Reliable sewage sludge handling for Wien Energie

Wien Energie's new external sludge intake system was built using tried-and-tested Putzmeister components. It ensures high availability and reliable conveyance even in the presence of contaminants, and paves the way for future integration into schemes for the mono-incineration of sewage sludge and phosphorus recovery.

Wien Energie's sewage sludge reception and storage station was planned and implemented in collaboration with Putzmeister. The aim was to create a reliable, contaminant-tolerant solution offering high availability and long-term operational reliability for the reception and conveyance of sewage sludge.

In Austria, a requirement for phosphorus recovery from sewage sludge will apply from 1 January 2033 for facilities serving 20,000 inhabitants or more. In Germany, this requirement will apply from 1 January 2029.

With this plant system, Putzmeister provides a future-proof foundation for operators looking to prepare for the mono-incineration of sewage sludge and phosphorus recovery.

The robust sludge pumps and matching components are designed for high dry matter content and varying sludge qualities, and can be integrated into appropriate thermal treatment and recovery processes.

Are you planning a new sewage sludge treatment plant or the retrofitting of existing systems?
Get in touch with us – we can support you every step of the way, from design through to long-term maintenance.

High-performance Putzmeister plant system for safe, efficient and sustainable waste disposal.

Robust system solution for receiving and conveying

Wien Energie's sewage sludge reception and storage station was designed and implemented in collaboration with Putzmeister. The aim was to create a reliable, robust solution with high availability and long-term operational reliability for the reception and conveyance of sewage sludge.

Third-party sludge collection – reliable and seamless

A coordinated Putzmeister system is used for the reception and conveyance of sewage sludge. The components are designed for a long service life and ease of operation, and ensure reliable conveyance even in the face of varying product quality and contaminants. It consists of:

- Feed hopper
- PDSL slide gate
- Discharge screw
- Transfer hopper
- KOS 1480 HP sludge pump with S-tube technology
- Hydraulic power unit
- Control cabinet
- FKA 200 foreign bodies separator

The storage system

A storage silo connected to a Putzmeister system is used for the temporary storage and onward conveyance of the sewage sludge. This enables the downstream processes to operate continuously and in line with demand:

- Storage silo
- PDSF sliding frame
- Discharge screw
- Transfer hopper
- KOS 1070 HP sludge pump with S-tube technology
- Hydraulic power unit
- BLI lubricant injection system
- Control cabinet
- Hydraulic piping

Special features

With decades of experience in sewage sludge treatment, Putzmeister offers robust and future-proof solutions for mono-incineration and phosphorus recovery.

