

VX series: Pumping sludge with high dry matter content

Case Study - WWTP Northern Germany



Problem

Universal pump for reversible handling of highly viscous sludge

Solution

Vogelsang rotary lobe pump VX136-210Q

The customer and the problem

In a Northern German wastewater treatment plant, a sludge tank required a retrofit of a new pump but only limited space was available. It is necessary for the new pump to perform multiple tasks including charging the post thickener and the homogenization. Furthermore, the pump must convey sludge between the tanks and basins as well as pumping sewage sludge into tanker trucks. A dry matter content of up to 8 % was assumed.



Vogelsang rotary lobe pump VX136-210Q

The solution

The wastewater treatment plant selected the Vogelsang rotary lobe pump VX136-210Q with saddle design, which fits perfect to the limited space. The pump is driven via a belt-drive by a $7.5~\rm kW$ electromotor that allows a capacity of up to $70~\rm m^3/h$ at up to $2~\rm bar$ differential pressure.

The VX series rotary lobe pump extracts the sludge from the center of the sludge tank and pumps it through a pipe DN 200 to the mixing nozzle or charges tanker trucks or other destinations. Since the pump direction can easily reverse, the pump can also drain off mobile units or other locations and charge into the sludge tank or e.g. the thickener.



Vogelsang VX series

Advantages of the VX series

- Runs dry resistant
- Reversible pump direction
- Constant delivery rate even at high dry matter content
- Low space requirement

Benefits for the user

- Easy installation with limited space
- Only one pump needed for multiple tasks

Mentioned Vogelsang product

VX series: Rotary lobe pump for every application



Mentioned Vogelsang product

VX series: Drehkolbenpumpen für Abwasser-Anwendungen



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