# 97301T Waste Gas Burner with Touch Screen Control Panel

The S&J 97301T Waste Gas Burner is specifically designed for dependable "Flaring" operation that utilizes low BTU anaerobic digester waste gases. Typical applications include anaerobic digesters, lagoons, landfills and methane offgas from other fermentation processes. The 97301T efficiently incinerates waste gases thus minimizing odors and VOC's.

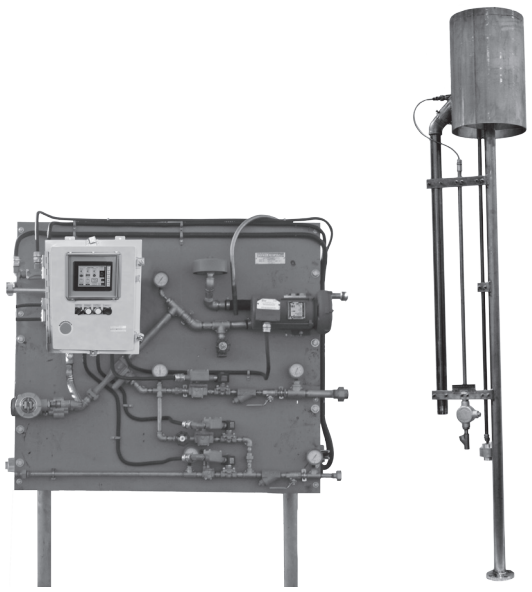
Using a stoichiometric pilot ignition system, the 97301T is able to achieve a stable pilot flame. Air and pilot gas are combined and ignited at ground level, separate from the burner. This process gives the burner a controlled pilot flame with an ideal gas-to-air ratio.

A continuous or intermittent burning pilot in the flame area provides stable, controlled nonsmoking combustion to minimize odors and reduce hazardous emissions. Automatic controls and alarm outputs and automatic controls provide safe, reliable and simple operation.

Paired with a touch screen control panel, the flare controller is designed for complete automatic operation of the entire Flare System. Shand & Jurs' Flare System gives the operator much more flexibility in controlling the system with more parameters easily configured via the touch screen control panel. The Control Panel can also be connected to a local PLC.

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

The 97301T utilizes stainless steel components that can withstand the severest of process environments. This candlestick flare is capable of withstanding a wind speed load of 150 mph and seismic zone 4 loads. The S&J 97301T is specifically designed to combust unwanted biogases generated in fermentation processes like anaerobic digesters, lagoons, and municipal landfills. These gases are primarily methane with a high moisture content ( or "wet") and typically have low BTU values.



