

# **BIOGAS & LANDFILL**

GLOBAL LANDFILL GAS MONITORING AND BIOGAS ANALYSIS





"I particularly like the low weight and size, as well as the easy-to-read display... and I would certainly recommend this analyser."

Manager of a landfill site using the GEM5000



### **GEOTECH IS THE LEADING** SUPPLIER OF ANAEROBIC DIGESTION GAS MONITORING EQUIPMENT IN THE UK.

With top reliability and support, Geotech's fixed and portable gas analysers are used throughout the globe to help AD businesses to optimise their AD process.

They also help minimise gas production downtime from CHPs and are integral to gas upgrading projects.

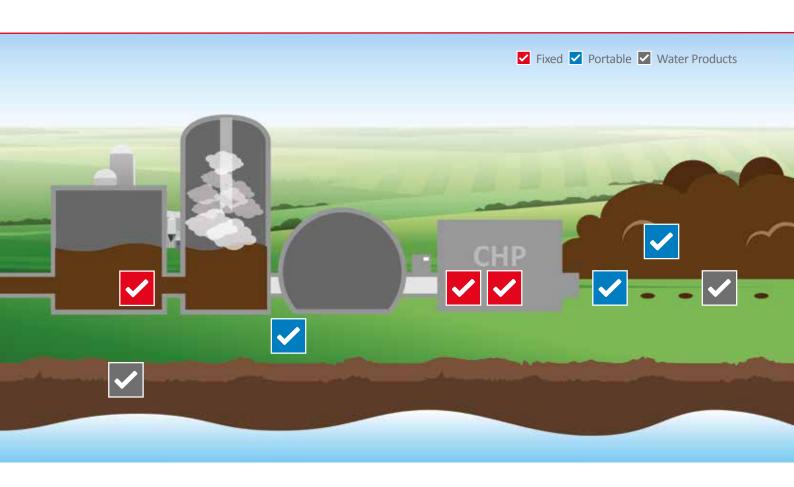
Biogas analysis can help optimise digester operation and maximise methane production. It assists process control, which can help protect CHP engines from H<sub>2</sub>S and moisture damage. As a result, it ensures that methane is produced efficiently, ultimately generating revenue.



### WE HAVE OVER 30 YEARS' **EXPERIENCE OF MONITORING GASES AND LIQUIDS ON** LANDFILL SITES.

Working closely with businesses to offer reliable and sophisticated gas analysers, gas monitoring systems and data management software.

Our fixed gas analysis systems and portable landfill gas analysers are designed to ensure users comply with stringent legislation and safety standards, as well as helping to optimise the exploitation of energy potential on landfill sites.



	FIXED		PORTABLE			WATER PRODUCTS	
TYPICAL APPLICATIONS	GA3000 PLUS	BIOGAS300	GA5000	GEM5000	BIOGAS 5000	AUTOPUMPS	DIPMETERS
Farming Waste AD (Small and Large scale)	<b>/</b>	<b>~</b>			<b>/</b>		
Agricultural Waste AD (Small and Large scale)	<b>/</b>	<b>/</b>			<b>/</b>		
Food Mixed waste AD (Small and Large scale)	<b>/</b>	<b>~</b>			<b>/</b>		
Sewage Sewage and Waste water treatment AD					<b>/</b>		
Landfill Perimeter Compliance with site permits (PPC) and health and safety	~		<b>/</b>			<b>/</b>	<b>/</b>
Sewage Sewage and Waste water treatment AD	<b>/</b>		<b>/</b>	<b>~</b>	<b>~</b>		
Waste to Energy Gas field balancing and maximising gas production						<b>/</b>	
Remediation Site investigation and clean up						<b>/</b>	<b>/</b>



**PORTABLE EQUIPMENT** 





- Used by operators on landfill and contaminated land applications
- Measures CH<sub>4</sub>, CO<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>S and CO
- ATEX certified, light weight and robust
- Its market leading reliability helps you to standardise monitoring routines
- Takes and stores readings displaying gases' flow readings, relative pressure, temperature and more





- Used at different stages of the anaerobic digestion process
- Measures CH<sub>4</sub>, CO<sub>2</sub>, O<sub>2</sub> and H<sub>2</sub>S
- Maintain gas quality going into the CHP engine
- Download data to read and analyse
- ATEX certified, light weight and robust



### **■ GEM5000**



- Designed to aid balancing the gas field, maximise power output and maximise revenue from CH₄ extraction
- ATEX, IECEx, MCERTS, CSA and UKAS calibration (ISO17025) certified
- Landfill gas extraction monitor
- Measures CH<sub>4</sub>, CO<sub>2</sub> and O<sub>2</sub>
- Records static and differential pressure



## **NAUTOPUMPS**



- For harsh liquids in the landfill, brownfield, petrochemical and remediation industries
- ATEX certified
- Competitive flow rates and pumping capabilities
- Proven design for superior reliability and durability
- Handles solids, some solvents, hydrocarbons and corrosive conditions beyond limits of electric pumps





**FIXED EQUIPMENT** 

## ☐ **GA3000 PLUS**



- Used by plant operators for process control and protection of their CHP engines
- For farm waste, large scale AD sites and waste water treatment sites
- Measures CH<sub>4</sub>, CO<sub>2</sub>, O<sub>2</sub>, additional gases: CO, H<sub>2</sub>, H<sub>2</sub>S
- Return the sensor unit for servicing and receive a temporary replacement unit
- Safe and reliable ATEX certified, calibrated to 17025 UKAS







- Fixed methane monitor for agricultural and food waste applications
- Quick and easy to self-install, operate and maintain
- Field proven equipment and technology
- Zero service downtime
- Low cost of ownership

















### **WHAT NEXT?**

- What gases do you need?
- Is it a safe zone?
- What data storage/download?
- Is flow required?
- Fixed or portable?









### Service Support and Process

Local service and support is available from the majority of our distributors which gives you faster and more efficient service and turnaround time. Your analyser will remind you when your unit is due to be serviced.

Every 3 years your analysers are returned to Geotech's Service centre in the UK where they undergo a full service and calibration with over a 100 detailed tests, both through our state of the art UKAS calibration chambers and manually via our highly experienced engineers. The stages the unit goes through whilst in service at Geotech are:

- 1. An initial assessment
- 2. A gas check using full computer diagnostics to ascertain how accurate it is
- 3. A comprehensive service including diagnostics where everything is checked and replaced, where needed, by our service engineers
- 4. All accessories are tested and serviced
- **5.** Chemical cells are calibrated using our state of the art calibration rig
- 6. The unit is fully calibrated using our in-house UKAS calibration chamber which compensates for changes in temperature and pressure
- 7. The unit receives a final manual check alongside an automatic verification programme
- 8. Every day our couriers collect and deliver units across the world



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#### Service

service@geotech.co.uk

#### **Technical support**

technical@geotech.co.uk



#### **Geotech UK**

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