

## CLEAN SOLUTIONS

Wastewater disposal and fresh water supply from coaches





## YOU CAN RELY ON IT

Quality, experience and expertise guarantee future-proof technology

As the inventor of the elastomer-coated rotary lobe pump and a tireless pioneer, Vogelsang has numbered among the world's leading mechanical engineering companies in the area of wastewater disposal for decades. Companies, on-site employees and, last but not least, the passengers depend on Vogelsang's reliable supply and disposal solutions, particularly those companies involved in intercity passenger transport.

Based on our years of wide-ranging experience and continuous research work, we develop highly functional pumps and entire systems for bus and train depots that guarantee trouble-free, hygienic draining of wastewater tanks and simplify the supply of drinking water. Both the production level and the quality of the material used by us show how seriously we take our commitment to our customers and to their customers. That is why we also ensure that our plants can be operated safely. Our pumps and disposal systems are just as easy to maintain as they are durable, and therefore fulfill all the requirements of combining efficiency with sustainability.

# COMPLETE CONTROL OF DRAINING AND CLEANING

Mobile or stationary: triple solution expertise based on the tried-and-tested Vogelsang rotary lobe pump



RoadPump

The core of every RoadPump is a Vogelsang rotary lobe pump of the VX series.

Traveling on coaches is becoming more and more popular. With rising passenger numbers, one particular challenge is to dispose of wastewater from washrooms and toilets hygienically. To ensure that this disposal is controlled and does not take place under unhygienic conditions that are hazardous to health, Vogelsang has developed the RoadPump.

#### RoadPump

The RoadPump is a disposal and supply station for washroom and toilet wastewater, specifically designed for bus stations, bus depots or stopping places and rest stops. It uses various collecting devices and its built-in pump system disposes wastewater safely and hygienically in the connected sewer system or collection tank. At the same time, it supplies tap and drinking water. The RoadPump's robust vacuum technology and the intelligent design of the collection facilities prevent contamination of the road. To ensure a high level of user acceptance, the RoadPump has a simple structure. It can be operated without difficulty by any bus driver or station employee. At the heart of the RoadPump is the established rotary lobe pump technology. Vogelsang - the market leader in the field of toilet wastewater disposal in passenger train coaches has been using pumps in this design around the world for more than twenty years. They have an outstandingly compact type of construction, are very easy to maintain, and are extremely resistant to foreign matter. Toilet paper, pieces of fabric and other contamination that is commonly present in wastewater do not impair the rotary lobe pump's operation.

Vogelsang has designed several methods to dispose of the wastewater from buses with a RoadPump. Bus depots or stations of very different sizes, petrol stations or service areas – we have the perfect solution for you. The RoadPump is a totally clean and odorless system, avoiding contamination of the surfaces with feces or other foreign materials. The RoadPump is the easiest and the most environmentally friendly way to dispose of wastewater from buses and supply fresh and drinking water.

### Vogelsang rotary lobe pump of the VX series



#### Advantages of the rotary lobe pump for toilet sewage:

- Hygienic and fast wastewater disposal system
- · Resistant to dry running
- Maximum tolerance of foreign matter
- Easy maintenance
- Easy handling & self-service
- Winter-proof with electric heating

## For each application we have the perfect RoadPump solution

Depending on the requirements of your installation, we deliver the perfect solution for you. If you have a small bus depot, a public area or a private business, or even a big petrol station on the highway; if your prevision is to use the RoadPump once a week or several times an hour; we always come up with the perfect equipment to fit your needs, e.g., when it comes to mobile solutions, payment and authorization systems, remote maintenance, weather resistance, unusual positioning or additional services such as a hygienic drinking water supply.

#### Find out more at roadpump.info



Thorsten Schlüter, owner and operator of Rosenow highway rest area, Kiel, Germany

"The RoadPump Plus creates a disposal network for intercity bus companies that we as operators benefit from financially. The bus drivers lose hardly any time and don't harm the environment during disposal. And passengers are finally no longer confronted with closed restrooms. There's nothing else on the market that compares."



#### RoadPump Eco

The RoadPump Eco is a mobile cost-effective solution for small bus companies. It can be used together with the CollectingMax or with a BusPlug, if it is already installed on the bus.



#### RoadPump Easy

The RoadPump Easy is a cost-effective stationary system in a weatherproof housing, ideal for private bus companies. The wastewater tanks can be emptied with the CollectingMax trolley or directly via the odorless suction connection BusPlug.

In addition, there is the possibility to fill the water tank with tap water or even to flush the wastewater tank. The operation can be easily carried out by the bus driver. Optionally, a pay-per-use system can be installed using coins or tokens.



#### RoadPump Plus

The RoadPump Plus is a stationary system in a weatherproof housing, specially engineered for petrol stations, service areas, ferry ports or public areas such as bus stations. The wastewater tanks can be emptied with the CollectingMax trolley or directly via the odorless BusPlug suction connection. In combination with the BusPlug an automatic flushing of the wastewater tank can be done. All parts required for unplugging and supply are kept in the housing and are electromechanically locked, preventing vandalism and theft. The RoadPump Plus has a unique feature to offer: it has a drinking water filling facility, as well as a hygienic flushing system. It fulfills the requirements of drinking water quality according to the German Federal Railway Authority (EBA). The housing is heated, which prevents freezing of the individual components. The system can be equipped with different payment solutions. This version can also be set up as a self-service system. The design and operation are modeled on a petrol pump to simplify the installation in these facilities.



