully with the customer's process specifications and requirements.

Various Slack & Parr precision gear pump models.

Eclipse magnetically coupled

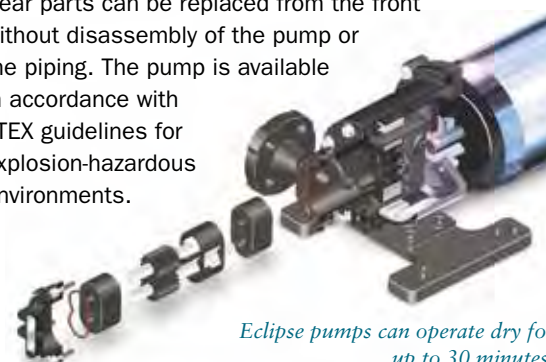
Fully plastic gear pumps

Eclipse gear pumps are developed especially for transporting and dosing chemical, aggressive and/or hazardous liquids.

These pumps are robust, safe, reliable, leak-free and easy to maintain. The pump housing and gears are manufactured from carbon reinforced ETFE and PTFE polymers. The pump has ceramic shafts and the option of carbon bearings or silicon carbide bearings. These high-quality materials provide excellent chemical resistance.

The magnetic coupling guarantees a safe and leak-free pump. This is ideal for applications in which leakage must be entirely eliminated. Thanks to the magnetic

coupling the pump needs hardly any maintenance and the expensive mechanical seals are not susceptible to wear. Standard maintenance can be carried out quickly and very easily. The very small number of wear parts can be replaced from the front without disassembly of the pump or the piping. The pump is available in accordance with ATEX guidelines for explosion-hazardous environments.



Eclipse pumps can operate dry for up to 30 minutes.



MIXERS

Lightnin Top Entry mixers

Optimum return with minimum consumption

With Lightnin's impeller technology, AxFlow has over 90 years' proven experience in-house in order to offer the most efficient solutions for a diverse range of applications. Lightnin has the world's most advanced agitator laboratory in Rochester, N.Y. The most modern analytical tools are used in research and product development, with the liquid flow and pump capacity and direction being digitised and then analysed in a mixing tank at each location.



Lightnin ECL with high-efficiency axial A310 impeller.

These technologies have also led to the development of the unique and high-efficiency axial flow impellers, types A310, A510 and A6000. These three-blade impellers have extremely low power consumption during high pump operation. In comparison with conventional impellers/turbine systems, Lightnin impellers take up 50% less power with an equivalent or even better process result.

A substantial reduction of the required power means that a smaller drive is needed as well as a less heavy-duty gear unit. This combination delivers considerable cost savings.

Lightnin A6000 impeller in laser laboratory.



COMPLETE SYSTEMS

Dosing skids

Dilution, dosing, mixing of chemicals

AxFlow Systems designs, builds and delivers total solutions for the safe and precise dosing of all kinds of liquid chemicals and raw materials that are used in the most diverse production processes. The pumps are the heart of the system. AxFlow Systems builds a total solution around this, entirely our under own management, to comply fully with customer specifications.



A multiple dosing system for dosing various raw materials, for example in the production of adhesives.




Diluting and dosing of Sodium hydroxide. System built in a container for outdoor use.

Large or small, an AxFlow system is delivered as one project. The customer has one contact point, one telephone number, one documentation source and can count on one team for design, installation and engineering.



With the increasing demand for energy, fuels and raw materials, the petrochemical industry and oil and gas industry are facing many challenges and opportunities in the upstream, midstream, downstream and oilfield services.

The petrochemical industry is a mature, smooth-running supply and demand industry that responds flexibly to changes and fluctuations. Processes are optimised flexibly and dynamically, which means that risks become manageable. AxFlow understands the flow dynamics and has the most detailed know-how of the equipment and systems used in complex processes. The knife cuts both ways. The more control you have over processes, the better the profitability and the greater the peace of mind.

fluidity.nonstop solutions by AxFlow 
keep the petrochemical industry running and are particularly delivered to:

- Refineries
- Oil and gas terminals
- Offshore platforms



DOSING PUMPS

Bran+Luebbe dosing pumps

Dosing with complete precision

The production of oil and gas takes place under demanding conditions and following strict safety requirements. This demands reliable, high-quality and safe pumps with exceptional performance. Features of these pumps include the explosion safety, which of course satisfies the so-called European ATEX (ATmosphères EXplosives) CE Directive. The safe pump heads are leak-free and hermetically sealed and satisfy all international standards and strict norms including those of the American Petroleum Institute (API 674, 675) and German Technische Anleitung (TA) Luft.

The B+L Novados and Novaplex product series

The AxFlow diaphragm dosing and process pumps are extremely reliable, satisfy all the strict requirements set for the oil and gas industry and have the features necessary for optimum operational safety.



Novados diaphragm pump.

Novados

The Novados product series comprises the plunger pumps, double-acting plunger pumps and diaphragm pumps with a hydraulically balanced diaphragm. This is available in a single or double-acting version and is a good alternative for the existing Boxer models. The pumps are available for both horizontal and vertical applications up to a capacity of 35 [m³/h] and work pressures up to 1035 [barg].



