# Small WWTP for 4 - 50 inhabitants High treatment performance and sludge treatment

# AUTARK





# **Quality - Innovation - Reliability**

Kordes is your reliable partner for wastewater technical products. The satisfaction of our customers is always our first priority, which is why we only use high-quality and durable components.

In the course of the company's history, now in its third generation, we have continuously optimized our products through innovative ideas, experience and a great attention to detail.

The know-how we have built up is the result of the engineering expertise of our employees and the practical experience of thousands of products supplied, which we subsequently look after for many years as part of maintenance contracts after successful completion of installation.

Active environmental protection with a perspective for the future is certainly one of the greatest challenges of our time. In the field of wastewater technology we contribute to keep our waters clean and to develop solutions for tomorrow.

We will be pleased to accompany you from planning to successful commissioning. An individual drawing especially for your project in 3D view, visualizes the product even before the start of production. Together we will find the ideal solution for your project and we are looking forward to a successful cooperation.

Kordes KLD Wasser- und Abwassersysteme GmbH Möllberger Str. 20 32602 Vlotho

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# The innovative system for 4 - 50 inhabitants

- Low investment costs due to compact design
- Low follow-up costs due to sludge reduction
- Low energy consumption due to ventilation according to demand
- Excellent treatment performance
- No odor emission
- Easily adaptable to changes in the number of inhabitants
- Orderly operation even with load fluctuation
- Easy mounting and maintenance
- Treatment procedure:



#### 1. filling - Inlet

The wastewater is fed directly into the septic tank. There, mixing with the inflowing wastewater takes place immediately.



#### 2. Aeration

The OKTOPUS then aerates the wastewater until the treatment tank is filled. The strong turbulence causes all solids, such as toilet paper, to decompose.



#### 3. Sedimentation

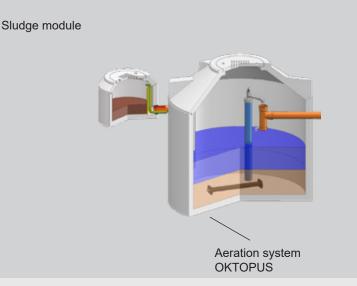
In the sedimentation (settling) phase, the aeration is switched off. The sludge in the plant settles to the bottom. A clear water zone is created in the upper area. This is where the treated wastewater is now located.



#### 4. Clear wastewater discharge outlet

The treated wastewater is now pumped out of the clear water zone. The new cycle can begin. The excess active biomass at the bottom of the small wastewater treatment plant is conveyed to the sludge module. There, water and material separate from each other once again. While the water is conveyed back into the treatment tank, the now remaining residual sludge can rest until it has almost turned into soil and sludge removal is not necessary for a long time.





# AUTARK treatment plant

## Aeration system

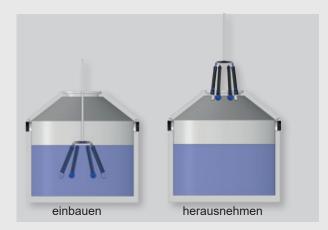
The OKTOPUS flexible aeration system provides complete aeration and mixing in the biology. The spread membrane tube aerators are completely distributed on the tank bottom, so that the entire surface is aerated. The flexieblen system is ideally adapted for round septic tanks, so that later maintenance work can also be carried out easily.

## **Control units**

The control system optimizes the treatment process individually according to the incoming wastewater.

During the day, the biological treatment of the wastewater takes place. At night, i.e. during the time without inflow, sedimentation takes place with the clear water discharge.

In addition to the process control of the wastewater treatment plant, operating hours and error messages are also stored. All operating data are clearly displayed via the full text display.





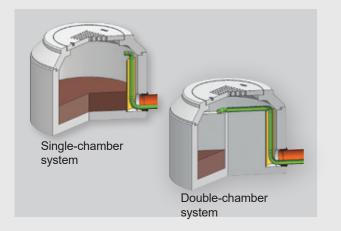


## Sludge treatment

Usually, wastewater treatment plants regularly discharge the pre- sedimentation, which means that, in addition to the sludge, mainly wastewater is discharged. With the AUTARK wastewater treatment plant, a sludge module can be added, which ensures dewatering of the sludge. Compared to a pre-sedimentation, the sludge volume is considerably reduced by this.

#### Functionality:

Excess sludge is pumped from the treatment plant into the sludge module at regular intervals. Here the sludge remains and has sufficient time to dewater. The majority of the water flows back into the treatment plant, so that the volume of sludge that dries out is considerably reduced.



# Tanks for AUTARK



PE tank:

inhabitatnts	Ø Tank (m)	Number of tanks	Installation depth (m)
4	1,20	1	2,85
6	2,20	1	2,14
8	2,20	1	2,58
12	2,20	1	2,58



PE tank: :

Inhabitants	Dimensions (m)	Number of tanks	Installation depth (m)
4	2,40 x 1,47	1	2,05
6	2,50 x 1,70	1	2,38
8	3,50 x 1,70	1	2,38
12	5,00 x 1,70	2	2,38



# Service

### Spare parts

You need a spare part? Due to our extensive component archive and with corresponding stock-keeping, we will find the right spare part for you, so that your system is quickly ready to work again.

### Installation and commissioning

After you have received the delivery and the on-site preparations have been completed, we will be pleased to come to the technical assembly. After a successfully completed test run, everything is ready for commissioning. As a preparation for professional operation management, you will receive a detailed technical briefing from us.

### Maintenance

Your Kordes system has been running trouble-free so far and you are satisfied with the product. To keep it that way, we recommend regular and qualified maintenance. As part of the maintenance contract, we check the entire systems technology and adjust everything to the current conditions. We then document the status of the system, including the measures carried out, and provide you with a clear report. A permanently reliable operation of your treatment plant is thus guaranteed.

Contact Tel: 05733 / 9908 - 402 wartung@kordes.de









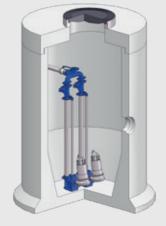
# **Products**

### DORANT with PE-HD tank



HEKANT with dry-installed pumps





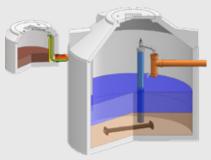
VARIANT Pressure drainage



BIOclear vario wastewater treatment plant up to 5,000 Pe



Small wastewater treatment plants up to 50 Pe





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