



The Financial Argument For Improved Sludge Handling In The Waste Water Industry.

Innovation

British waste water companies are becoming more efficient and more cost effective whilst reducing their carbon emissions.

How?

By shifting their focus from water supply/waste treatment to energy generation.

The potential of sludge as a source of profit rather than a cost is having a big impact on the waste water industry.



DID YOU KNOW: Extraction of material should be based on 'first in, first out' principles

Costs being cut by up to 75% by new sludge cake handling systems...

Sludge can be dewatered into cake to reduce its bulk, thus minimising transportation and storage costs. By dewatering sludge, for example through centrifuge or belt press, slurry of circa 6% dry solids (DS) can be dewatered into cake comprising 22% DS.

This represents a 4:1 reduction in volume, meaning that potentially one truck could be used instead of four for the equivalent mass (without water). Such a reduction in volume can result in potential savings in storage and haulage costs of up to 75%.

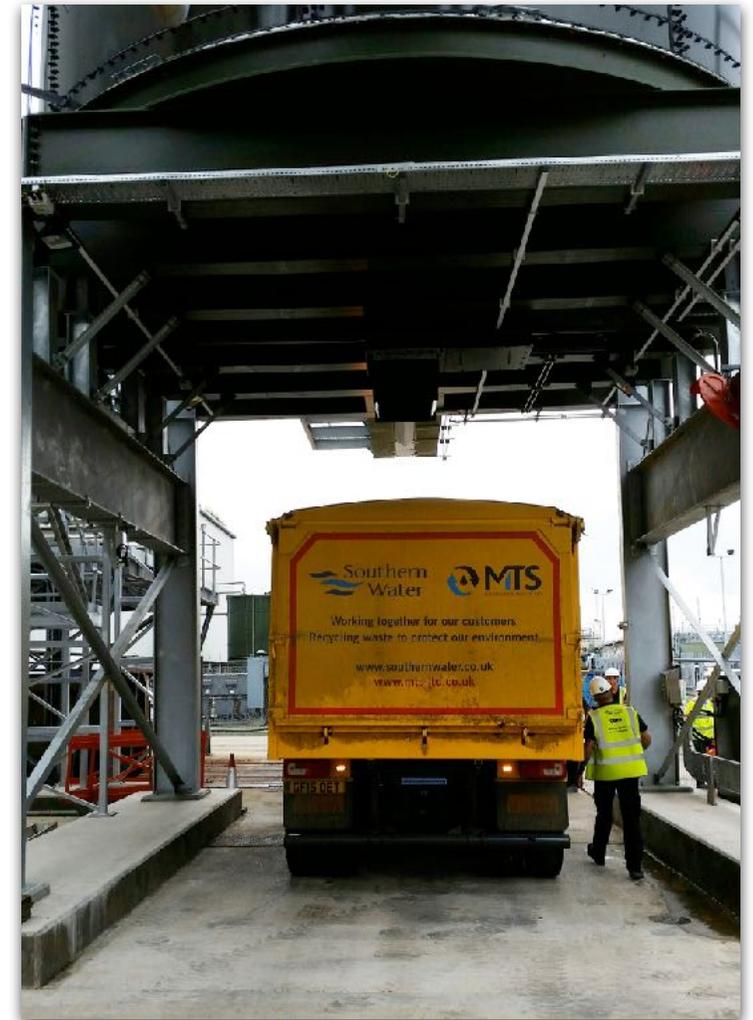


The Correct Choice of Transport

Transportation of sludge or sludge cake is an important factor in ensuring a trouble-free reception and delivery.

Typically, we understand the saving is around £10,000 to £17,000 per month for a 100m³ truck loading silo compared with an existing 2-3 RO-RO container system.

For a 240 m³ truck loading silo the saving is around £27,000 per month.



End to end the length of the Push Floor Ladders we're in contract for stretches over 1.5km

The right technical, environmental and economic solution...

It is essential for water companies to select the right technical, environmental and economic solution, not only for their current requirements but for their anticipated future needs.

Extensive experience and a full understanding of the processes and risks in this industry - such as the ability to foresee potential issues and to resolve them before they become a real problem - are essential.

It's also important for an industry partner to provide a complete, end-to-end quality solution for sludge storage and handling which includes design and construction, commissioning and maintenance.



Case Study: Anglian Water

Anglian Water supplies water and water recycling services to over 6m domestic and business customers across a 27,500 km² area. It Provides almost 1.2 billion litres of water per day, making it the largest water and water recycling company in England and Wales.

Anglian Water needed to meet Ofwat's obligation for it to provide enhanced digestion for 80% of its raw sludge production and to increase total renewable electricity output from biogas to 86.8GWh/year by 2015.

Saxlund completed a series of projects for Anglian Water in 2014, including the construction of raised storage silos. These were specially designed to allow de-watered sludge to be directly loaded into trucks below for transportation off site.



Silos designed for efficient reception and delivery...

Truck-loading silos using the latest sliding frame technology and screw conveyors enable greater volumes of sludge to be handled in a shorter space of time than traditional hook lift container storage systems.

Whilst some storage silos may be cheaper, they may be of an inferior design and quality, and this can result problems with bridging and discharging.



DID YOU KNOW: 22% of the energy used by Anglian Water comes from renewable sources.

Case Study: Severn Trent - Coalport Works

Severn Trent Water invests in Saxlund sludge cake loading silo for Coalport works:

The project scope includes the construction of a raised 100m³ circular storage silo designed to allow de-watered sludge to be directly loaded into trucks below.

The solution, which will handle 26.3m³ per day, incorporates Saxlund's industry-leading sliding frame technology. This ensures consistent discharge of material, as well as chain and screw conveyors with integrated control systems. The £400,000 project is due for commissioning in November 2016.



Company Profile

For decades, Saxlund International has been a major player in the development of flat bottom silo and bunker discharge technology and conveyor systems for difficult bulk solid materials.

The company's practical experience in handling major projects stems from the fact that to date it has constructed more than 3500 plants worldwide.

If you would like to discuss improving handling of sludge in the waste water industry call Mark Neal today:

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