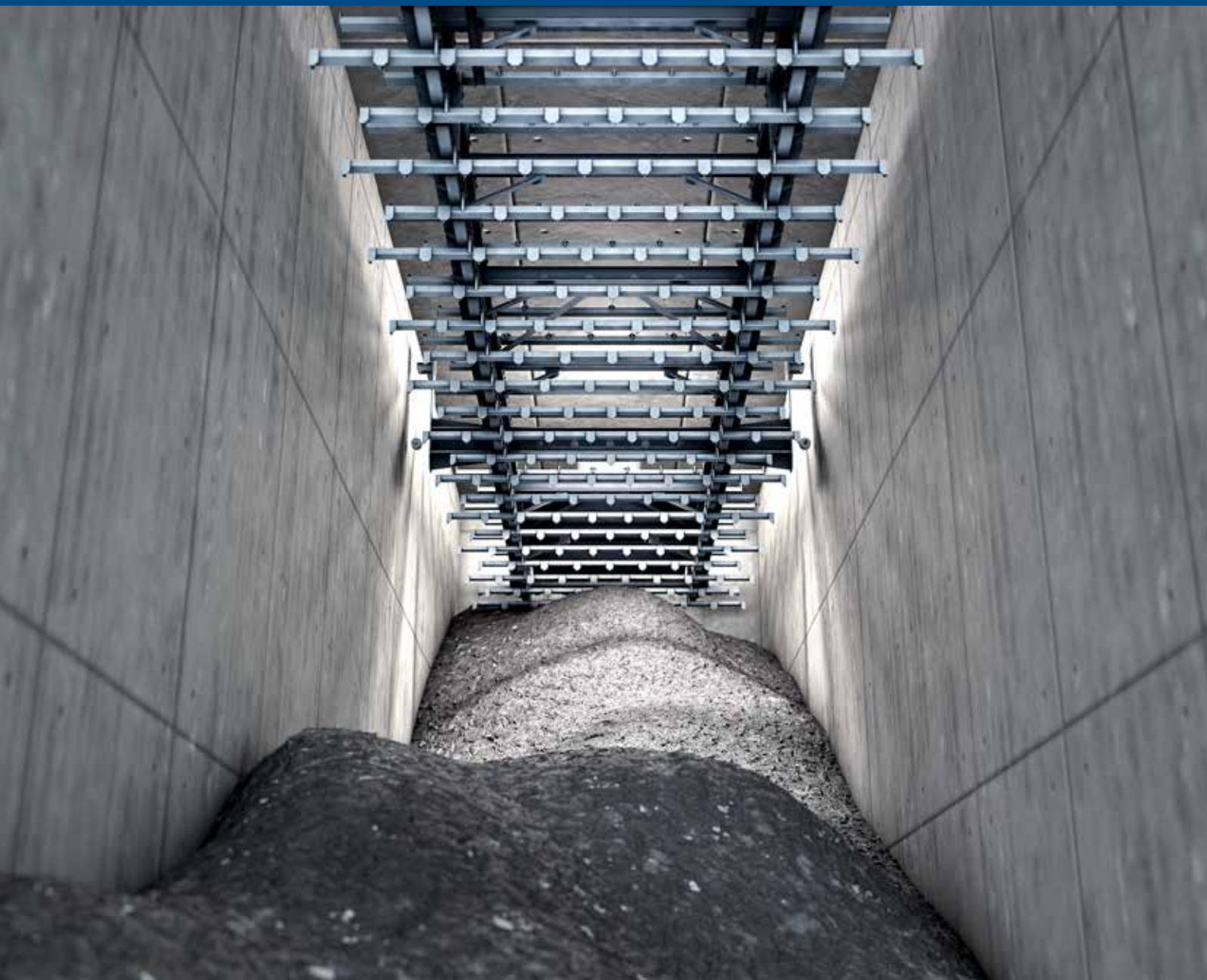


Alternative fuels storage – Feedex™ overhead reclaimer



Storing alternative fuels with the Feedex™ overhead reclaimer system

Key benefits

- High volume live storage in an enclosed building
- Optimised for blending fuels and AF homogenisation
- Simultaneous feeding and extraction possible
- Eliminates problems with bridging and clogging
- Ensures complete discharge
- Robust, heavy duty design
- Low energy consumption/ cost-effective
- Easy maintenance and service
- ATEX certified