Bran+Luebbe Novaplex Vector process diaphragm pump.

Novaplex Vector

The Novaplex Vector process diaphragm pump combines a unique new gear unit with the already tried and tested pump head technology. This enables the use of a diaphragm pump in a double-acting configuration up to a capacity of 140 [m³/h] and operating pressures up to 500 [barg]. Ideal for applications in which weight plays a role and a smaller footprint is required, as in the oil & gas industry at offshore locations.



Bran+Luebbe Novados double-acting diaphragm pump. Capacity up to 15.52 [m³/h] and counter pressure up to 500 [barg].



Would you also like to get rid of scaling in your piping?

Preventing corrosion and scaling is extremely important in the production of oil and gas. If corrosion and scaling were given free play, the complex and demanding production techniques could cause hazardous situations. An AxFlow System dosing skid with a Bran+Luebbe Novados dosing pump, doses the correct amount of corrosion and scale inhibitor into the pipeline.



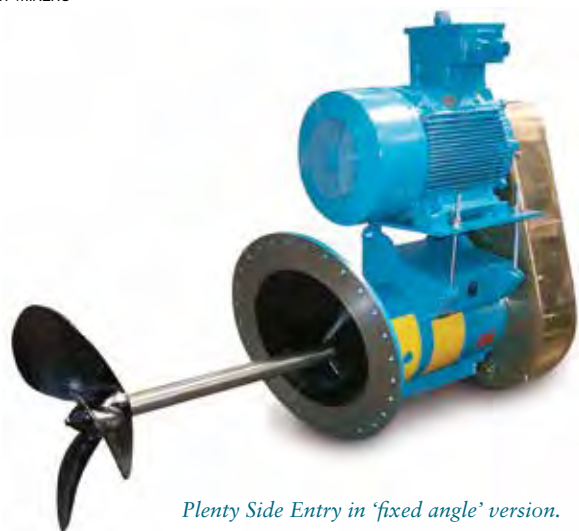
SIDE ENTRY MIXERS

Solutions in the tank terminal industry

Plenty side entry mixers

Storage tanks for crude oil often contain unwanted sludge and water, better known as Bottom Sludge and Water (BS&W). Removal is still a costly aspect in the petrochemical industry and oil terminal market.

In order to obtain the required process result, these days operational procedures on the mixers are carried out manually at the tank. These procedures comprise the ventilation of the seal valve and periodic rotation of the mixers horizontally from 30° left to 30° right. If these procedures are not carried out or not carried out correctly, this will impact significantly on the



Plenty Side Entry in 'fixed angle' version.

process result. This can lead to leakage at the shaft seals and contamination on the bottom of the tank, resulting in high repair costs and downtime.

With Plenty side entry mixers, AxFlow offers the option of an automatic ventilation system for the mechanical seal and an automatic swivel movement. During tank filling and refilling, the ventilation system ventilates the seal chamber automatically so that it is immediately ready for use.

The swivel system is available in mechanical or electric version. The automatic swivel rotates the agitator approximately every 8 to 9 hours back and forth from 30 degrees left to 30 degrees right.



Plenty Side Entry agitator provided with 'Automatic Seal Air release system'.

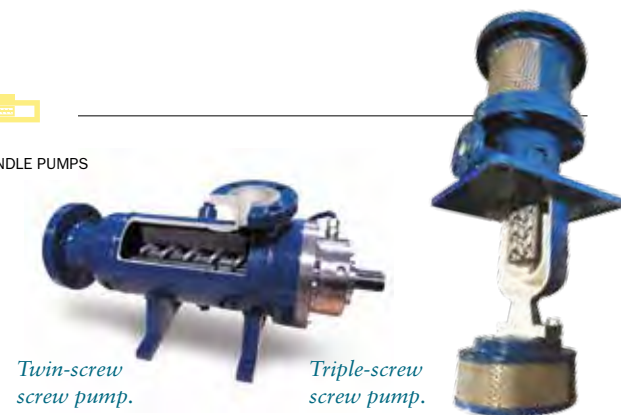


SCREW SPINDLE PUMPS

SEIM

Twin-screw and triple-screw screw pumps

The SEIM triple-screw screw pumps work with one drive screw and two idler screws. The pumps are suitable for lubricating products with a viscosity from 1.2 to 5,000 [cPs]. Depending on the type, the pumps can handle 120 [bar] with a maximum flow of 1,200 [m³/h] and a temperature of 300 °C. Various pump types can be supplied in accordance with the API 676 design standard. The seals are available in accordance with API 682, making these pumps suitable for systems that need to satisfy API 614. ATEX certification is available for these pumps.



Twin-screw screw pump.

Triple-screw screw pump.

The twin-screw screw pumps have two screws and in most cases are provided with a timing gear, enabling lean mix products to be pumped. The screws do not touch each other. This pump type can be used to pump liquids up to 15,000 [cPs] at an operating pressure up to 10 [bar] but, depending on the viscosity, an operating pressure of up to [40 bar] is also possible.



