



XRipper®: Reliable shredding of coarse matter in domestic wastewater

Case Study - Lippeverband, Dülmen sewage treatment plant



Problem

Clogging of wastewater pumps by textiles and wipes

Solution

Retrofitting the XRipper XRC136-560QD with Sewer Integration Kit (SIK)

The customer

The Dülmen sewage treatment plant belonging to the Lippeverband water authority in Germany is designed for 55,000 PE. The locality of Merfeld is connected via a pumping station. It has a redundant design and is equipped with three submersible pumps. These propel the domestic wastewater to the treatment plant 8 km away. There are no commercial or industrial operations connected to the network.

The problem

The wastewater coming from the houses in the residential area regularly contained textiles and cleaning cloths that caused clogging in the pumps. Once a week, two employees were occupied for about 1.5 hours fixing the malfunctions.

Attempts using grinder pumps were not adequate in the long term. After a time, stones and grit in the wastewater impaired their functional reliability. Bar screens were ruled out as an option for disposing of the coarse matter and debris due to the high investment outlay and the difficulty and cost of operation.

Talking to Vogelsang, an ideal solution came to the attention of plant supervisor Wissing: the XRipper XRC-SIK wastewater grinder. With its monolithic rotors, the XRipper masters even stubborn coarse matter reliably. With its carefully engineered design, it can be installed with little effort in front of the inlet in the open pump pit.



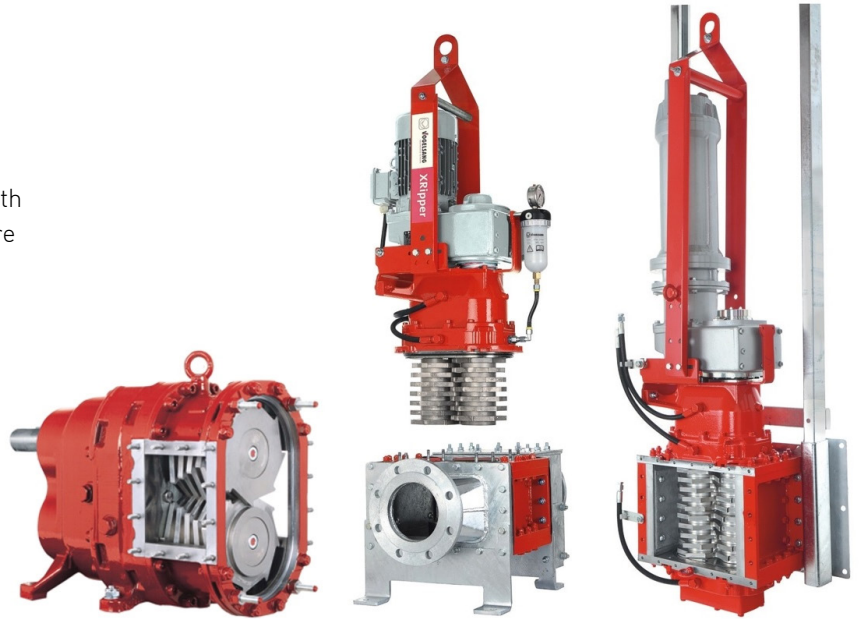
Vogelsang wastewater grinder XRipper XRC SIK

The solution

The XRipper and the pumps now run smoothly, and textiles and sanitary products no longer need to be recovered and disposed of by employees. A six-month test phase proved the reliability of the XRipper. There were no malfunctions during this phase or after it.

The XRipper can be pulled out using a crane for servicing and maintenance work. So far no maintenance has been necessary.

The grinder has paid off for Lippeverband in financial terms too. The investment is offset by the savings in weekly maintenance. Taking into account power costs and other expected operating costs including wear parts, the investment will pay for itself within a few years.



Vogelsang XRipper

“There hasn’t been a single clogging event since the XRipper was installed,” says plant supervisor Helmut Wissing.

Advantages of the XRipper®

- Reliable shredding, even of stubborn coarse matter
- Minimal space required and easy to integrate
- Maintenance and servicing on site by plant’s own personnel

Benefits for the user

- Wastewater pumps no longer clog on a regular basis
- Regular maintenance interventions are no longer necessary

Mentioned Vogelsang product

[XRipper: Twin-shaft grinder for sewer and wastewater treatment plants](#)



Mentioned Vogelsang product

[XRipper: The wastewater grinder for wastewater applications](#)



Vogelsang Ireland Ltd.

Unit 3, Liosban Business Park | Tuam Road
Galway H91 H63P | Ireland
Phone: +353 91 394 570 | ireland@vogelsang.info

vogelsang.info/ie

