



ELOVAC®-P

Completely skid-mounted, plug and play, compact phosphate sequestration system that prevents struvite scaling.

Reduction of the phosphorus return load to the head of the plant with $> 90\% \, PO_a$ -P removal

Improve dewatering by up to 5%

Reduce sludge hauling costs by up to 20%

Reduce polymer consumption costs by up to 20%

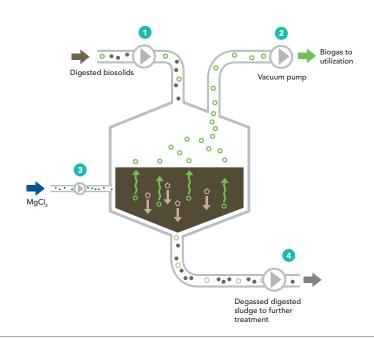
Capture additional biogas: energy positive operation

Reduce Carbon footprint of the plant by up to 20%



OPERATING PRINCIPLE

- 1. Sludge is fed continuously to the degassing reactor.
- A vacuum pump extracts the methane and CO₂ from the digested sludge to raise the pH in the reactor. The vacuumed gas enables an energy-positive operation by capturing additional biogas, while reducing greenhouse gas emissions.
- MgCl₂ is added to the digested sludge in the reactor and with the higher pH, controlled struvite precipitation takes place.
- Continuous discharge of degassed sludge with the precipitated struvite to dewatering.

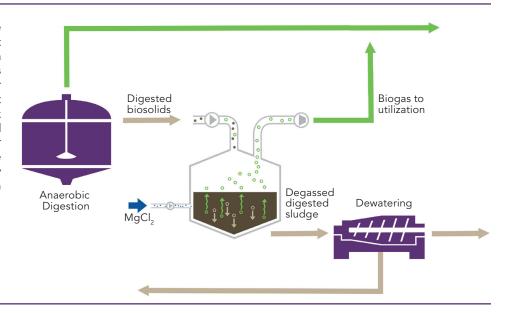






HOW IT WORKS

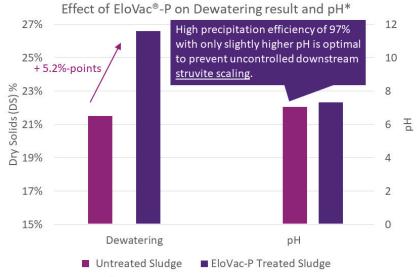
EloVac®-P is installed downstream of the digester and upstream of dewatering where it performs controlled struvite precipitation via vacuum degassing. Given the compactness of the system, it is an easy and modular addition to any anaerobic digestion plant and comes in fully engineered for a quick installation. The system is fully automated for simple operation with minimal operator attention. The process can also be remotely monitored via Ovivo's proprietary WaterExpert™ app for constant observation and support.



PROVEN SUCCESS

Full scale performance of the system has produced results above theoretically predicted values. In addition, maintenance costs are lower because of the simplicity of the system so downtime is minimized.





^{*}Results of installed EloVac®-P in Lingen (Ems), Germany