GEAR PUMPS

Viking

Gear pumps in accordance with API 676 with API 682 shaft seal

Viking pumps are used across the world in refineries in a variety of applications, from crude oil and asphalt to diluting agents and molten sulphur.

Viking XPD 676

The Viking XPD 676 is fully compliant with the strict API 676 design standard, as well as the API 682 sealing standard. These pumps have a bracket with an increased bearing housing for the larger API 682 shaft seals diameter. Viking is the only internal toothed gear pump with shaft seals that comply fully with the API 682 sealing standard. The XPD 676 has a broad chemical resistance and a broad area of application up to some 365 [m³/h], 14 [bar] and 340 [°C].

Universal Seal

AxFlow offers pumps from the extensive Universal Seal product series in a standard version and with a jacket; both in steel and stainless steel in compliance with the API 676 standard.



Viking Universal Seal series complete pump unit with pressure vessel.



These are offered in a large range of varying sizes: from typical process pumps to large transfer pumps for loading and unloading inland waterway vessels and tankers at terminals.

Sealless Universal Mag Drive

Sealless Universal Mag Drive pumps are used where leakage and emission of volatile organic substances need to be eliminated, including isocyanate, varnish, alcohol and highly flammable fuels.



Viking Universal Seal pump unit as transfer pump on an oil tanker.



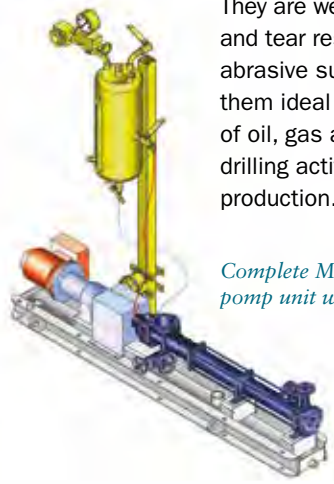
Mono API 676 EZstrip™

The Mono progressive cavity pumps are extremely suitable for heavy duty applications typical in the oil and gas sector, in which liquids with solid matter, such as drilling fluids, drilling cuttings and wastewater need to be pumped with a constant flow and low shear.

EZstrip™ API 676

The EZstrip™ API 676 pumps offer a practical, reliable and proven solution that helps prevent emulsification.

They are well-resistant against wear and tear resulting from pumping abrasive substances. This makes them ideal for pumping all kinds of oil, gas and mud mixtures from drilling activities, exploration and production.



Complete Mono EZstrip™ API 676 pump unit with seal system.



Mono EZstrip™ API 676.

The EZstrip™ pumps are mounted on a robust basic frame (long-coupled) with a drip tray. The entire unit complies with API 676 3rd edition. The pumps are supplied with a single or double mechanical seal which comply to API 682 category 1 or 2. Optional with complete sealing system according to API. EZstrip™ technology enables the pump to be entirely disassembled without needing to be removed from the piping.

The self-priming pumps can be manufactured from various materials for different applications, varying from stainless steel to fully traceable and NACE certified duplex steel.



The Mono API 676 in Flexishaft version is tested extensively before leaving the factory.



COMPLETE SYSTEMS

Total solutions for the oil & gas/petrochemical industry Refineries, oil & gas terminals, offshore

AxFlow Systems has been a dedicated partner and contact point for total solutions in the oil & gas and petrochemical industries for many decades. This field demands specific knowledge of standards, regulations and processes. AxFlow's basic principles are that this knowledge, together with the customer experiences, should form the basis for the total solutions.

The high-quality equipment from leading suppliers that AxFlow represents exclusively forms the core of the systems. This is combined with experience and especially know-how regarding the area of application. This unique combination guarantees optimum total solutions.



Methanol storage and dosing system to prevent the formation of hydrate in wells in a gas field.

AxFlow Systems offers total solutions proven in practice in the form of:

- Complete skid-mounted storage, distribution and injection systems including for methanol, ethanol, glycol and inhibitors.
- Systems for storage, distribution and blending of chemicals.
- In-line dosing systems for dosing various additives in petroleum products.
- Mobile and compact spill units, for pumping products from drip trays or for rapid deployment in the event of an emergency.
- Extremely precise dosing systems for all products in the petrochemical industry, using Bran+Luebbe dosing pumps, for instance.
- Solutions for water treatment in the petrochemical industry, including polymer production and dosing and transfer systems, for instance using Mono pumps.



Storage tank with preheated suction line in connection with high viscosity of cold product (corrosion inhibitor).

AxFlow Systems provides the engineering, complete construction and on site installation of these systems. AxFlow also pays particular attention to rules and regulations. Of course, all products and systems that AxFlow offers are certified in accordance with the latest CE and ATEX standards. Each product and each system is delivered with all available non-materials, such as manuals, drawings and specifications.



A galvanised box frame for two storage tanks and two dosing pumps for dosing of chemical products.



For many decades, AxFlow has been a leading supplier of pump technologies that fully comply with the pharmaceutical and personal care industry's strict requirements and high hygienic standards.

