DORSET GM
GREEN MACHINES

BIOSOLIDS

LOW TEMPERATURE PLATE BELT DRYER

- REDUCE VOLUME AND WEIGHT
- CUT COST
- STAY COMPLIANT

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SLUDGE PROCESSING IS GETTING HARDER TAKE CONTROL WITH DRYING

Sludge disposal is becoming more difficult and expensive. Routes are disappearing, regulations are tightening and risks like PFAS contamination are limiting your options. In many regions, spreading sludge on land is no longer allowed. You need a solution that keeps you compliant and in control.

Handling untreated sludge means dealing with:

- High transport and disposal costs
- Odor and emissions problems
- Limited storage options
- Growing regulatory pressure

Drying changes that. It allows you to:

- Stabilise sludge and stop biological degradation
- Reduce volume and weight, lowering transport and disposal costs
- Predict and control your disposal expenses
- Optionally produce a hygienized, safe end product
- Reduce CO2 footprint

The result is simple: you stay compliant and keep your costs under control.

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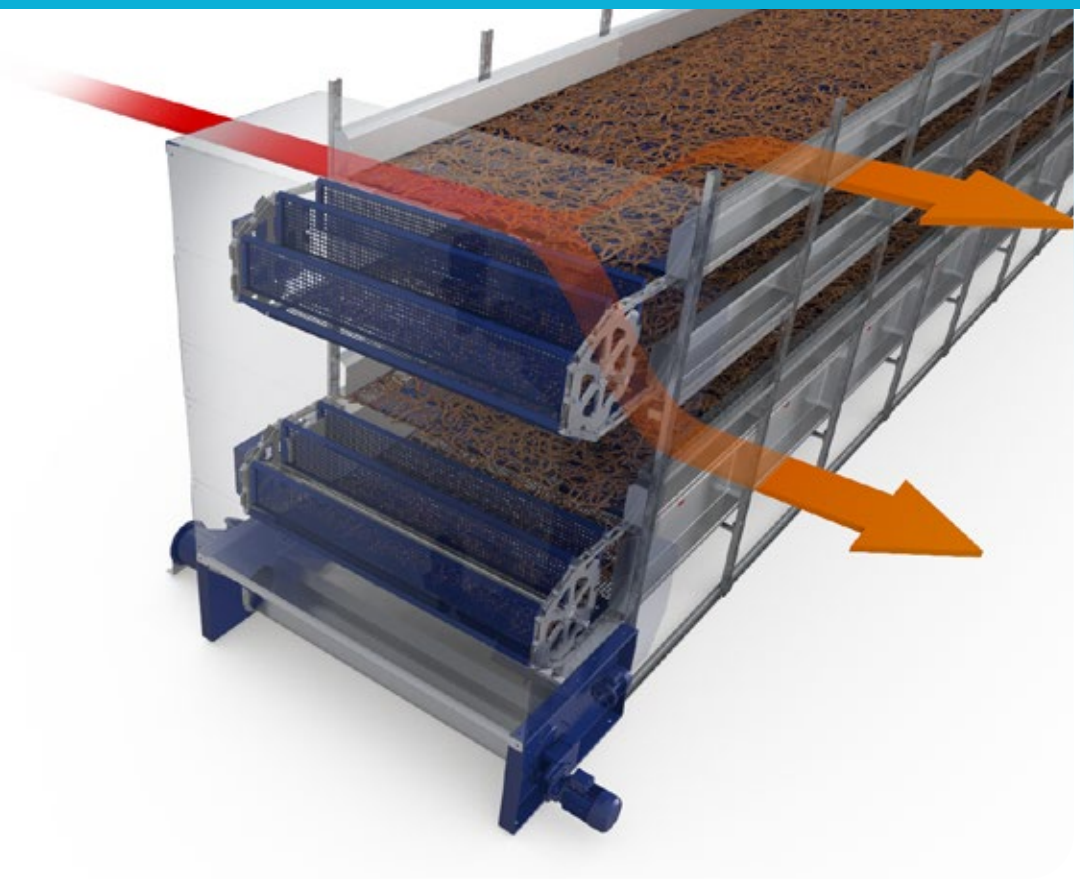
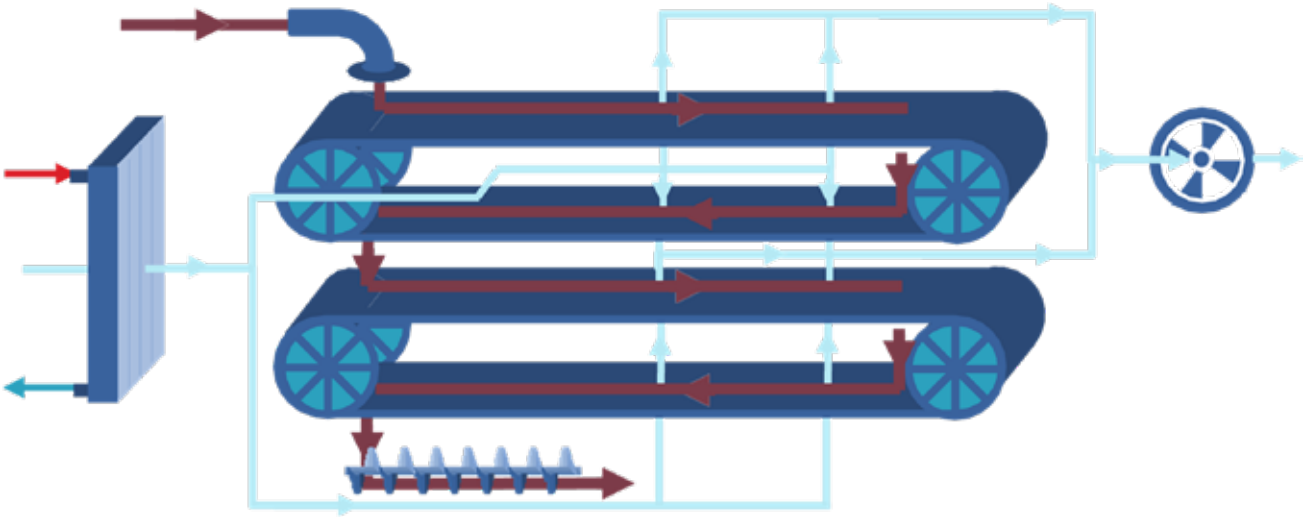


