97127 Gas Purifier

The S&J 97127 Gas Purifier removes unwanted components H_2S from biogas. Typical applications include anaerobic digester gas trains, municipal landfills, anaerobic lagoons, pulp and paper digesters, food and beverage making and other fermentation processes.

Regulations made to minimize sulfur emissions require the removal of sulfur components in biogas systems. Installed upstream of a gas engine generator or boiler, the S&J 97127 uses a bed of media to remove the unwanted gas component. The H_2S is removed by passing through a purifier. The H_2S is removed by reacting with ferric sulfide (Fe_2S_3). This removal process helps to minimize the corrosion of metals and equipment while also reducing toxic air pollutants/severe odors.

The S&J 97127 can handle a wide range of operating conditions. It is also designed specifically for low pressure biogas applications.

The S&J 97127 is designed to withstand the harshest of process environments found in municipal waste water treatment facilities, chemical plants, petroleum refineries and other similar facilities. With a reinforced FRP fiberglass tank, the S&J 97127 provides very high corrosion protection in biogas systems and elongates the operating/service life of the tank.

Features

- Efficient Removal of H_2S
- Designed for low pressure biogas applications
- Handles finite range of operating conditions
- 8' and 12' Diameters
- Fiberglass tank provides optimum corrosion protection
- Manual or Continuous Regeneration Configuration

Specifications:

Standard Materials of Construction:

Tank - Reinforced FRP fiberglass with NFPA 820 fire resistant coating
Cover Gasket - Nitrile Rubber
Media - Impregnated wood chips

Process Connection:

Inlet/Outlet flange; ANSI 16.5 150 lb. Flat Faced;
Instrument port 1" NPT or 150 lb. Flat Faced Flange;
Spray nozzle 1" NPT or 150 lb. FF Flange
Drain port 2" NPT or 150 lb. FF Flange

Operating Temperature Range:

32°F to 120°F

Maximum Working Pressure:

1 PSIG

Sizing Requirements:

Overall dimensions may vary depending on the following parameters:

- Inlet H_2S concentration in ppm
- Desired outlet concentration in ppm
- Flow rate
- Indoor or Outdoor Installation

All designs subject to change. Certified dimensions and specifications available upon request.

97127 Ordering Guide

Model Number Selection

The model number will have a base number **97127** followed by 7 digit numbers. These digits will represent 7 sets of option tables.

97127 - AB - CD - EF - G

Table A - Size

Option A	Size
0	8' Diameter x 10' Height
1	12' Diameter x 11' 6" Height

Table B - Flange Inlet / Outlet

Option B	Flange
4	6" ANSI FF
5	8" ANSI FF
6	10" ANSI FF
7	12" ANSI FF

Table C - Tank Construction

Option C	Tank Construction
0	Fiberglass No Insulation
1	Fiberglass Insulated Tank
2	Stainless Steel

Table D - Configuration

Option D	Configuration
0	Manual Regeneration
1	Continuous Regeneration

Table E - Control Panel

Option E	Control Panel
0	None
1	NEMA 4X Fiberglass
2	NEMA 7 Explosion Proof Aluminum
3	NEMA 4X Stainless Steel

Table F - Power Supply

Option F	Power Supply
0	Not Required
1	110 VAC 50/60 Hz, Single Phase
2	220 VAC 50/60 Hz, Single Phase

Table G - Options

Option G	Options
0	None
1	Media Removal System