Processes in the pharmaceutical and personal care industries should not only be socially responsible, they should also meet the highest standards and requirements. Good Manufacturing Practice (CMP) is the quality assurance for this and is a requirement in both the production of medicines in the pharmaceutical industry as well as the production of cosmetics in the personal care industry. All AxFlow solutions offer continuous reliability and safeguard the smooth functioning of CMP processes.

fluidity.nonstop solutions from AxFlow are used in the pharmaceutical and personal care industry for the production of, among other things:

- Medicines
- Cosmetics
- Soaps and shampoo
- Detergents
- Mouthwash



DOSING PUMPS

Bran+Luebbe dosing pumps

Dosing with highest precision

The Bran+Luebbe ProCam series comprises plunger and diaphragm dosing pumps. This series offers extensive options for capacity regulation. Standard manual setting or electric as option. The ProCam offers a flexible construction system in which six pump heads and various combinations of gear units can be connected (types 15-500).

Diaphragm version

The ProCam series with mechanically driven diaphragm is a dosing pump for standard applications. This combines a safe application with a double membrane system for a competitive price. The diaphragm version

of this pump is available with a stainless steel or plastic pump head. The double membrane is manufactured from PTFE and a diaphragm failure indicator is available, for example via a manometer or pressure switch.



Plunger version

The ProCam series in plunger version is compact in design and can operate in demanding conditions. The maximum operating pressure for these plunger pumps is 80 [bar] (with the exception of PS-25 at 32 bar).



Type DP
(plastic pump head).



Type DS
(stainless steel pump head).



Do you also purchase water by tank truck?

AxFlow designs and builds customer specific total solutions for the dilution of liquid raw materials into homogeneous products during the production process (*in-line*). These raw materials serve as basis for the production of other care and cleaning products, such as soap. The in-line dilution system enables the purchase of 70% concentrated basic materials, making expensive water transport in tank trucks unnecessary. An AxFlow system produces the correct amount of diluted solution, making large storage tanks unnecessary. The use of a Bran+Luebbe in-line dilution system means that stabilisers or other additives can be added in-line so that batch production tanks become obsolete. AxFlow has decades of knowledge and experience in the design and realisation of Bran+Luebbe dilution systems. From separate systems to complete projects, including unloading, storage tanks and control, which can be delivered ready for operation.



AxFlow Systems in-line dilution system for diluting raw materials for the production of liquid detergents, soaps and shampoos.



LOBE PUMPS

Waukesha MDL

Best price-quality ratio in its class

This high-quality Waukesha series has been designed especially for standard applications in which a lobe pump is the optimum choice. This includes emulsions, lotions, syrups, fruit concentrates and purée. Manufacturers cannot afford risks in any process in which shear-sensitive products are pumped, or products with large particles and/or variable viscosity.



The Waukesha MDL series offers the most important features for the best price-quality ratio in its class. The robust housing, the rotors and the cover are manufactured entirely from 316L stainless steel in order to satisfy the high hygiene requirements of the production process. With its double mechanical seal, the MDL can operate dry indefinitely and the unique design of the gear unit prevents cross contamination, i.e. the contamination of lubricating oil in the product zone. The patented coupling of rotor on shaft means that metal on metal contact is impossible.



CENTRIFUGAL PUMPS

Waukesha EcoPure™

Hygienic magnetically coupled centrifugal pump

The Waukesha EcoPure™ is part of an innovative series of magnetically coupled, hygienic centrifugal pumps for low viscosity, difficult to seal liquids. In contrast to the industrial magnetically coupled pumps, EcoPure™ has no bearings or shaft in the product zone. The EcoPure™ magnet is integrated in the shaft and impeller. This makes the pump 100% suitable for hygienic applications.



The magnetic coupling is integrated in the shaft and impeller, making a mechanical seal unnecessary.



The hermetically sealed pump chamber prevents the liquid from coming into contact with outside air, making mechanical shaft seals unnecessary. Wear and tear and leakage become a thing of the past. Difficult to seal applications such as saturated brine, starch slurry, crystallised whey and various aggressive chemicals such as acids and alkalines can be processed excellently with the Waukesha EcoPure™. The magnetically coupled pumps are not only environmentally friendly (no leakage, no rinsing water), they also contribute to optimum operating times in the food, beverage, dairy and pharmaceutical industries.



COMPLETE SYSTEMS

Hygienic dosing systems

Dosing colourings and flavourings

AxFlow Systems designs, builds and installs customised mixing and dosing systems including for the dosing of chemicals and *in-line* dosing of colourings and flavourings. AxFlow Systems has an excellent understanding of the hygiene challenges facing the pharmaceutical and personal care industries. Components of systems for these industries are subject to electrolytic polishing (0.5 RA) and are edge, seam and screwhead-free to prevent the accumulation of bacteria.

Whether this system is a compact, mobile production and dosing tank or a complete in-line dosing system, AxFlow supplies a fully documented and certified total solution that safeguards your process quality.



