

Sewage Sludge Drying



Drying
Technology

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SMS
Inside
Excellence



Dried Sewage Sludge: A Valuable Product

Sanitation still improves noticeably people's health. Meanwhile, the resulting large quantities of sewage sludge become an issue.

Traditional agricultural use has been limited because it pollutes ground water, and landfill disposal is often not allowed. Latest legislation enforces the recovery of phosphorus. Sewage sludge can be converted into a valuable product: dried sewage sludge.

Dried sewage sludge serves as feed material for incineration, gasification, pyrolysis and carbonisation. Its energy ends up in gas, hot heating oil, heating steam or electricity. Simultaneously, contained phosphorous can be recovered and supports sustainability and environmental protection.

A sophisticated drying solution is needed.



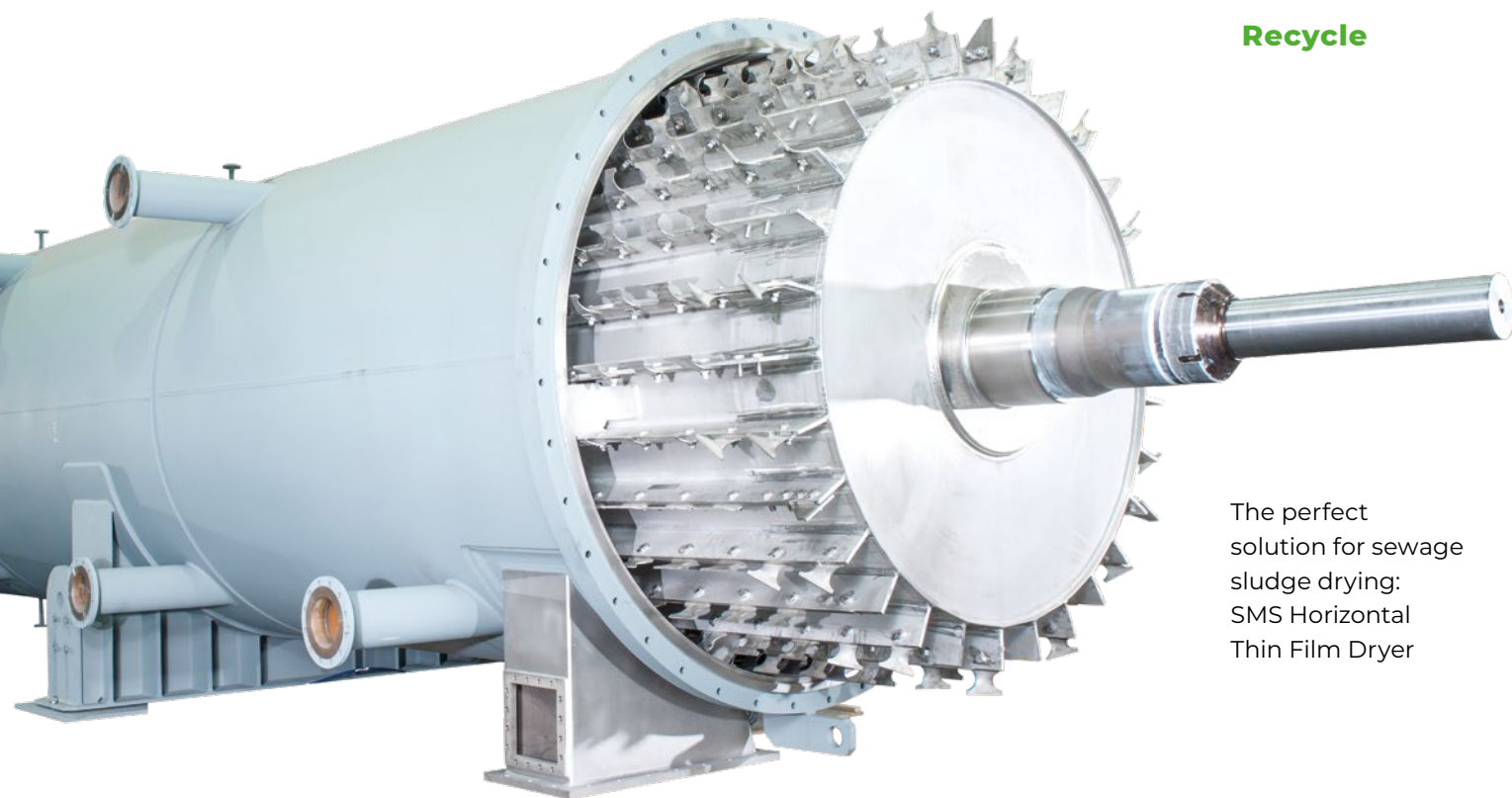
Reduce



Reuse



Recycle



The perfect solution for sewage sludge drying: SMS Horizontal Thin Film Dryer



»We have 10 drying lines with Buss-SMS-Canzler dryers and are very satisfied with the installation and the reliability of the systems. They perform as promised.«

Jiangrui, Assistant Plant Manager, Zhuyuan Sludge Treatment Plant of Shanghai Chengtou Sewage Treatment Co., Ltd

Whichever of the following final process solution is selected: First of all, the sludge needs to be dried!

