



WASTEWATER AND SEWAGE SYSTEMS

Proven pump solutions for reliable transfer of sewage sludge, wastewater and additives - combined with advanced flow technology and expert support.

ABOUT WANGEN PUMPS

Established in 1969, we are a well-known brand offering high-quality positive displacement pumps for demanding industrial applications. Our progressing cavity technology is globally recognized for their robustness and reliability in handling a wide variety of media. We provide highly effective and long-lasting solutions to diverse industries such as biogas and anaerobic digestion, agricultural engineering, pharmaceutical and cosmetics, food and beverage, environmental and wastewater, marine, chemicals and paper production.

WANGEN PUMPS is part of Atlas Copco Group.



Designed for low-maintenance, reliable continuous operation

Municipal and industrial wastewater is treated in several stages, depending on the country and current legislation. At each treatment stage, sewage sludge is produced alongside the treated water. Initially, the sludge is thickened, dewatered and finally recycled. These sludge streams are extremely abrasive, fibrous and contain dry matter contents of up to 45 %. This places the highest demands on the pumps used.

WANGEN PUMPS stands for growth and durability

For this purpose we offer a comprehensive range of robustly constructed, extremely reliable progressing cavity pumps. Our portfolio is complemented by special designs for conveying highly dewatered sludge. This helps to ensure trouble-free, continuous operation of your wastewater treatment plant and maximum plant availability.

As experts in dewatered sewage sludge, we supply pumping solutions that ensure efficiency and reliability.

TECHNOLOGY OF OUR PUMPS

Progressing cavity pumps for wastewater treatment processes

Our pump series for wastewater treatment feature sleeve-protected universal joints, which make the pumps resistant to clogging and abrasion. The flow-optimized pump housing prevents solids from accumulating and ensures that the pump remains free of blockages. Large inspection ports also allow easy cleaning of the inner pump chamber.

Thanks to our extensive range of flange connections, integration into your wastewater treatment plant is seamless, ensuring maximum efficiency with minimal downtime.



Tailored to your medium



Built for long-term reliability



Ideal for demanding wastewater applications

**Your best choice for plant installation.
Let your process flow with confidence.**



Steps in the wastewater process: Our contribution to clean water.

MATERIALS DOSING

For the removal of colloidal substances, fine particles and phosphorus, wastewater is treated using flocculants and flocculation aids. During this process microflocs agglomerate to fast sinking macroflocs. Alkalis and acids are used to regulate the pH value, while metal salts, lime milk and polyelectrolytes optimise sludge dewatering. High dosing accuracy is crucial – a key strength of our stainless steel KB series, ensuring an efficient and reliable treatment process.



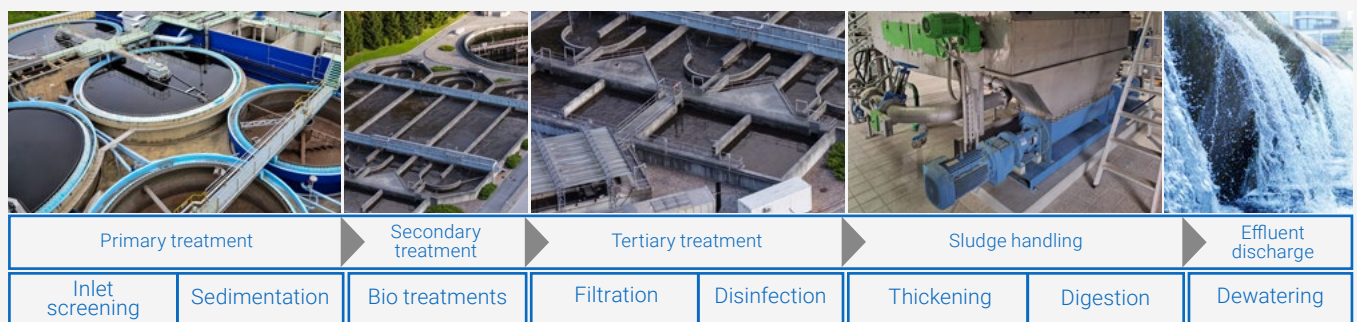
WASTEWATER TREATMENT

Depending on the requirements municipal and industrial wastewater is treated using mechanical-physical, biological and chemical processes. We provide process-optimised pump solutions for the sludge produced during the treatment stages. Robust construction, flow-optimized geometries and energy-efficient drive systems ensure high cost-effectiveness and pump technology designed for a long service life.



SLUDGE HANDLING

In wastewater treatment, our pumps handle raw water, thin sludge, excess sludge and digested sludge, as well as thickened sludge, for further processing in decanters/ centrifuges or filter and belt presses. Even dewatered sewage sludge with a dry matter content of up to 45 % from chamber filter presses or belt filter presses, as well as industrial sludges such as metal hydroxide sludge, are also reliably handled using specialized pumping solutions.