Mobile storage and dosing system; electrolytically polished to 0.5 RA.

Toothpaste in three colours

The filling of toothpaste tubes is a serious business, especially when the toothpaste needs to contain perfectly coloured and flavoured strips and the production runs to a million tubes per day. In addition, 'hygiene' and the requirement for fast and efficient cleaning (CIP) are decisive factors for a product change. Minimising product loss and making minimum use of cleaning liquids are vital. The entire system also needs to be designed so that it can be operated locally and integrated seamlessly within the factory's existing SCADA system. Individual colour batches are traditionally produced in a mixer. As many tanks need to be cleaned, there are always very long waiting times between the batches. This also

creates a lot of wastewater and a high detergent use. The AxFlow Systems total solution in the form of a complete in-line dosing system provides a sustainable solution, with much less product loss. The tank and pipe cleaning process is minimised. This means that water consumption and the use of cleaning agents is kept to the minimum and the water purification system will need to be used less. In-line dosing offers a shorter production process and a faster product change. The system also comprises fewer tanks, which means that a smaller floor area can be used, creating space for future growth.



A total solution for mixing and dosing colourings and flavourings in the production of toothpaste (personal care).



Ecology plays an important role in our society today, certainly as far as drinking water is concerned. Of course, we want to ensure optimum water treatment. And the requirements that are set for this are also becoming stricter.

This results in an increased demand for pumps, dosing equipment and monitoring and control instruments. The emphasis here lies increasingly on total solutions in the form of complete water purification systems.

fluidity.nonstop solutions by AxFlow for water and wastewater treatment are used in:

- Sewage treatment
- Wastewater treatment
- Industrial wastewater



Get to know the EZstrip™ Family

Lower maintenance costs and minimum downtime

The Mono EZstrip™ Family is distinguished by the unique Maintain-in-Place approach, in which maintenance can be carried out without disconnecting the pump from the piping. The suction casing of the EZstrip™ Transfer pump is extremely easy to open, allowing simple internal inspection, cleaning and easy replacement of stator and rotor.

A huge advantage of the Mono EZstrip™ compared to separable stators is that no leakage is possible between the two stator halves. And as standard stators are used, no concessions are made on performance and lifespan. A pressure of 6 [bar] per stage is possible, up to a maximum of 24 [bar].



The Mono EZstrip™ Transfer pump (left) and the Mono EZstrip™ Cake pump (right).



The Mono EZstrip™ Transfer pump and Muncher in an application for mechanically concentrated sludge (6-9% DM).

The EZstrip™ Cake pump offers the same advantages as the EZstrip™ Transfer pump, but for high-viscosity products, such as dewatered and concentrated sludge. That is why the pump is provided with a larger inlet and a special feed screw. This type of pump is often entirely built into a system, below a hopper or decanter centrifuge. Nevertheless, the EZstrip™ Cake pump can be maintained on site, including exchange of feed screw, main shaft and mechanical seal, without disconnection from the piping.



Mono EZstrip™ TR Munchers

Chop solid matter

The EZstrip™ TR Munchers are also part of the EZstrip™ Family. These are grinders with a very high torque for processing extremely heavy duty solid matter. The knife section can be removed from the Muncher casing as one cartridge without the machine needing to be disconnected from the piping.

All TR Munchers are slow speed grinders resulting in lower energy consumption, vibration and noise levels than fast speed grinders.



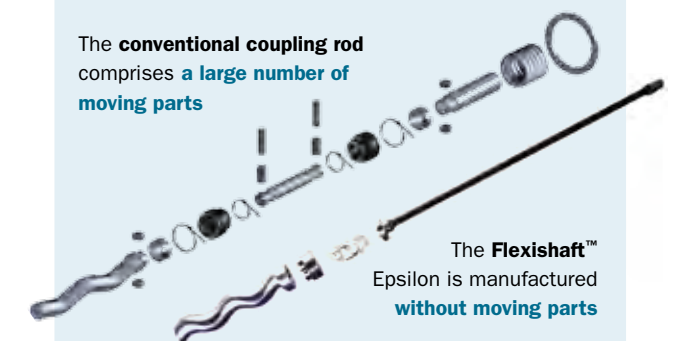
EZstrip™ CT201.

10 year warranty

Mono Flexishaft™

The eccentrically rotating rotor needs to be connected properly to the main shaft. The Flexishaft™ provides this connection without using maintenance-intensive pin/bush connections or crown gear connections, both of which are constructed from sensitive components that need to be lubricated.

The **conventional coupling rod** comprises a large number of moving parts



The **Flexishaft™** Epsilon is manufactured without moving parts



PISTON PUMPS

Schwing

Fully hydraulically driven piston pump

Schwing single or double-acting piston pumps are fully hydraulic, which means that they can be operated free from electronic faults. These pumps are used to pump products with high dry matter levels across longer distances. This includes dewatered sludge, dredging waste, spent lime, organic waste, various other filter cakes and pasty media from the chemical industry.



Schwing piston pumps pump concentrated and dewatered sludge.



