

Product Data Sheet Part number:- BGA KC 600 - 5000

BioGas AutoKleen

Flows	Part #	Features
350-650 m3 / hr	BGA KC 600	Auto on site regeneration
650-1200 m3 / hr	BGA KC 1200	Auto on site regeneration
1800 -2000 m3 / hr	BGA KC 2000	Auto on site regeneration
2000 - 2600 m3 / hr	BGA KC 2400	Auto on site regeneration
2600 - 3000 m3/hr	BGA KC 3000	Auto on site regeneration
3000 - 4000 m3/hr	BGA KC 4000	Auto on site regeneration
4000 - 5000 m3/hr	BGA KC 5000	Auto on site regeneration

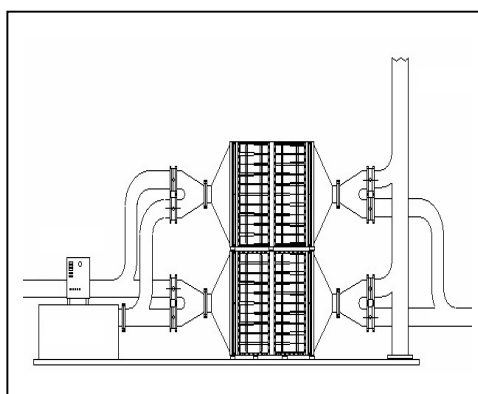
Photograph of a BioGas AKC being commissioned at PpTek Factory.



Product features

- Low ongoing maintenance costs
- Media guaranteed for 5 years
- 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 or 2)
- Optional Modus TCP/IP connection
- Optional Remote GSM monitoring
- Optional Vent Air Burner (VAB – Mini Flare)
- Installation under pressure or suction

Schematic of BioGas AK



Product description

The BioGas AK is a Bio-Chemical filtering system that is fitted in the fuel supply line of a BioGas to Energy plant decontaminating landfill and sewage gas of siloxanes and other VOC's

It has been designed to filter the gas of contamination automatically switching between the twin filter chambers, regenerating the filter medium in the "off line" chamber.

Product characteristics

1 Physical properties

- 1.0 Size:- 600 – 1800, 3.5m L x 2.5m W x 2.6m H
2000 - 2400, 3.5m L x 2.5m W x 2.6m H
2600 – 5000, 4.9m L x 2.5m W x 2.6m H

- 1.1 Weight 600 – 1800 = ~ 1500 - 1700 Kg
2000 - 2400 = ~ 1800 – 2000 Kg
2600 – 5000 = ~ 2800 – 3500 Kg

1.2 Material:- Stainless steel

1.3 Connections Air and Gas:-

- DN150 PN16 flanges (600 – 1800)
DN150 PN16 flanges (2000 – 2400)
DN200 PN10 flanges (2600 – 5000)
DN300 PN10 (4000 – 5000) – optional

2 Gas purification & regenerative capacity

- 2.0 Max gas flow 5000 M3/hr.
2.1 Programmable up to max 12 times per 24 hours.

3 Gas input requirements

- 3.1 Gas flow Min 150M3/hr
3.2 Gas flow Max 5000M3/hr
3.3 Max gas temperature of 40° C

4 Gas pressure

- 4.1 Max pressure drop over filter unit <15mb
4.2 Max pressure for unit < 400 mb
4.3 Can be installed under pressure or suction

5 Electrical system

- 5.1 All spark sources Atex approved / ISB protected.

- 5.2 Separate mounted panel outside zone connected by ducted or surface cable and pneumatic tubes.
5.3 Mitsubishi PLC controller for automatic operation.

6 Safety controls fitted

- 6.1 Over temperature of regeneration process.
6.2 Thermal cut out on process air heater.
6.3 Air flow detection on regeneration unit.
6.4 Auto restart after power failure.
6.5 Unit pressure drop.
6.6 Temperature resilient bubble tight Viton valves.
6.7 Valve position indicators
6.8 Pneumatically operated actuators via Atex approved solenoids with limit / position switches
6.9 Unit default on error is system bypass.
6.10 Optional Modus TCP/IP connection for monitoring. Remote monitoring & text alert

7 On site requirements

- 7.1 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
7.2 Supply pipe diameter:150- 300 mm
7.3 Feed pipe to engine diameter: 150 – 300 mm
7.4 Electrical supply: 3 phase 50 Amp / phase
7.5 Compressed air: min 5 bar

8 Total power requirements

- 8.1 Average consumption of 20 kW for 120 mins /day



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