



Gore is a unique, creative, technology-driven company that has been serving a variety of global markets for 50 years.

Gore has made its name by creating innovative, technology-driven solutions, from high-performance GORE-TEX<sup>®</sup> fabrics for outerwear to the treatment of organic waste. Today Gore is an international company with more than 45 plants and 8.000 employees (Associates) around the world. The company is owned by members of the Gore family and the Associates.

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GORE™ COVER More efficiency in organic waste treatment

# WELL COVERED.

GORE<sup>™</sup> Cover is the most economic and best performing solution for the treatment of organic waste – providing highest odor and emission control. GORE <sup>™</sup> Cover completely does away with buildings for the composting of organic waste – at a fraction of the investment and operational costs.

- Recognized as the leader for in-vessel composting worldwide
- Approved and proven in over 150 composting plants in more than 20 countries
- Impossible-to-beat cost/performance ratio through low investment and running costs, optimal procedure, easy to handle and flexible in use
- For green waste, food waste, other source separated organics, biosolids and MSW over 2 million tons per year worldwide



# **WELL DONE!**

## GORE™ COVER IS ALL ABOUT WASTE TREATMENT – AND SAVING MONEY

Controlling costs is critical for operating a waste treatment business successfully.

Stricter regulations as well as more competitive waste processing markets have led to diminishing returns per ton.

### Whoever wants to survive in the long run has to

- increase the efficiency of plant throughput performance
- create a return on investment by marketing the highest quality compost as end product
- reduce initial investment and running costs
- ensure that the plant adheres to all legal regulations by operating within threshold limits at all times

In this challenging business environment GORE<sup>™</sup> Cover represents trendsetting technology for aerobic, organic waste treatment using special semi-permeable membranes. It offers plant operators an identical performance profile and the same environmental protection as halls, tunnels, boxes or containers – at substantially lower costs.

Globally, GORE<sup>™</sup> Cover – as the market leader – is used in over 150 composting and organic waste treatment plants, with a total plant throughput amounting to more than 2 million tons per annum.

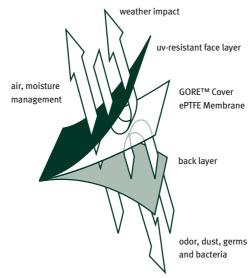
Today, fully enclosed waste treatment plants can be operated highly economically – with GORE™ Cover.











## The laminate technology behind GORE™ Cover

With the waterproof and breathable GORE™ membrane as its centerpiece, GORE™ Cover's composting laminate is much more than just an enclosure. A unique microporous membrane based on ePTFE (expanded Polytetrafluoroethylene) offers semi-permeable features and enhances the rotting process. Being waterproof and windproof, it protects the composting material from the elements and consequently from unwelcome decaying processes. Being permeable to vapor it manages moisture content and retains bioaerosols at the same time.

## GORE™ COVER IS MORE THAN A COVER – IT'S A COMPLETE SYSTEM

### The system behind GORE<sup>™</sup> Cover

GORE<sup>™</sup> Cover stands for a comprehensive aerated system proven in multiple sites. It is equipped with an oxygen controlled, positively aerated system and an oxygen and temperature monitoring device. This creates ideal composting conditions within the heap while efficiently trapping odors and other emissions such as dust and VOCs. This results in a higher throughput on a smaller footprint of composting area - with little energy consumption and human involvement. Biological washing and filtration is not necessary.

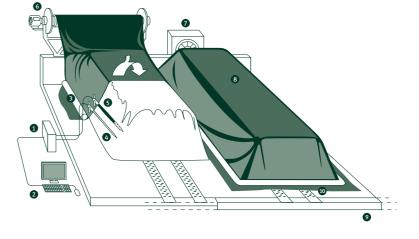
### System support by Gore

In addition to the supply of the laminate and the technical system Gore provides intensive training to ensure sustainable operation of the treatment process.

Thus GORE<sup>™</sup> Cover combines a number of advantages in one product: higher throughput combined with cost effectiveness in terms of personnel, energy consumption and approved regulatory conformance.

1 Control unit

- 2 PC
- 3 Tarpaulin retainer
- 4 Temperature profile probe
- 5 Oxygen/Temperature probe
- 6 Winding gear
- Ventilator station
- 8 Gore<sup>™</sup> Cover
- 9 Drainage system
- 10 In-floor aeration channels





annual throughput

• From hundreds to many thousands of tons of

## WHATEVER IS THROWN ITS WAY, GORE™ COVER CAN HANDLE IT

### Treatment of separated organic waste

## **Treatment of biosolids**

From yard waste to food waste, from green cuttings to digestate, from source separated organics to manure, from catering waste to paper sludge, from fish waste to slaughterhouse waste: There is few organic waste we can think of that has not been successfully treated with the GORE™ Cover system. In every case the system has proved its flexibility, has never caused complaints about odor emissions and always delivers high class compost for a successful marketing approach.

