



- High Performance Stoichiometric Pilot
- No Flame Front Burn-out of Pilot Gas During Ignition
- Sizes 2" Through 12"
- Burns High Flow, Low BTU "Wet" Methane
- No Venturi Maintenance
- Minimizes Pilot Pipe Freeze Potential
- State-of-the-Art Digital Control
- Fully Automated Continuous or Intermitant Pilot
- Provides Alarm Outputs

## The Shand & Jurs 97300 Waste Gas Burner

The S&J 97300 Waste Gas Burner is specifically designed to operate efficiently with low BTU anaerobic digester waste gases. The 97300 helps to properly contain and incinerate waste gases thus minimizing odors and VOC's.

severest of process environments. The S&J 97300 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.

Its stainless steel components withstand the

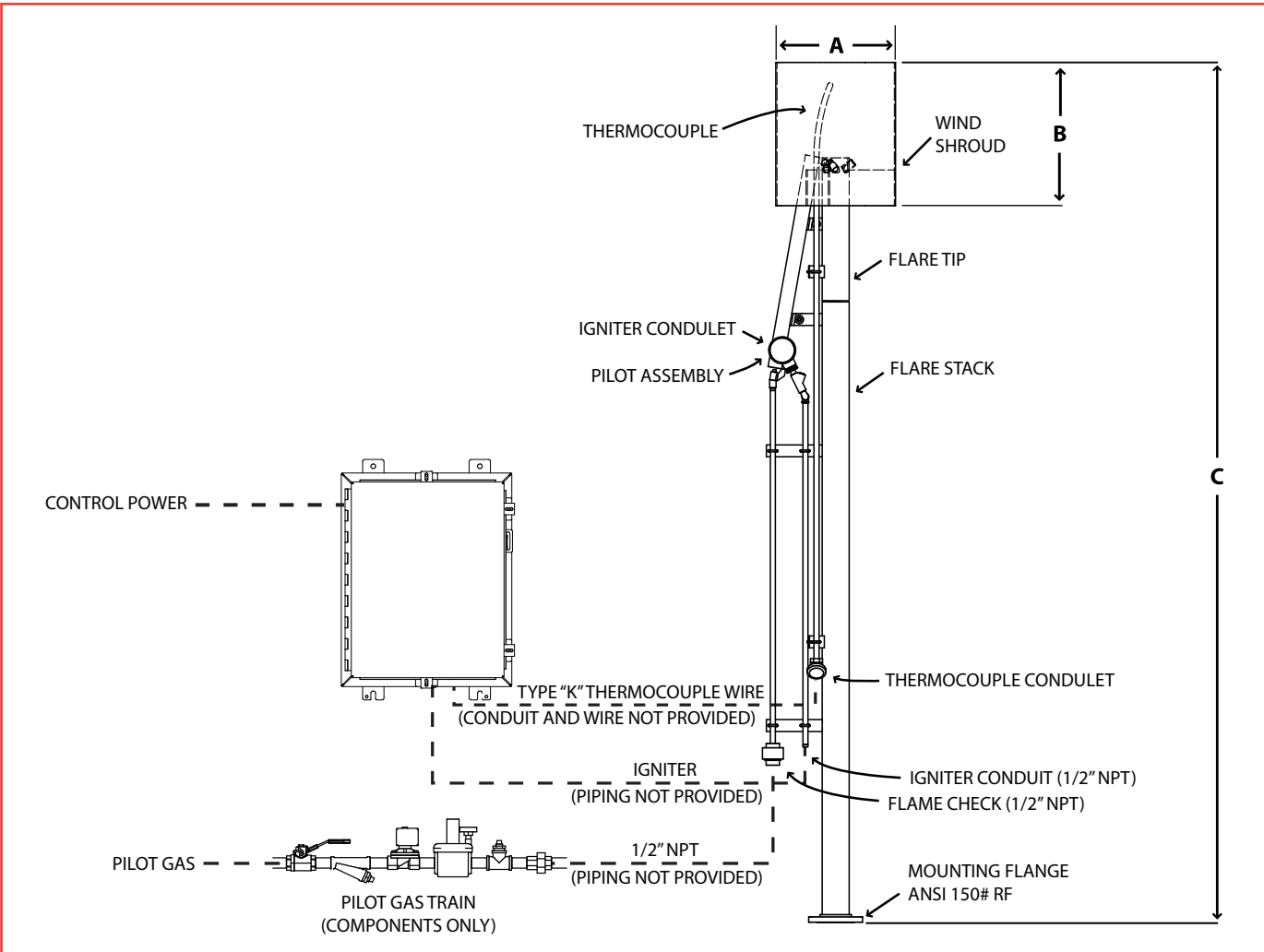
The 97300 is 100% U.S. made.