Left the valve seat and right the swivel pipe version.

AxFlow supplies two versions of the Schwing piston pumps. The valve-seat valve, provided with end cushioning of the stroke is used in organic sludges. The swivel pipe version is used for non-compressible slurries. With an application range up to 220 [m³/h] at 150 [bar] the Schwing piston pump can be used for almost all extremely high viscosity applications.



AIR OPERATED DIAPHRAGM PUMP

SandPiper

Pump solids without problem

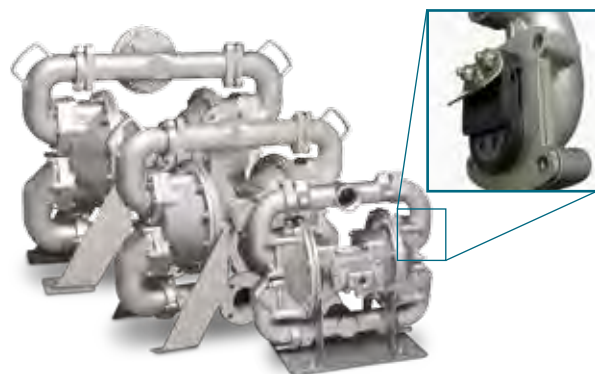
SandPiper Heavy Duty Flap Valve diaphragm pumps (SA series) are provided with metals flap valves and are particularly recommended for pumping slurries and liquids containing solid matter. The flap valve principle enables solid matter up to 75 [mm] to be processed through the pump without causing damage.



The plastic SandPiper HD20F.

The minimum weight of the fully plastic Heavy Duty Flap Valve (HD20F series) enables the pump to be used in a wide multifunctional range of applications. The integrated handles make this pump easy to move.

The SandPiper HD20F's easy to reach Flap valve and Air valve ensure easy maintenance without needing to disconnect the pump from the piping. The fact that this pump is manufactured from polypropylene means that it is not susceptible to corrosion and is extremely suitable for pumping chemicals, acids and alkalines. Pumping liquids with solid matter up to 46 [mm] is no problem for this pump.



Metal version of the SandPiper Heavy Duty Flap Valve. (Inset) The valve with a diameter up to 75 [mm].



COMPLETE SYSTEMS

PolyTECH

Fully automatic polymer production and dosing units

The ever increasing process quality requirements that are set for water treatment (drinking, industrial and wastewater) mean that the use of polymers are here to stay.

Polymers are available in powder, crystal and concentrated liquid form and are diluted with water prior to use into much lower concentrations.

For optimum returns, diluting or producing polymers needs to take place with care. Further correct treatment of the produced solution is also necessary to achieve and retain the long polymer chains.

PolyTECH is a standard AxFlow systems total solution for the fully automatic production and dosing of both dry and liquid polymer. All main components, such as storage, dosing, humidification, production, maturation and control are combined in one compact unit. The tank, manufactured from environmentally-friendly polypropylene, is sub-divided into a production, maturation and storage compartment, separated from each other via overflow panels. This keeps the mature polymer separate from the newly produced solution. The level electrodes in the final compartment switch the production on and off.



PolyTECH for dry polymer.



PolyTECH for liquid polymer.

Dosing units

Customised chemical dosing

The AxFlow Systems dosing units are fully fitted and are delivered to the customer's site 'ready for use'. The unit is made of PP or HDPE. The piping and components are manufactured from PVC, PP, PVDF or PE.

The dosing pumps are assembled with suction lines, valves, waste and rinsing lines, overpressure valves, pulsation damper and pressure retention valve. The unit is closed on the front by means of transparent sliding panels. AxFlow Systems has considerable experience with dosing units, which are produced as custom-built units according to customer specifications. Prior to delivery, the dosing units are tested for pressure and water capacity. They are delivered with CE certificate and, if required, in accordance with ATEX with all certificates and manuals.



Dosing unit with Bran+Luebbe ProCam dosing pumps for chemical dosing.



You are involved in a business process in which technology and continuity play an essential role. But... are you actually sure that your processes will simply continue? You need to be able to have confidence in your systems. The right service at the right time helps you to control these uncertain factors. But what is the right service and when is it the right time? AxFlow Service has the answer to these pressing issues.

Service is a broad concept that is used by almost every company. But what service will you actually receive? AxFlow offers far-reaching service and makes this very clear. You would like to know where you stand and we would be delighted to tell you what you can expect from us. This will enable us to compile a suitable service plan for your company to prevent unpleasant surprises and offer you complete peace of mind. That is *fluidity.nonstop*

AxFlow provides maintenance and repair in our service centres and on site, supported by an external service partner. This strategic cooperation comprises various SCC certified service sites with a total of 120 Service Engineers. This enables AxFlow to guarantee a 24/7 service network with complete coverage throughout the Netherlands, Flanders and on offshore locations.

The AxFlow European distribution centre (EDC) delivers 95% of all A- and B-products from stock. It is also possible to have a spare parts' case ready with original

parts at your location or retained at AxFlow EDC. This means that maintenance and/or repair can always take place immediately, minimising down-time in your process.