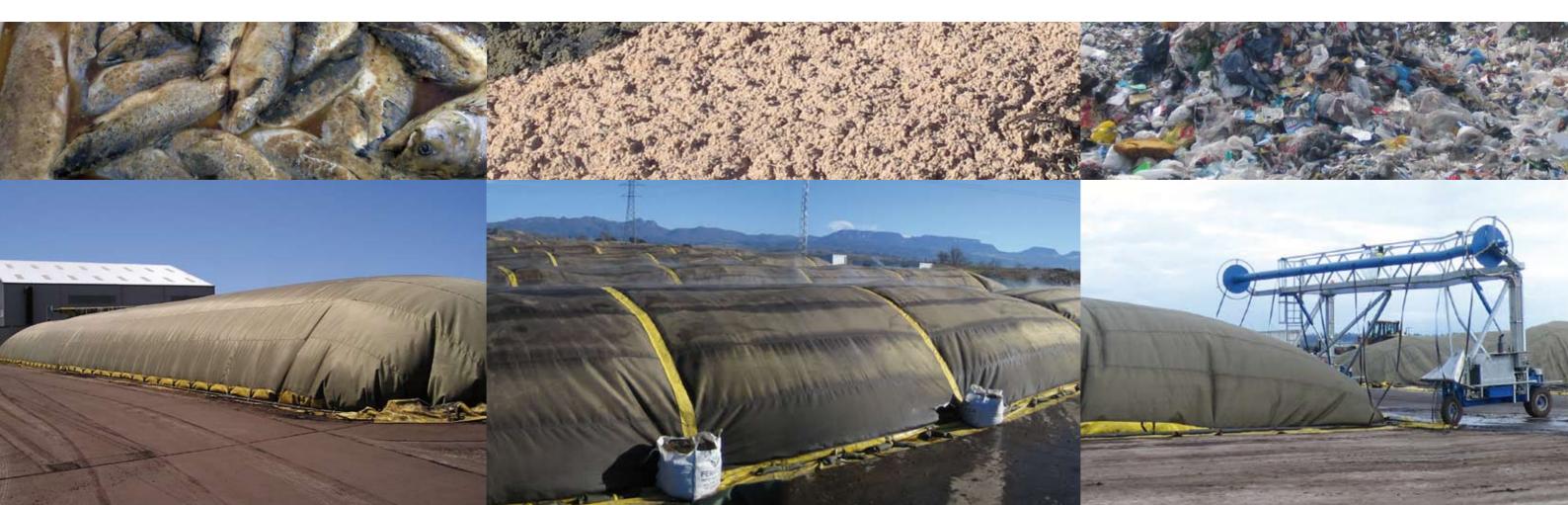
As a result of an increasing number of waste water plants there is a strong trend towards the composting of biosolids. Whilst compost from biosolids offers a lot of environmental benefits, processing the input material is challenging (it has a high moisture content, is rich in nitrogen, contains potential pathogens) and requires a high degree of process control: neatin

GORE™ Cover technology provides:

- Safe and proven pathogen reduction
- Production of quality compost in compliance with all relevant national laws (e.g. US Federal Rule 503, EU Animal-By Products Regulation) in all climates, from desert conditions to cold areas
- High bandwidth for a variety of sludges: primary and secondary waste water sludges, as well as other source separated sludges such as paper sludge and manures

The key to successful MSW treatment is volume and moisture reduction to achieve landfill criteria as defined by national regulations. Alternatively Refuse Derived Fuel (RDF) can be produced to generate energy from waste.

Within this context the GORE™ Cover system is ideal as fully capable stand-alone solution for processing pre-screened MSW. But it has also been proven to solve troublesome odor issues when curing MSW which was initially treated in a tunnel system.



## Treatment of municipal solid waste (MSW)

## INNOVATIVE WASTE TREATMENT LEADS TO HIGH-QUALITY PRODUCTS

## **Reduction of odor concentration**

## Full service for customers

GORE<sup>™</sup> Cover creates ideal composting conditions without any side effects. Compared to open windrow composting, the GORE<sup>™</sup> Cover system can achieve a reduction of up to 97 % in odor concentration – without additional filtering installations. It is approved for all the latest regulations, for example in California, UK and Germany.

With a pore size of approximately 0,2 µ it is also an effective barrier against spores and microbes. Comparative tests have proved that the system reduces the output of bio-aerosols by > 99%, thus ensuring that plant workers and nearby residents are well protected. As required by law pathogenic microbes are safely destroyed by the heat generated during the treatment process. With its low emissions (i.e. VOCs, ammonia, dust), GORE<sup>TM</sup> Cover technology offers a cost-efficient way of complying with all applicable legal regulations. GORE<sup>TM</sup> Cover is sold by partners and system suppliers all over the world. In addition to custommade GORE<sup>TM</sup> Covers, control and aeration systems and user-specific handling options, a whole range of complementary customer services are available. These range from help with site layout, commissioning, training and marketing of compost, to full support with new or individual challenges in the field of organic waste treatment.

Partners with expertise in composting markets have a long track record in their countries and regions and are able to use their extensive experience to install excellent systems.

This special partnership completes GORE™ Cover's role in producing high-quality compost. Well done.