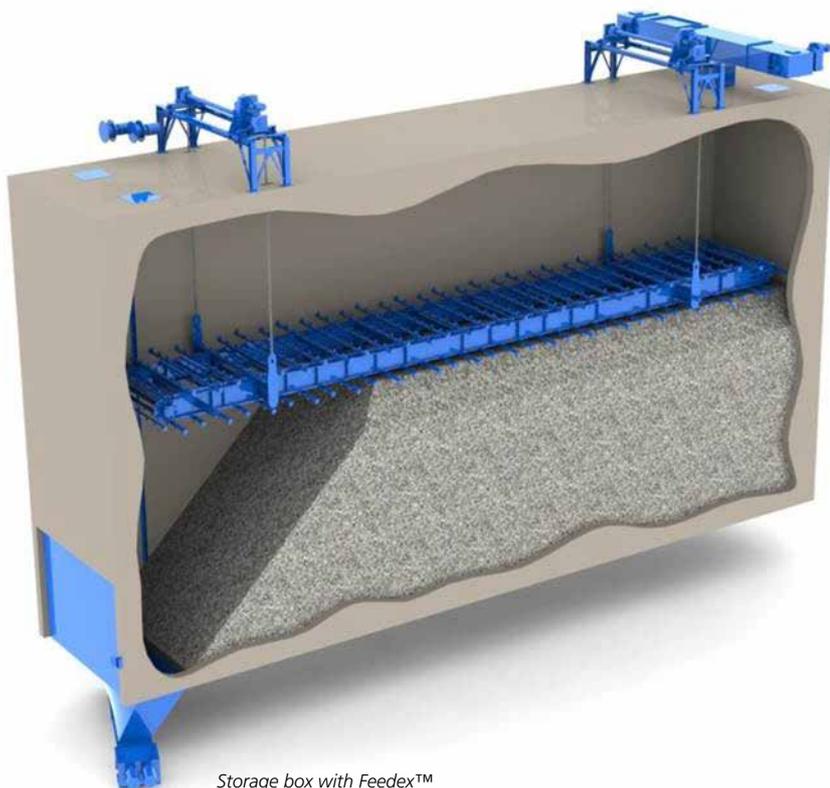
FLSmidth is a leading provider of alternative fuels (AF) solutions, offering an extensive range of services to cover every aspect of a project, including storage. AF can be stored in cylindrical or rectangular cross-section silos, each with different options for materials reclaim, such as a screw bottom, push floor or via the Feedex system.

The Feedex system is applicable for a wide range of AF, for example Refuse-Derived Fuels (RDF), Municipal Solid Waste (MSW), wood chips, rice husk and many other materials. It is particularly suitable for storing non-free-flowing AF and compressible materials, such as dry/wet RDF. The Feedex system eliminates bridging and

clogging of AF, ensuring complete discharge. It has low energy consumption, and is easy to maintain and clean.

Both the storage and reclaim system are either in one enclosed box or in multiple boxes to allow for blending. The box is usually made of concrete or steel, and allows simultaneous feeding and extraction at a capacity of up to 600 m³/hour.

Inside the box, the Feedex frame is suspended on marine-quality hoisting chains and is powered by dust-proof, fan-less motors. The scrapers move continuously to distribute/stack the material inside.



Storage box with Feedex™

Standard bunker size

Height	15 m
Width	5 m
Length	30 m

Storage capacity up to 1250 m³

Drive power

Main Drive	2x12 KW
Hoisting Drive	2x5 KW

Intake Capacity up to 600 m³/h

Extraction Capacity up to 300 m³/h

Other sizes and capacities are available upon request

Optimised fuel blending and homogenisation

The modular design – from a single box to multiple boxes – is flexible to match your needs.

You can store different fuel types in separate boxes and blend the fuel to facilitate optimal firing. The system is optimised for blending fuels and ensures AF homogenisation – both in the box and between boxes.

The technology has been proven to handle extreme climates, at temperatures down to -25 °C and up to +50 °C, and the drive in the Feedex frame is designed with a built-in dust filter and a self-cooling motor, maximising reliability.

The system supports a high Thermal Substitution Ratio (TSR), in both the kiln and calciner, significantly reducing fuel costs, helping plants become more sustainable and ultimately lowering the CO₂ footprint.

Safe, reliable and easy to maintain

The Feedex system is ATEX certified and stands out with its safety features. Unlike other systems, the marine-quality hoisting chains mean no loaded wires where plant staff are walking, significantly improving safety. The reclaimer is

also fully interlocked according to FLSmidth standards so that it cannot be started accidentally.