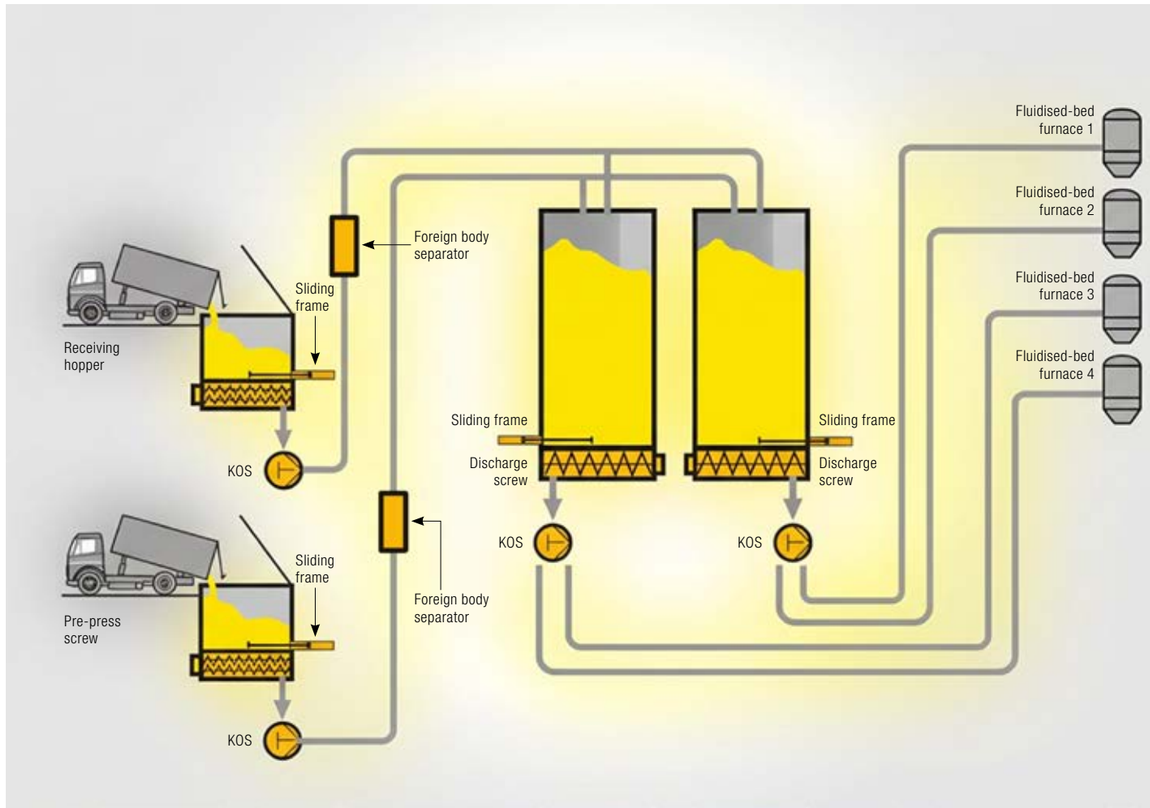
The S-tube technology used ensures high contaminant throughput and system availability – a decisive advantage for the intake of foreign sludge and safe operation.

The current version of the foreign matter separator has proven itself over many years as a particularly robust and user-friendly piece of equipment. Putzmeister's inclined screen solution ensures reliable separation and has clearly established itself as the preferred option over the earlier basket screen variant.

Another important factor for Wien Energie was the local availability of a competent service partner. For successful operation over 20 years and more, it is not only robust machinery and a good design that are crucial, but also a fast, experienced and reliable after-sales service.

Receiving hopper

Foreign body separator



“The system is running reliably and we are well prepared for the future”

Mr Florian Madl, Head of the Asset Operations Division, Wien Energie GmbH, Vienna, Austria

In conversation with Mr Madl about the progress of the project, operational experience and future prospects

What were your key requirements for the new sewage sludge treatment plant?
“For us, operational reliability, tolerance to contaminants and high availability are the top priorities. The plant must operate reliably on a day-to-day basis – even when capacities and sludge quality fluctuate or contaminants are present.”

How did you find working with Putzmeister during the planning and implementation phases?
“The collaboration was very constructive. Putzmeister understood our requirements well and translated them into a coherent overall system. It was particularly positive that we had a dedicated contact person from the design phase right through to commissioning.”

How satisfied are you with the system in ongoing operation?
“We are very satisfied. The KOS sludge pumps and the foreign bodies separator used have proven to be low-maintenance and reliable in day-to-day operation. Downtime due to blockages has been significantly reduced, and the operating staff appreciate the simple, straightforward solution.”

What role does the topic of sewage sludge mono-incineration and phosphorus recovery play for you?
“With the new handling system, we are technologically positioned to already implement sewage sludge in mono-incineration at our plants today. In doing so, we have simultaneously laid the foundation for future concepts for phosphorus recovery.
This is an important building block for us to meet legal requirements and recover resources such as phosphorus.”

Would you choose a Putzmeister solution again?
“Yes. The combination of many years’ experience in sewage sludge handling, the proven S-tube technology and, in particular, having a reliable local service partner convinced us.”

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