TECHNOLOGIES



KL-S SERIES SELF-PRIMING PUMP

Pumping raw sewage, mechanically thickened sludge and free-flowing thin excess sludge / Durable construction with bearing pedestral / Individually configurable to the respective application.

Max. capacity:	560 m ³ /h
Max. pressure:	48 bar
Dry matter content:	18 %



KL-T SERIES IMMERSION PUMP

Suitable for pumping highly viscous slurries from basins and pits / Immersed directly in the medium / Used where self-priming pumps reach their limits / Configurable to the basin depth

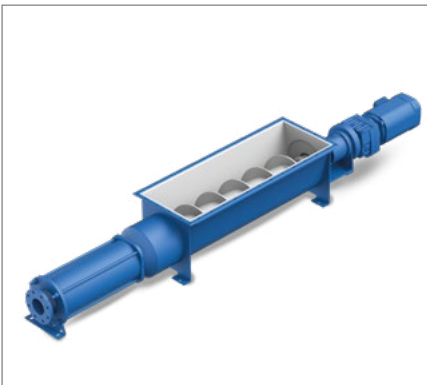
Max. capacity:	100 m ³ /h
Max. pressure:	12 bar
Dry matter content:	18 %



KB-S SERIES SELF-PRIMING PUMP

Suitable for dosing applications / Designed as a monobloc unit / Durable, wear- and maintenance-free shaft coupling

Max. capacity:	4,900 l/h
Max. pressure:	40 bar
Dry matter content:	5 %



KL-R SERIES HOPPER FEED PUMP

Conveying thickened and dewatered sludge / Fitted with a hopper and a worm pre-conveyor for optimum and continuous product feed into the pumping chambers of the pump

Max. capacity:	160 m ³ /h
Max. pressure:	48 bar
Dry matter content:	45 %



XPRESS SERIES SELF-PRIMING PUMP

Pumping raw water, slurries, polymer solutions and lime milk / Compact pump design, developed to pump high volumes / Service-in-place concept / Cost-effective monobloc pump with an L-geometry pump assembly

Max. capacity:	102 m ³ /h
Max. pressure:	6 bar
Dry matter content:	10 %



KL-RS SERIES HOPPER SILO PUMP

Dosing and conveying dewatered sewage sludge / Installation directly under the moving floor of a silo or bunker / Thanks to the X-LIFT quick-change system, the rotor and stator can be easily replaced even when the container is full

Max. capacity:	35 m ³ /h
Max. pressure:	48 bar
Dry matter content:	45 %

Guaranteed to prevent bridging

High-performance hopper feed pumps for trouble-free operation in the plant.

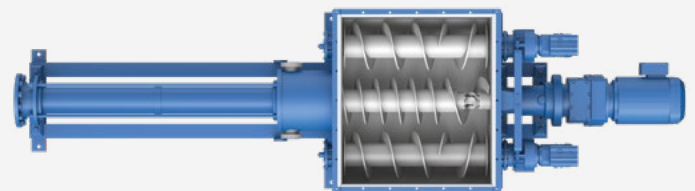
KL-R TRIPLEX | KL-RQ

Robust hopper feed pumps for clog-free pumping.

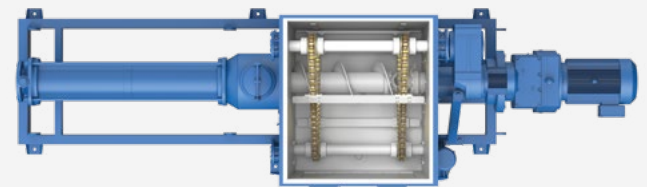
The high-performance pumps of the KL-R Triplex and KL-RQ series are used for conveying dried sewage sludge and are therefore ideally designed for applications in sewage sludge recycling. The large buffer volume in the collecting container ensures consistent dosing and reliably prevents bridge building.

