

- No visible flame
- Controlled Combustion environment including natural draft design
- Meets emission standards of EPA & local regulations
- High Destruction removal efficiency
- High turn down ratios
- Convenient sampling ports
- Operates with low input pressures
- Advanced automatic ignition system

The Shand & Jurs 97310 Enclosed Flare

The S&J 97310 Enclosed Flare removes harmful emissions from waste gas streams. Typical applications include fermentation off gas piping systems such as anaerobic digesters. This unit is specifically designed to bring emissions levels to within allowable limits as dictated by customer requirements or governmental bodies such as the EPA.

Every unit is designed for maximum destruction efficiency for each application's process parameters. Provides very low NOX and CO emissions. Key data, such as gas stream composition and flow rates, are used to determine the appropriate residence time of the waste gas inside the stack. This is critical to both the reliability of the emissions removal as well as the efficiency of operation.

Components of construction include carbon steel or stainless steel for stack, pedestal, base, pilot piping and manifold as specified.

The Automatic Ignition System accepts a remote contact or signal from a pressure sensor to initiate ignition sequences. Advanced pilot design include UV sensor for positive flame proofing. Pilot System includes pilot pressure regulators and shut-off valves as specified.

The S&J 97310 can be configured with any combination of measuring instruments for complete recording and reporting. Flexible operation is achieved through innovative software and hardware design.

Convertible manways for ease of maintenance and inspection.

The S&J 97310 withstands the severest of process environments including high wind loading and seismic conditions as specified.

Applications

Anaerobic digester gas train

Fermentation off gas piping systems

Low pressure vent lines

Processes requiring EPA Emissions Control

TYPICAL CONFIGURATION

Burner Material: Stainless Steel
 Pilot Material: Stainless Steel
 Stack Material: Carbon Steel
 Process Connection: 150# ANSI Flange

HOW TO ORDER

Emission:	
Stack Exit Temperature	_____ F
*Destruction Removal Efficiency(DRE)	_____ %
Residence Time	_____ Seconds
NO _x Emission	_____ Lbs/MMBtu
SO ₂ Emission	_____ Lbs/MMBtu
CO Emission	_____ Lbs/MMBtu
Waste Gas Composition:	
Methane CH ₄	_____ %
Carbon Dioxide CO ₂	_____ %
Hydrogen Sulfide H ₂ S	_____ %
Saturated Vapor	_____ % or ppm
Other	_____ % or ppm
Other	_____ % or ppm
Operating Conditions:	
Gas Flow Rate:	_____
Gas Pressure:	_____
Pilot Gas:	
Flow Rate:	_____
Pressure:	_____
DRE Greater than 99% Available upon request.	
Accessories:	
An electric actuated positive shut-off valve, a pressure (explosion) relief vent and flame trap should be installed directly at the flare inlet. The pilot gas line should be protected with a flame check shut-off valve.	
Design subject to change without notice	

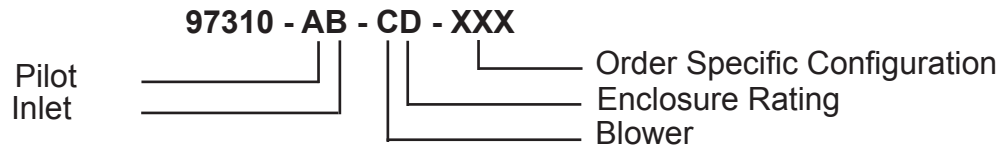


TABLE (A) PILOT GAS

OPTION	DESCRIPTION
0	Natural
1	Propane

TABLE (B) BIOGAS CONNECTION

OPTION	DESCRIPTION
2	2" ANSI RF
3	3" ANSI RF
4	4" ANSI RF
5	6" ANSI RF
7	8" ANSI RF
8	10" ANSI RF
9	12" ANSI RF

TABLE (C) ENCLOSURE RATING

OPTION	DESCRIPTION
0	NEMA 4 - CS
1	NEMA 7/4X - CAST AL
2	NEMA 4X- SS

TABLE (D) BLOWER

OPTION	DESCRIPTION
0	No Blower - Standard
1	Blower - General Purpose Motor
2	Blower - NEMA 7 Motor

Table (XXX)

OPTION	DESCRIPTION
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XXX is converted to a three digit sequence of numbers. A unique number is assigned to each site. The unique number defines the site specifications which are incorporated into the approval drawings.

Note: An electrically or pneumatically operated shut-off valve is required in the main Bio-gas feed line (by others).