

# Product Data Sheet

## BioGas AutoKleen – Siloxane Removal System

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### Product description

The BioGas AK is a Siloxane Removal System (SRS) installed in the biogas supply line of a gas to energy installation, decontaminating landfill and sewage gas of siloxanes and other VOC's

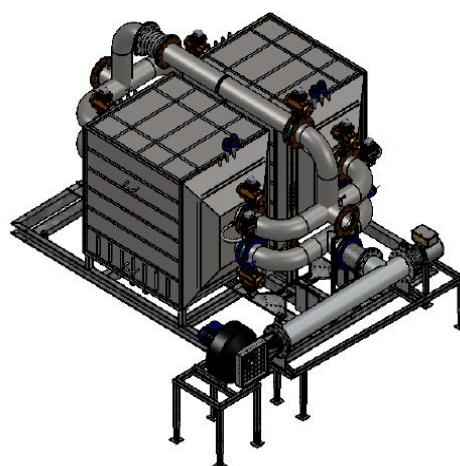
The system is designed to remove the contaminants from the gas in one online housing whilst regenerating a second offline housing automatically. Once regenerated the cleaned housing is automatically switched to become the duty unit and will continue in this process loop.

### Product features

- Low on-going maintenance costs
- Media guarantee (5 years/1800 regenerations)
- Media Hydrophobic
- Skid mounted
- Microprocessor controlled
- Small outline and footprint
- Filter media automatically regenerated
- Stainless steel construction
- No engine warranty issues
- Environmentally safe
- No filter medium disposal cost
- Multiple fail safe detection features
- ATEX approved CE compliant (Zone 1 and 2)
- Optional Modus TCP/IP connection
- Optional Remote GSM monitoring
- Optional Vent Air Burner (VAB – Mini Flare)
- Optional Virtual Vent Stack (VVS 150 ft)
- Installation under pressure or suction
- Available in 3 x layouts for tight spaces



*BioGas BGAK on WwTW site.*



*3D Schematic of BioGas AK*



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Model	Layout	Size	Max Gas Flow Nm <sup>3</sup> /hr	Approx weight
BGAK 400	S	3.8m L x 2.0m W x 1.8m H	350	950 kg
BGAK 600	L	5.7m L x 1.9m W x 1.6m H	700	1,600 kg
BGAK 600	S	4.6m L x 3.4m W x 1.6m H	700	1,600 kg
BGAK 1200	L	5.7m L x 1.9m W x 1.6m H	1,400	1,600 kg
BGAK 1200	S	4.6m L x 3.4m W x 1.6m H	1,400	1,600 kg
BGAK 2000	L	5.7m L x 1.9m W x 2.1m H	2,100	1,800 kg
BGAK 2000	S	4.6m L x 3.4m W x 2.1m H	2,100	1,800 kg
BGAK 3000	L	5.5m L x 2.5m W x 1.9m H	3,500	2,300 kg
BGAK 3000	S	4.3m L x 3.9m W x 1.9m H	3,500	2,300 kg
BGAK 4000	L	5.5m L x 2.5m W x 1.9m H	3,500	2,300 kg
BGAK 4000	S	4.3m L x 3.9m W x 1.9m H	3,500	2,300 kg
BGAK 5000	L	5.5m L x 2.6m W x 2.2m H	4,200	2,800 kg
BGAK 5000	S	4.7m L x 3.9m W x 2.2m H	4,200	2,800 kg
BGAK 5000E	L	7.2m L x 2.1m W x 2.2m H	4,200	2,800 kg
BGAK 5000E	S	5.8m L x 3.2m W x 2.2m H	4,200	2,800 kg

## Specifications

### 1 Gas pressure

- 1.1 Max pressure drop over filter unit <10mb
- 1.2 Max pressure for unit < 350 mb (higher by special order)
- 1.3 Can be installed under pressure or suction

### 2 Electrical system

- 2.1 All spark sources ATEX protected.
- 2.2 Separate mounted panel outside zone connected by ducted or surface cable and pneumatic tubes.
- 2.3 Mitsubishi PLC controller for automatic operation.
- 2.4 Optional kiosk for local control panel

### 3 Total power requirements

- 3.1 Average electrical consumption of 60 - 100 kWhr /day
- 3.2 Supply min 100 amps 3 x Phase Neutral and Earth

### 4 Safety controls fitted

- 4.1 3 x Over temperature of regeneration process.
- 4.2 3 x Thermal cut outs on process air heater.
- 4.3 Air flow detection on regeneration unit.
- 4.4 Auto restart after power failure.
- 4.5 Unit pressure drop.
- 4.6 Temperature resilient bubble tight Viton valves.
- 4.7 Valve position indicators
- 4.8 Pneumatically operated actuators via ATEX approved solenoids with limit / position switches
- 4.9 Unit default on error is system bypass.
- 4.10 Optional Modus TCP/IP connection for monitoring. Remote monitoring.

### 5 On site requirements

- 5.1 Level concrete plinth 1m larger than relevant sizes shown above .  
The min distance from the engine supply inlet 1m  
Min distance from the gas supply after the particle scrub filter 1m
- 5.2 Supply pipe diameter:150- 300 mm
- 5.3 Feed pipe to engine diameter: 150 – 300 mm
- 5.5 Compressed air: min 5.5 bar 250 Litre receiver



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