HOW SLUDGE DRYING WORKS

Sludge drying is efficient and effective: we remove water using heat in the smartest way. The sludge is spread evenly on a belt, where warm air passes through and evaporates moisture. It exits as a stable, dry product, typically increasing from 18–25% to 85–90% dry matter, ready for safe handling or further use.

Tailored heat use

Each system is designed to use your available heat source, such as CHP waste heat, biogas, industrial processes, heat pumps or natural gas. The ability to work with drying temperatures ranging from 40 °C to 110 °C allows you to turn unused energy into a cost-effective part of your operation.



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MACHINE FEATURES

The Dorset dryer delivers high efficiency with a unique plate belt design. Perforated steel plates replace traditional mesh belts, reducing air resistance and lowering electricity use. Thick product layers dry quickly and evenly, without the need for belt cleaning or replacement.

Advanced sludge feeding system

The system uses an extruder or dosing mixer to spread sludge, allowing us to efficiently process sludges with varying dry matter contents, starting from as low as 8% dry matter.

Self-cleaning and agitation

Automatic cleaning and agitation keep the system running smoothly. Product quality stays consistent and downtime is minimal.
Fully automated, the Dorset dryer works 24/7 without constant supervision, letting you focus on your operations.

BENEFITS COMPARED TO ALTERNATIVES

Traditional sludge processing methods are under increasing pressure. Drying offers you a future-proof solution with low energy use through efficient airflow. The system runs continuously and reliably, with minimal dust, odor and ammonia. You don't need wastewater treatment or a complex closed-loop setup. Remote monitoring and control make management easy.

Compared with composting or storage, drying preserves nutrients, works faster and requires less space. It also prevents uncontrolled emissions and reduces your CO2 footprint.

With drying, you stay in full control of your process, costs, and compliance.

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OPTIONS AND MODULAR SETUP

With our wide product portfolio, each project is tailored to your needs, options include:

- Toploader & bunkers for storage handling
- Heat recovery for higher energy efficiency
- Acid scrubber and biofilter for environmental compliance
- For US applications the dryer can achieve Class A biosolids
- Heat pump ready solutions
- Zero condensate water solutions

CAPACITY AND SCALABILITY

Every Dorset dryer is tailored to your project. We design each system based on your sludge characteristics, dry matter content, available heat, required capacity and local climate.

The system is flexible and can scale from compact units to large industrial plants using different belt widths and lengths. Capacity increases with dryer size and available heat.

The system delivers output dry matter up to 90%, with heat demand adjusted to site conditions and sludge properties.

Each installation is engineered to fit your site and deliver the right balance of performance, efficiency and scalability.

DMC IN:	25%
DMC OUT:	90%
Temp. Dryer in:	80°C
Sludge:	850 m^3/m^2 < Required airflow
RH Outside/ambient air:	75%

Dryer type	Water evaporation [kg/h]	0°C [kWth]	10°C [kWth]	20°C [kWth]	Installed power [kWe]	Air volume (to arm.) [m3/h]
KS 2E12 (Compact)	250	244	232	218	20	7.332
KS 2D24 (Medium)	1.250	1.208	1.151	1.095	34	36.302
KS 3D24 (Large)	2.500	2.420	2.307	2.194	77	71.973
KS 3T30 (Extra large)	3.500	3.374	3.214	3.056	95	101.462

*Rec. Thr.HE+CU

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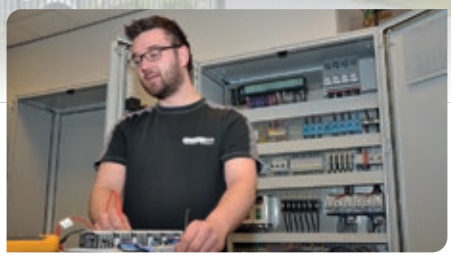
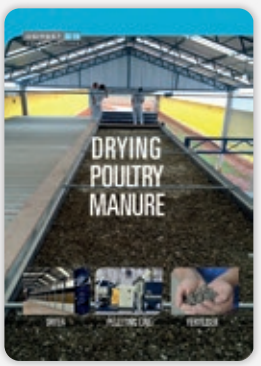


ABOUT DORSET

Dorset Green Machines is a Dutch technology provider specialized in processing organic residual streams. With decades of experience and thousand plus installations worldwide, Dorset delivers complete solutions including:

- **Engineering**
- **In-house production**
- **Installation**
- **Service and aftersales**

We support our customers in transforming waste streams into valuable resources, efficiently and reliable. **From residue to resource.**



Dorset Green Machines B.V.
Weverij 26
7122 MS Aalten
The Netherlands
Tel. +31 (0) 543 47 21 03
Fax +31 (0) 543 47 53 55
gm@dorset.nu

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GREEN MACHINES

MORE INFO AT
WWW.DORSETGM.COM

INNOVATION
PRODUCTION
REALISATION