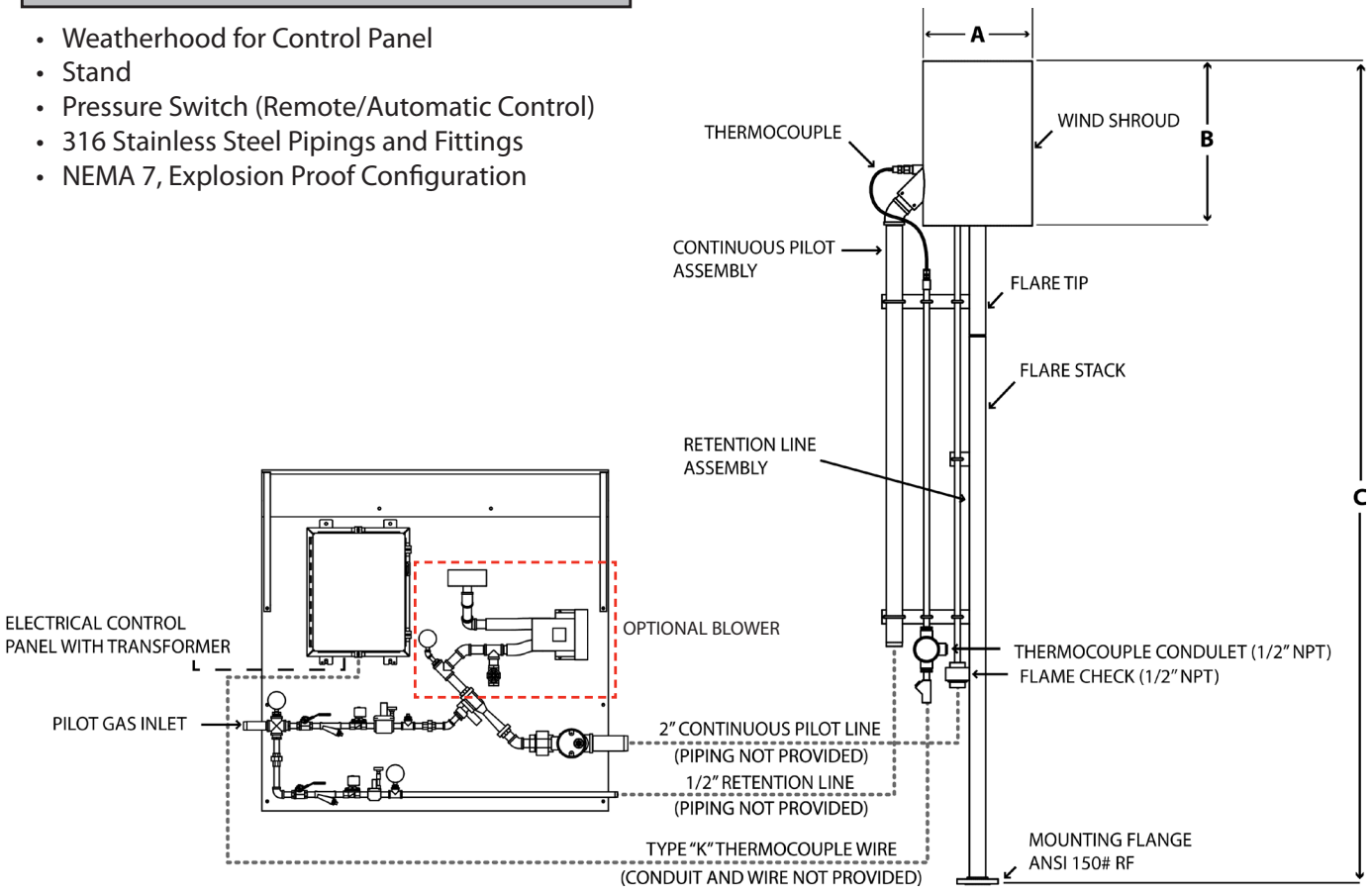
## Features

- High Performance Stoichiometric Pilot
- Touch Screen Control Panel
- Sizes 2" Through 12"
- Burns High Flow, Low BTU "Wet" Methane
- Stainless Steel Flame Area
- Superior Pilot Wind Protection
- Solid State Controls
- Fully Automated Continuous or Intermittent Pilot
- Ground Level Venturi Pilot Ignition
- Provides Alarm Outputs

## Dimensions:

### Additional Options

- Weatherhood for Control Panel
- Stand
- Pressure Switch (Remote/Automatic Control)
- 316 Stainless Steel Pipings and Fittings
- NEMA 7, Explosion Proof Configuration




## Stack Dimensions

| Dimensions (Inches [mm]) | | | |
|---|---|---|---|
| Size | A | B | C |
| 2 [50] | 16 [406] | 24 [610] | 120 [3048] |
| 3 [75] | 18 [457] | 24 [610] | 144 [3658] |
| 4 [100] | 20 [508] | 24 [610] | 144 [3658] |
| 6 [150] | 24 [610] | 36 [914] | 144 [3658] |
| 8 [200] | 24 [610] | 48 [1219] | 192 [4877] |
| 10 [250] | 30 [762] | 48 [1219] | 240 [6096] |
| 12 [300] | 36 [914] | 60 [1524] | 240 [6096] |

Flow specified for gas with 0.8 specific gravity, air at 60° F, and .5" WC pressure drop

## Capacity

| Size (Inches mm]) | Capacity ($FT^3$/Hr.) |
|---|---|
| 2 [50] | 4000 |
| 3 [75] | 9970 |
| 4 [100] | 19150 |
| 6 [150] | 44200 |
| 8 [200] | 76800 |
| 10 [250] | 129000 |
| 12 [300] | 218600 |