Pumps sent for overhaul will be inspected thoroughly by one of our service engineers before we take on the overhaul contract. We produce an extensive inspection report to clarify our findings. This report is then offered to you together with the quotation, so that you can see exactly what we have observed and what you can expect from us.

Although we are proud to be integrated in the local market, we also understand the specific needs of multinationals. Finally, AxFlow Group operates in over 25 countries in Europe and in South Africa. You can count on us from the very beginning of your project up to and including our extensive after-sales service.



AxFlow Service inspection report prior to an overhaul.

Our added value

AxFlow offers added value across an extremely diverse range of areas. In order to clarify our services, we have divided these areas into 9 main categories, all provided with a characteristic icon.



Consultancy

What is the most appropriate pump for my application?

AxFlow has more than 50 years' knowledge and experience in creating solutions in the liquid processing industry. We listen to your requirements and expectations in a personal discussion and then offer you advice and support to provide you with the right solution(s).



Stock & logistics

How fast can you deliver?

The AxFlow European distribution centre in Lelystad has an extremely large stock of pumps and parts and offers a service level of 95% on all A- and B-products; ordered today before 12.00 noon means delivered to you tomorrow and in an emergency, within just a few hours!



Maintenance and repair

How can I keep my system in top condition?

Our care goes further than just the delivery of high-quality AxFlow equipment and the accompanying spare parts. With AxFlow Service, AxFlow also offers maintenance and repair/overhaul where necessary. We do everything to prevent that our customers are confronted with unpleasant surprises.



Installation

Can AxFlow also install and start-up the equipment?

We understand like no other the importance of precise installation in order to guarantee the best performance of the liquid processing equipment in your process and the quality of your end product. AxFlow Service offers precise and reliable installation services based on our extensive product and process experience.



Training

As a user, what do I need to know about the products?

Being able to identify wear and tear on time and being able to carry out minor maintenance work can prevent unpleasant surprises. AxFlow also offers the opportunity to follow specific product training at our offices in Lelystad or if desired on site in the Netherlands or Flanders.



Contracts

How do I keep my system in top condition?

AxFlow has three basic contract forms to keep your products and systems in top condition. These AxFlow service and maintenance contracts mean that your equipment will be part of a quality system, aimed at detecting wear and tear and ageing at an early stage.



Emergencies

Can you repair it for me now?

AxFlow Service has its own service site in Lelystad, which is supported in practice by an external service partner. This strategic cooperation guarantees a service network that is accessible 24/7 and that offers complete coverage throughout the Netherlands and Flanders. The AxFlow European distribution centre has a stock service level of 95% with the option of customer-specific stock.



Quality assurance

What makes the selection of a pump the best choice for my process?

AxFlow selects the best liquid transport equipment from leading manufacturers on the global market. By compiling our product series, we aim to select the best products from all available pump technologies, so that you can always use the most suitable products for your processes.



Engineering

Does AxFlow also offer complete systems?

AxFlow goes further than only delivering separate pumps, mixers and dosing equipment. AxFlow offers total solutions. AxFlow Systems B.V. in Lelystad is our own engineering centre of excellence, with which AxFlow offers added value. It designs, builds and sells total systems for the most diverse applications throughout Europe.



AxFlow has its own European distribution centre (AxFlow DC B.V.) in Lelystad, from where we can deliver pumps and parts directly from stock to all AxFlow countries.

With the European distribution centre in Lelystad, AxFlow delivers 95% of all A- and B-products directly from stock. Your pumps and parts will be delivered within 24 hours.

The intensive cooperation between AxFlow B.V., AxFlow Systems B.V. and AxFlow DC B.V. enables us to deliver complete pump units (pump and drive assembled on one frame) within a few days. AxFlow Group is the only organisation within the pump industry that can offer this service.



95% of all A- and B-products can be delivered from stock. Ordered today, delivered tomorrow!

Customer-specific stock and service cases

Would you like a 100% guarantee that we always have the parts for your system in stock? We can create a customer-specific stock for you. This means that we will always have the wear parts for your specific system or systems in stock.

AxFlow also offers the opportunity to compile customer-specific service cases and to keep these in stock for emergencies. These cases contain the necessary spare parts for your system; they are kept in stock at your site or in the AxFlow European distribution centre. In the event of preventive maintenance or in an emergency the AxFlow service engineer will have this case to hand and will thus have the right parts available at all times.



AxFlow customer-specific service cases offer security.

Advantages of AxFlow European distribution centre:

- 95% of all A- and B-products in stock.
- Direct delivery from stock, within 24 hours.
- Complete pump units assembled and delivered within a few working days.
- Customer does not need to keep its own stock.
- Pan-European purchasing means extremely competitive pricing.



Corporate social responsibility

AxFlow values sustainable and corporate social responsibility highly. For AxFlow, it is about finding the right balance between social interests (*People*), the environment (*Planet*) and the operating result (*Profit*).