## 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
Re-Start Alarm:	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
Options:	Manual Ignition Remote Manual Ignition Automatic Ignition (Restart Function) Audible Restart Alarm Heater and Thermostat
Stack Materials:	
Top Assembly and Pilot Nozzle:	Stainless Steel
Bottom Stack Assembly:	Carbon Steel (Optional Stainless Steel)
Pilot Gas:	Natural Gas (std) LPG Waste Gas (500 BTU/ Cubic foot Minimum)
Pilot Gas Pressure:	5 to 10 PSIG STD (Lower Pressures available)



Stack Dimensions				CAPACITY (FT <sup>3</sup> /Hr.)	
Size	A	B	D	Size	Capacity
2"	16"	24"	120"	2"	3300
3"	18"	24"	144"	3"	9970
4"	20"	24"	144"	4"	19150
6"	24"	36"	144"	6"	44200
8"	24"	48"	192"	8"	76800
10"	30"	48"	240"	10"	129000
12"	36"	60"	240"	12"	218600

**STACK DIMENSIONS**  
(typical)

**CAPACITY**

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 igniter to spark, igniting the pilot. Pilot-on is indicated by the flame-on indicator on the controller.

### Remote Ignition:

Remote ignition is performed in the same manner as Manual Ignition, but with a remote push-button. The remote push-button is wired to terminals in the controller.

### Automatic Ignition:

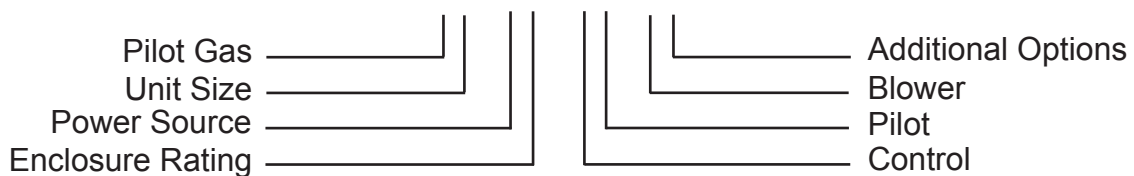
Automatic Ignition is performed by the system in reaction to a flameout condition. If the pilot switch is set to "Auto" and the system senses a flameout condition, it activates the igniter. The system will continue activating the igniter until a flame on condition is sensed or the auto start time out is reached. If the auto time out occurs prior to flame on the restart alarm is tripped.

### 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

### 97300 - AB - CD - EF - GH



**TABLE Ia (A) PILOT GAS**

OPTION	DESCRIPTION
0	Natural
1	Propane
2	Bio

**TABLE 1b (B) UNIT SIZE**

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

**TABLE IIa (C) POWER SOURCE**

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

**TABLE IIb (D) ENCLOSURE RATING**

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

**TABLE IIIa (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 IIIb (F) PILOT**

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

**TABLE IVa (G) BLOWER**

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

**TABLE IVb (H) ADDITIONAL OPTIONS**

OPTION	DESCRIPTION
0	None
1	Heater & Thermostat (Mounted within Enclosure)
3	NEMA 7 Spark Generation Enclosure
5	Options 1 and 3 Together

Design subject to change without notice