

GEA BIOSOLIDS GRANULATOR

Innovative dry-on-demand solution for sludge treatment





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Innovative dry-on-demand solution for sewage sludge treatment – with stackable end product and minimized pathogen regrowth.

The GEA biosolids Granulator is an innovative dry-on-demand solution for wastewater biosolids treatment from municipal and industrial wastewater treatment plants by combining existing centrifuge-based dewatering with established drying technology.

A perfect solution for plants with limited disposal and recycling capacities that want to future-proof their processes in terms of circular economy, sustainability and ecological footprint.

BIOSOLIDS CAN BE SAFELY AND SUSTAINABLY RECYCLED TO AGRICULTURAL LAND.

This unique process utilises small dewatered particles – ejecting directly from the rotating centrifuge bowl – which are then immediately heat-seared and fixed by the primary direct heat injection stream. These solids are then further dried by the secondary hot airflow in the main drying chamber. This results in an enhanced dried granulated material with up to 50 % dry solids with a sustained pathogen count below 100,000 cfu/g, which conforms to the Biosolids Assurance Scheme (BAS).

It's possible to achieve these process results using either low grade waste heat available at site (75 – 90 $^{\circ}$ C), heat generated from a fuel source or a combination of both.

The end product opens additional recycling opportunities to the end user such as agriculture, composting or incineration as a fuel/fuel additive.



Compliant to Biosolids
Assurance Scheme (BAS)
Treated biosolids can be
safely and sustainably
recycled to agricultural land.



<100K

cfu/g reduced pathogen count



Up to 50 % savings on transportation and disposal costs One container of solids less per day.



12

tons of water can be removed daily



Learn more

The animation vividly illustrates the working principle of the GFA biosolids Granulator.

FEATURES AND BENEFITS

Suitable for field storage

End product does not degrade due to weather.

Incineration friendly

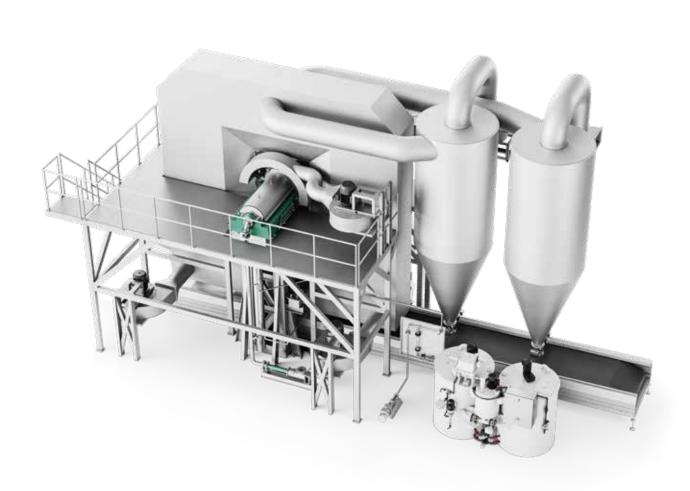
Granulated biosolid with a high calorific value.

Limited pathogen regrowth

BAS compliant final product with low re-infection risk.

Combination of robust and proven system components

Utilization of standard service methods.



Drying performance on demand

Final product dry solids can be controlled to different levels.

Efficient use of waste heat

Energy efficient circular economy.

Flowing consistency, small particle size

Easy to convey and mix with other products without the need for back-mixing.

Continuous process

Predictable throughput
 capacity, no interruptions of the dewatering or drying process.

SUCCESSFUL PARTNERSHIP



GEA has partnered with global water and wastewater specialists EPS Group for the provision of a turnkey MEICA offering for GEA biosolids Granulator solutions. EPS is an Irish-based business that has accumulated over 50 years' experience and expertise in the design, construction and operation of water and wastewater assets. EPS have developed a market-leading capability in the application of digital tools, BIM and off-site modular construction techniques.









GEA Westfalia Separator Group GmbH

Werner-Habig-Straße 1 59302 Oelde, Germany

Tel +49 2522 77-0 gea.com **GEA United Kingdom**

Westfalia House, Old Wolverton Road, Old Wolverton MK12 5PY Milton Keynes, United Kingdom

Tel +44 1908 576500 sftuksales@gea.com **EPS Water**

Unit 5 Delta Park, Wilsom Road Alton, Hampshire, GU34 2RQ, United Kingdom

Tel +44 1420 481482 epswater.co.uk