



- High Performance Stoichiometric “Slip Stream” Pilot
- Sizes 2” Through 12”
- Burns High Flow, Low BTU “Wet” Methane
- Stainless Steel Flame Area
- Superior Pilot Wind Protection
- Fully Automatic Option
- Heavy Duty, Long Life Ignitor Head
- Features Low Pressure Pilot
- Provides Alarm Outputs

The Shand & Jurs 97302 Waste Gas Burner

The S&J 97302 Waste Gas Burner is specifically designed to operate efficiently with low BTU anaerobic digester waste gases. Typical applications include anaerobic digesters, lagoons, landfills and methane offgas from other fermentation processes. The 97302 helps to properly contain and incinerate waste gases thus minimizing odors and VOC’s.

Its stainless steel components withstand the severest of process environments. The S&J 97302 is especially designed for hydrogen sulfide and hot, wet methane which are the main components of digester gas streams in municipal waste water treatment facilities.

All components of the pilot and ignition system are stainless steel and located near the main burner for optimized flame retention reliability. The ignitor head is retractable on taller stacks for easy ground level maintenance.

Both manual and automatic ignition systems are available. The automatic system provides remote ignition start capability with automatic retries. The remote signal is provided by dry contacts and/or a pressure switch installed in the bio-gas stream. Pilot status and flame failure alarms are also provided.

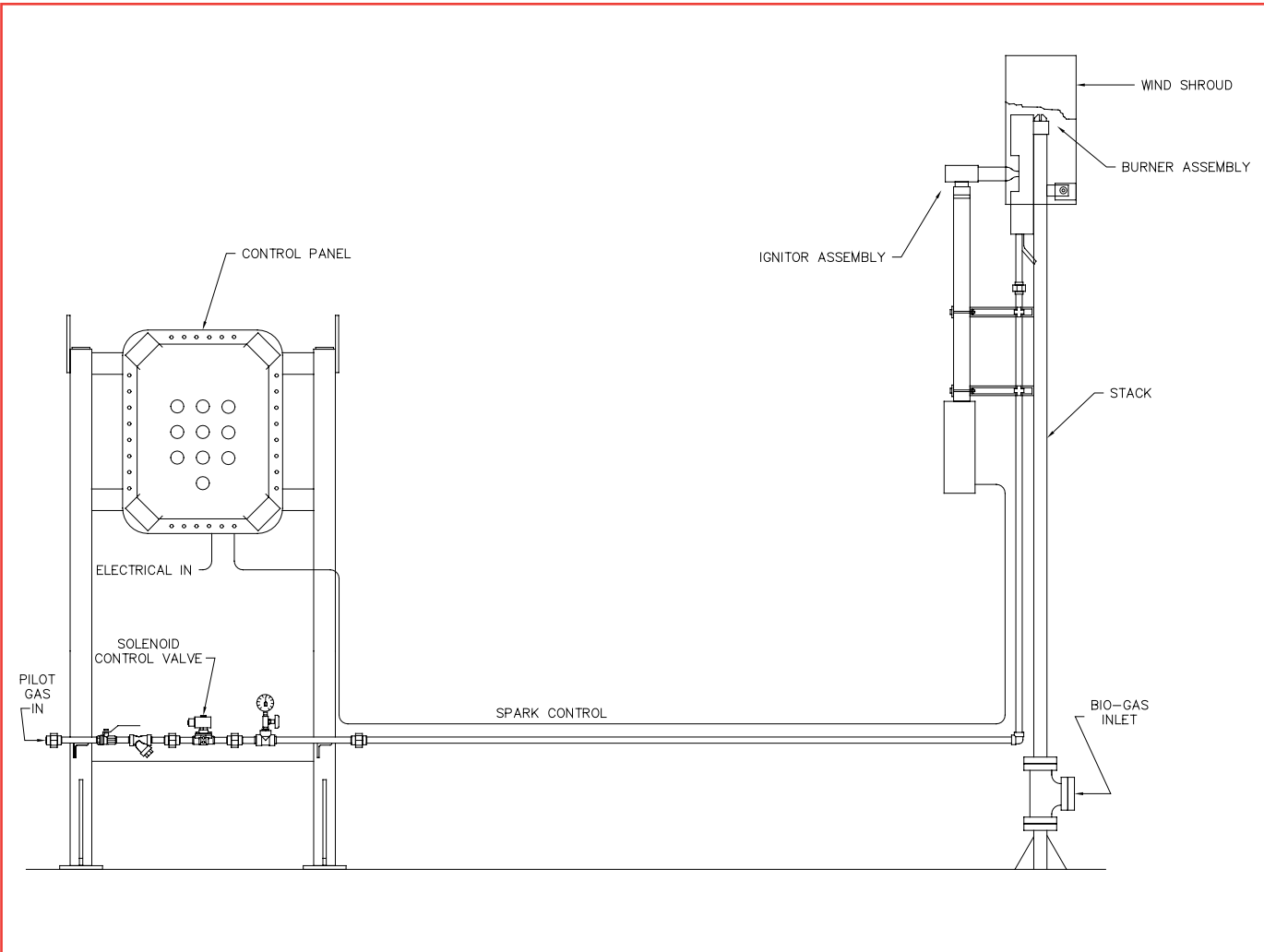
The 97302 is 100% U.S. made.