The doors of AxFlow Systems' brand-new production halls opened in early 2015. This opening was the final phase of the *AxFlow in one* project. This project was all about centralising the Dutch AxFlow divisions under one roof in the central Lelystad location. Doing business from one central site offers synergy advantages. It enables AxFlow to further optimise business processes and serve our valued customers even better.

With this, AxFlow has taken a great step forwards in corporate social responsibility. The logistics efficiency of goods and processes, central purchasing of durables and consumables and an optimum waste management system are a few examples of this positive development.

At AxFlow, corporate sustainability is not only found in our operations. We also distinguish ourselves with innovative ideas in our products and total solutions, in which we monitor carefully the balance between the three above-stated Ps (*People, Planet, Profit*).

Corporate social involvement

AxFlow focuses its business activities specifically on value creation in the long-term in the three dimensions of people, planet and profit. Corporate social responsibility is an important factor in this. AxFlow invests in people, and with this, in the future. The new generation within the organisation is being trained for the future to safeguard the continuity of the company. Outside the organisation, AxFlow focuses mainly on youth.

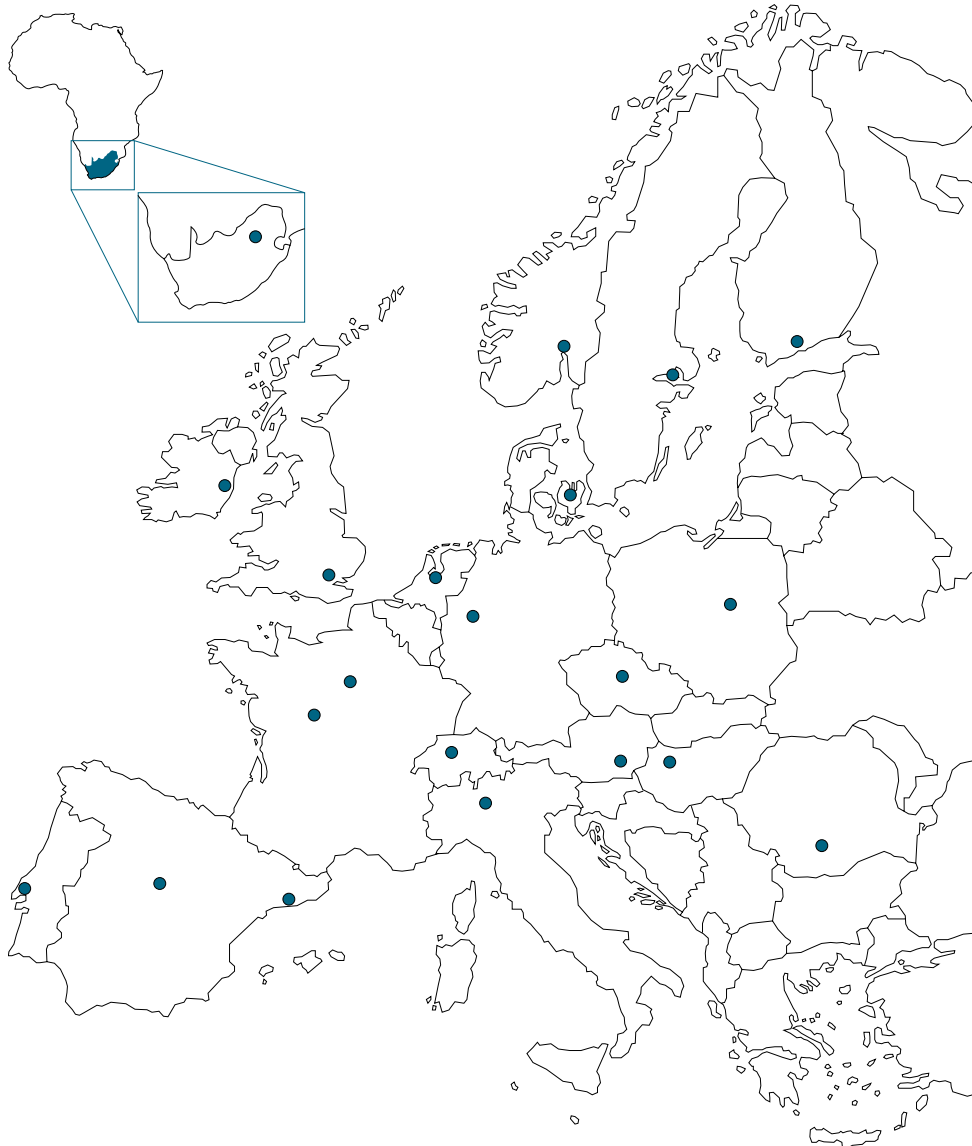
AxFlow inspires youth within and outside the province of Flevoland with structural support for various sporting activities. Youth form the basis and future of sport. But possibly even more important: youth is the future of society. Sport and exercise improve health and increase social cohesion.

We focus on numerous initiatives in sport in our immediate vicinity, because we are convinced that sport offers an important contribution to the development of youth and a positive contribution to society. These are just a few examples of the significant commitment that we have to the society in which we work and do business.



South Africa

Europe



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