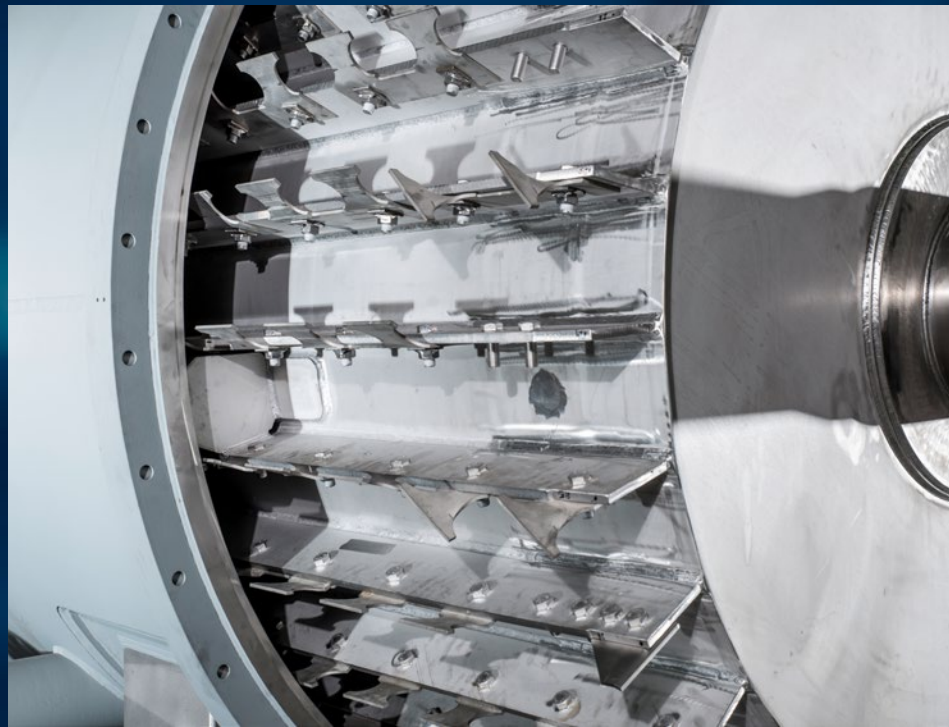
- ✓ Incineration
- ✓ Gasification
- ✓ Pyrolysis
- ✓ Fertiliser
- ✓ Stabilisation
- ✓ Hygienisation
- ✓ Composting



Fully dried sludge: 90% dry solid



Zhuyuan Sludge Treatment Plant of Shanghai Chengtou Sewage Treatment Co., Ltd



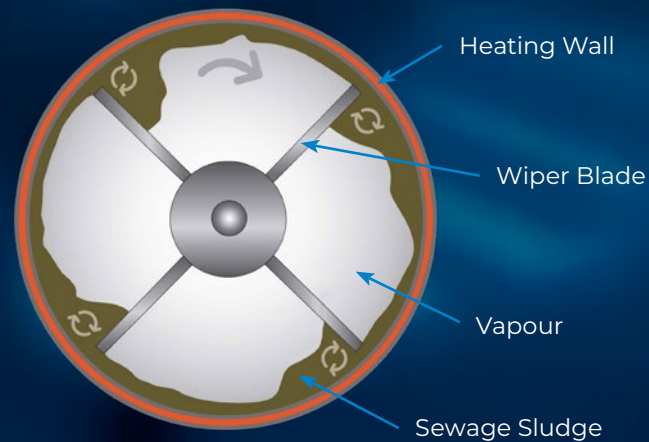
Sophisticated Sewage Sludge Drying with the SMS Horizontal Thin Film Dryer

Buss-SMS-Canzler offers the entire range of supply: basic engineering, detailed engineering for single equipment, and the supply of complete drying systems.