With the BusPlug from Vogelsang, which can be directly connected to the RoadPump Plus, the user can empty the wastewater tank in the easiest and cleanest way.

## COLLECTING SYSTEMS

## Wastewater tank disposal with Vogelsang's convenient solutions

#### BusPlug

#### For the cleanest disposal of wastewater from buses

The BusPlug was developed by Vogelsang to enable the clean, quick and comfortable suction of wastewater in travel coaches. The BusPlug can be easily retrofitted and is connected to the RoadPump quickly and easily using a Kamlock coupling. Even larger contaminants such as lighters or paper towels can be extracted without problems and completely odor-free.

#### Benefits of the BusPlug:

- Cleanest way to dispose of wastewater from buses
- Easy to install and to retrofit
- Easy to dismantle for inspections on the tank
- Made from chemical-resistant materials
- Prevents the creation of vacuum and damage in the wastewater tank
- Tried-and-tested Kamlock coupling; successfully used in the railway sector

#### CollectingMax

#### Mobile and ready to use for every bus

The CollectingMax consists of a large drip pan, which any employee or driver can quickly position under the outlet for toilet sewage on the bus. The system is easy to operate and fits all bus types perfectly. The drip pan is designed to enable a rapid outflow and prevent spray from toilet wastewater. The CollectingMax is an efficient solution for smaller bus stations or bus depots, and also for rest stops. It can be used without difficulty by untrained personnel.



Top: The BusPlug connects to the RoadPump using a coupling with little effort.

Bottom: The CollectingMax is the mobile drip pan for all bus types.



#### **Special solution**

#### CollectingStation

#### Permanently installed station for bus stations and bus depots

The CollectingStation is sunk permanently into the ground, so that the bus is simply driven over the collection unit. With the special positioning system, the driver is able to position the bus correctly above the collection unit. The special design of the station prevents contamination of its surroundings and of the bus when the wastewater is discharged. After the disposal, the CollectingStation is automatically flushed with water to remove odors and toilet paper residue.

## **SPECIFICATIONS**

	RoadPump Eco	RoadPump Easy	RoadPump Plus
Rotary lobe pump type	VX100-45Q	VX100-45Q	VX100-45Q
Max. capacity	180 l/min	180 l/min	180 l/min
Max. delivery height	8 mWC	8 mWC	8 mWC
Max. differential pressure	2 bar	2 bar	2 bar
Motor power	2.2 kW	2.2 kW	2.2 kW
Power supply	3 Ph x 230 / 400 volt 50 Hz	3 Ph x 230 / 400 volt 50 Hz	3 Ph x 230/400 volt 50 Hz
Cabinet & hose retainer	Mobile unit	Stainless steel 1.4301	Stainless steel 1.4301
Suction hose for CollectingMax/BusPlug	5 – 15 m DN40 spiral hose	5 – 15 m DN40 spiral hose	4.5 m DN40 spiral hose self-retracting
Suction hose for suction lance		5–15 m DN40 spiral hose with 1" suction lance, incl. ball valve	
Tap water hose		10 m 1/2" hose on automatically retracting hose reel	7 m 1/2" hose on automatically retracting hose reel inclusive of backflow preventer
Drinking water hose			7 m 1/2" hose on automatically retracting hose reel and automatic hygienic flushing
Approx. dimensions (HxWxL)		970 x 400 x 1,200 mm	1,700 x 900 x 2,000 mm
Approx. weight		290 kg	650 kg
Heating system		1 x 250 W with thermostat	2 x 250 W with thermostat



## Comprehensive services for smooth operation and a long lifetime

#### Support and supply from A to Z

Because we are aware that close customer proximity is essential for our mutual success, we design our services to best meet your needs. In Germany and in countries where we have subsidiaries, Vogelsang service centers and contractual partners generate an active dialog with our customers and provide reliable support. This means you always get the precise support you need in every phase of our partnership. Our highly qualified staff make it possible – experts such as consultants and technicians who know your Vogelsang machines inside and out.

#### We think ahead

Thinking ahead in your best interest begins with our extensive and detailed product documentation. Spare parts are available within a short time due to our high degree of vertical integration in production. In addition, you will always find an authorized service partner in your area who can help with repairs and wear part replacement. The Vogelsang ServicePack completes the offer. Whether you need start-up, on-site training, training at the Vogelsang facility, or full service support with a maintenance contract and a wear parts service package – we offer a support program tailored specifically to your needs.

#### What we offer

We provide solutions in the following sectors: AGRICULTURE, BIOGAS, INDUSTRY, TRANSPORTATION, WASTEWATER











#### Our broad range of products and services

- Consulting and service
- Data management and control technology
- Disintegration technology
- Individually tailored solutions for special applications
- Pumps and pump systems
- Solid matter feeders
- Solids reduction, separators and mixers
- Spreading technology
- Supply, disposal and cleaning

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