There are service platforms in the bunker to facilitate maintenance and both front and back-end maintenance access doors in the storage box, as well as maintenance access openings at the top of the main machine. Ensuring reliable operation, the fuel transport takes place outside the main structural frame of the reclaimer and the extraction teeth are easy to refurbish.

Precision control

The system is controlled via a local control panel and the hoist controller has a variable speed, with millimetre precision. There are three different modes of control to choose from:

- Pure intake enabling homogenisation and blending
- Combined intake and extraction
- Pure extraction

Operators can see logistics information so they know, for example, the number of hours of fuel left in storage.

When the Feedex is combined with the FLSmidth Pfister® dosing system you get the most accurate dosing of AF into the kiln burner or calciner.



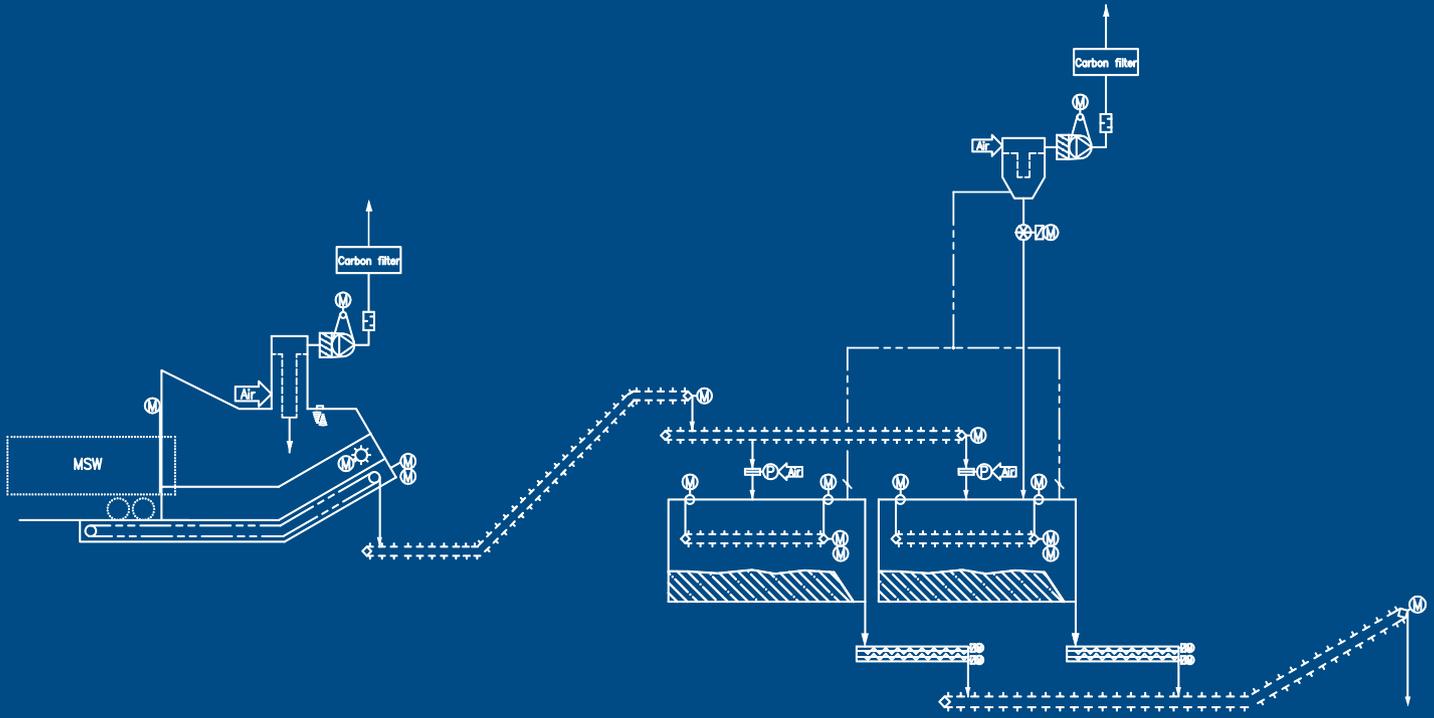
Feedex™ overhead reclaimer

The Feedex overhead reclaimer is suitable for several sizes of alternative fuel:

- Main burner: 30x30 mm (2D)
- Calciner: 100x100 mm (2D)
- Hotdisc®: 300x300 mm (2D)
- Gasifier: 300x300x300 mm (3D) - particles < 1 kg.
- Hotdisc®: 300x300x300 mm (3D) - particles < 1 kg.



FLSmidth Pfister® dosing system



Typical flow diagram for processed alternative fuel storage and feed

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