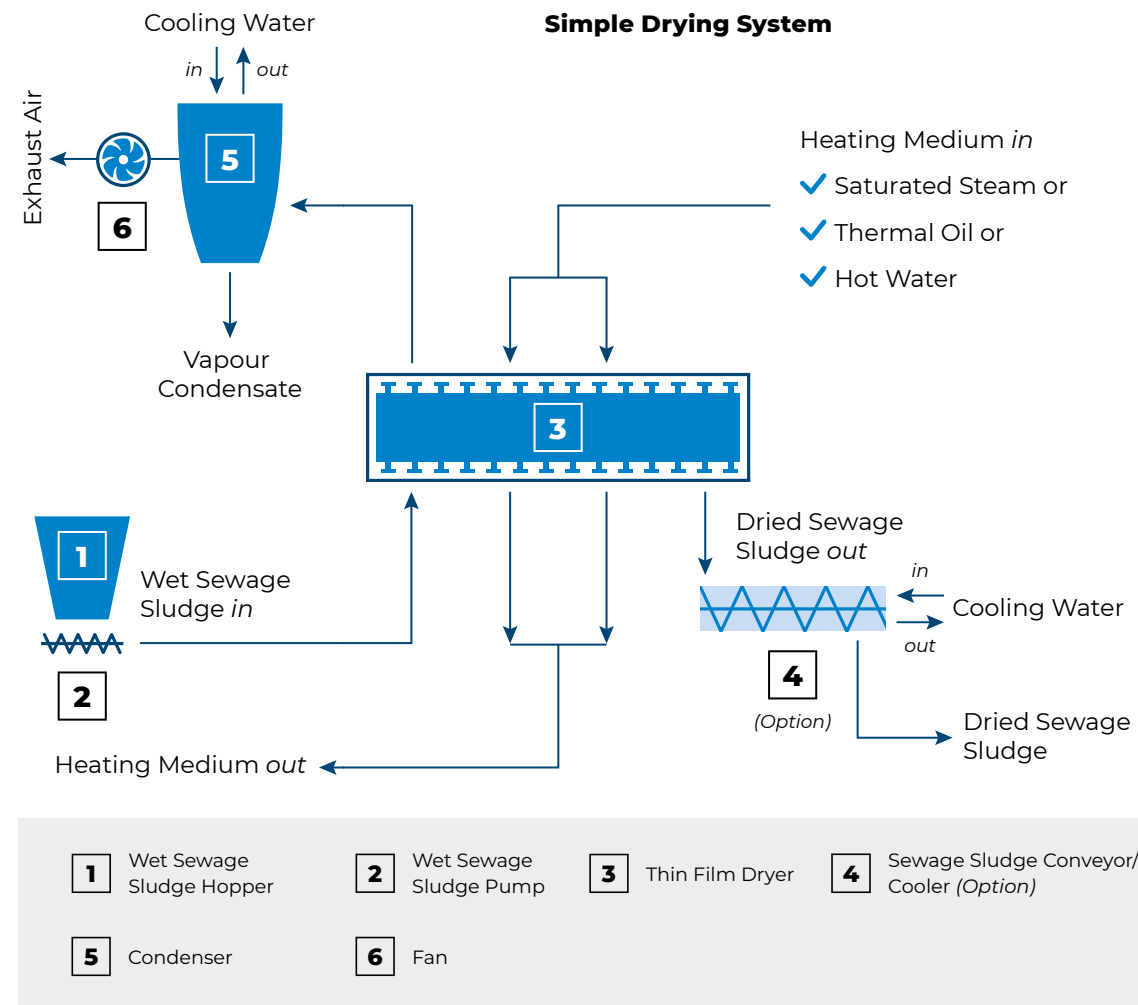
The rotating wiper blades distribute the sludge onto a heated cylinder. They maintain the thin film and provide outstanding features.

Benefits

- ✓ Drying in one step
- ✓ Partial drying up to 70% DS
- ✓ Full drying up to 95% DS



Entire Thin Film Drying Systems – Customised Solutions



Flexibility in feed product qualities:

"The thin film dryer takes what comes."
No special pre-conditioning needed.

No problem with the sticky phase:

The thin film dryer can easily handle it.
No backmixing needed.

- ✓ Water evaporation capacity up to 10 t/h per dryer
- ✓ Wide range of heating temperatures
- ✓ Self-cleaning
- ✓ Safe
- ✓ Customised dimensions
- ✓ Very low product hold-up
- ✓ Fast start-up/shutdown
- ✓ Short response times
- ✓ High turn-down capacity
- ✓ Predictable maintenance, simple, no specialist needed

Sewage Sludge is not always the same.

To identify the different sludge properties, such as the sticky phase, we offer laboratory investigations.



Dried sewage sludge



Zhuyuan Sludge Treatment Plant of Shanghai Chengtuo Sewage Treatment Co., Ltd



Sampler for dried sludge

»We are experts in sewage sludge drying. Our challenge is to exceed your expectations.«

Inside Excellence

Buss-SMS-Canzler is the global leader in delivering processes for thermal separation of substances that are difficult to handle, and the world's number 1 in thin film evaporation technology.

We develop and manufacture plants and equipment for evaporating, drying and processing highly viscous materials. As experts in process and application know-how, we have been delivering top quality in numerous industrial sectors for decades: from advising and process planning, engineering and production through to service. Everything is 100% made in Germany and Switzerland. Our focus is always on providing exceptional precision, high efficiency, innovation, and investment security.



»We guide our clients through all project phases from the first feasibility study to the installation and after-sales service such as delivery of spare parts, trouble shooting, optimisation, adoption to changing conditions.«



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