Applications

- Anaerobic digester gas train**
- Fermentation off gas piping systems**
- Low pressure vent lines**

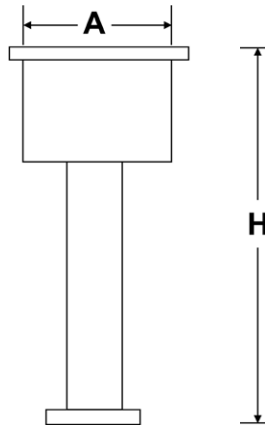
SPECIFICATIONS

Sizes:	2", 3", 4", 6", 8", 10" and 12"
Stack Burner Connection:	ANSI 150lb. RF Flange
Contact Outputs:	
Flame Out:	SPDT, 120 VAC 2 Amp
Pilot Status:	SPDT, 120 VAC 2 Amp
Power Requirements:	120 VAC 5 Amp 60 Hz 220 VAC (option)
Controller:	
Temperature Range:	-20 to 150 degrees F
Enclosure:	Wall Mount NEMA 4 (Optional Nema 4X or 7)
Enclosure Material:	Carbon Steel (Optional Stainless Steel)
Options:	Manual Ignition Remote Automatic Ignition Automatic Ignition Audible Alarm Heater and Thermostat
Stack Materials:	
Burner Assembly and Pilot	
Nozzle:	Stainless Steel
Bottom Stack (Optional):	Carbon Steel (Optional Stainless Steel)
Pilot Gas:	Natural Gas (std) LPG Waste Gas (500 BTU/ Cubic foot Minimum)
Pilot Gas Pressure:	4" WC to 10 PSIG
Pilot Gas Regulator:	Optional



Stack Dimensions		
Size	A	H
2"	12"	120"
3"	18"	144"
4"	24"	144"
6"	24"	144"
8"	30"	192"
10"	36"	240"
12"	36"	240"

STACK DIMENSIONS
(Typical)



CAPACITY (FT ³ /Hr.)	
Size	Capacity
2"	4000
3"	9000
4"	16000
6"	36000
8"	64000
10"	100000
12"	155000

CAPACITY
(Typical)

Flow specified in air at 60° F, 14.7 PSIA, .5" WC pressure drop

CONTROL OPTIONS

Manual Ignition:

The operator initiates ignition by depressing the push-button on the controller. This causes the ignition pilot to spark, igniting the gas in the remote ignition chamber. The resulting pilot flame ignites the main burner. Successful ignition is indicated by the Pilot-On indicator on the controller.

Automatic Ignition:

Automatic ignition is performed with a remote push-button or pressure switch. The remote push-button and/or pressure switch is wired to terminals in the controller. The system will continue activating the igniter with a 2 second spark every 18 seconds. This continues as long as the flare command contact is closed. A flame failure alarm occurs if no flame is detected after an adjustable time period. Pilot Gas solenoid is automatically controlled.

Accessories:

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.

HOW TO ORDER



TABLE (A) PILOT GAS

OPTION	DESCRIPTION
0	Natural
1	Propane
2	Bio

TABLE (B) UNIT SIZE

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

TABLE (C) POWER SOURCE

OPTION	DESCRIPTION
1	110/120 VAC, 60Hz
2	220/240 VAC, 50/60Hz

TABLE (D) ENCLOSURE RATING

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

TABLE (E) CONTROL

OPTION	DESCRIPTION
1	LOCAL - MANUAL START
2	Remote Control with NEMA 7 Pressure Switch Included
3	Remote Control (No Pressure Switch Included) Dry Contact

TABLE (F) PILOT

OPTION	DESCRIPTION
1	Continuous - Manual Start (Table E = 1)
2	Intermittent - Auto Start (Table E = 2 or 3)

TABLE (G) BLOWER

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

TABLE (H) ADDITIONAL OPTIONS

OPTION	DESCRIPTION
1	None
0	Heater & Thermostat (Mounted within Enclosure)

Note 1. Site specific requirements incorporated into approval drawings.

Design subject to change without notice