- Conveying and buffering dewatered sewage sludge with a high dry matter content
- Large tanks to eliminate the need for an intermediate silo
- **KL-R Triplex:** Integrated 3-screw system that continuously directs the medium away from the hopper walls to the central screw conveyor / Low-profile design combined with a large feed tank for minimal space requirements
- **KL-RQ:** Equipped with a chain cross-feeder for bridge breaking / Optionally available with the X-LIFT quick-change system for convenient rotor-stator replacement even when the tank is full

Max. capacity:	35 m ³ /h
Max. pressure:	48 bar
Dry matter content:	45 %



KL-R TRIPLEX
HOPPER FEED PUMP



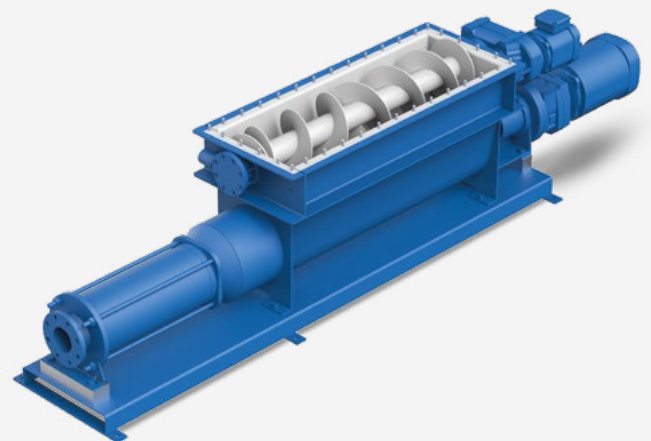
KL-RQ
HOPPER FEED PUMP

KL-RUE

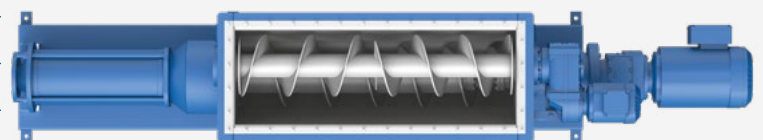
Modular hopper feed pump for maximum flexibility.

Thanks to its modular design, the KL-RUE offers flexibility, low spare parts inventory and minimal downtime during repair work. The optional attachment featuring an additional return feed screw effectively prevents bridge building and optimises sludge feed.

- Conveying thickened and dewatered sludge
- Equipped with a feed hopper and worm pre-conveyor screw for optimum and continuous product feed into the pumping chambers of the pump
- No fibres wrapping around the joint and joint connection thanks to anti-wrapping protection



Max. capacity:	160 m ³ /h
Max. pressure:	48 bar
Dry matter content:	45 %





SPARE PARTS AND SERVICES



SERVICE THAT KEEPS YOUR PLANT RUNNING

Regular inspections and maintenance by our service team and partners worldwide maximize pump reliability and operational safety, reducing downtime and costs. We provide fast repairs on-site or in our factory to ensure your equipment performs at its best.

 Despite limited space and complex conditions, we worked together to implement tailor-made solutions – resulting in a stable and reliable sewage sludge disposal system. 

–Wastewater treatment plant operator, Switzerland



ORIGINAL SPARE PARTS – YOUR GUARANTEE FOR MAXIMUM PERFORMANCE

Original WANGEN spare parts restore full pump performance fast. Benefit from expert quality for long service life and minimal downtime. Ensure efficiency and reliability in your wastewater plant.

Benefits of Original Spare Parts:

- Guaranteed quality from the manufacturer
- Extended service life for your pumps and modules
- Perfect fit and compatibility for all WANGEN systems

TRAINING & WEBINARS

Training and webinars to boost wastewater expertise and plant performance. Hands-on sessions with practical highlights into pump technology. Stay ahead with proven know-how – on-site or online.

WANGEN PUMP ACADEMY

With the PUMP ACADEMY, we would like to pass on our in-depth specialist knowledge to you in practice-oriented training courses so that you can use our pump technology successfully. More information online.

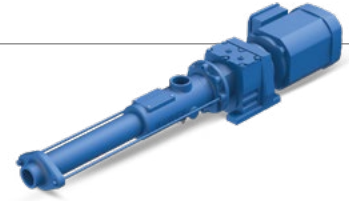


YOUTUBE

Watch detailed product videos on the WANGEN PUMPS YouTube channel featuring pump technology and operational best practices for various applications.



SUCCESS STORIES

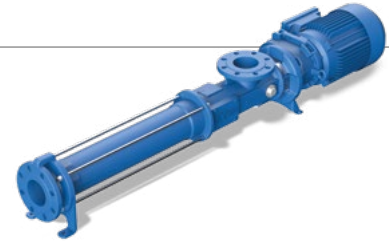


WASTEWATER TREATMENT PLANT AND ORGANIC WASTE

Most modern wastewater treatment plant in the world. 150,000 m³/day.

 48 pumps in operation

 Tuas Nexus, Singapur



UNDERGROUND WASTEWATER TREATMENT PLANT

Safe and cost-effective treatment of thin and dewatered sludge.


 59 pumps in operation

 Blöminmäki, Finland



CLARIFICATION PLANT

Reliable high, continuous output of up to 50 m³/s.

 98 pumps in operation

 Atotonilco, Mexiko

