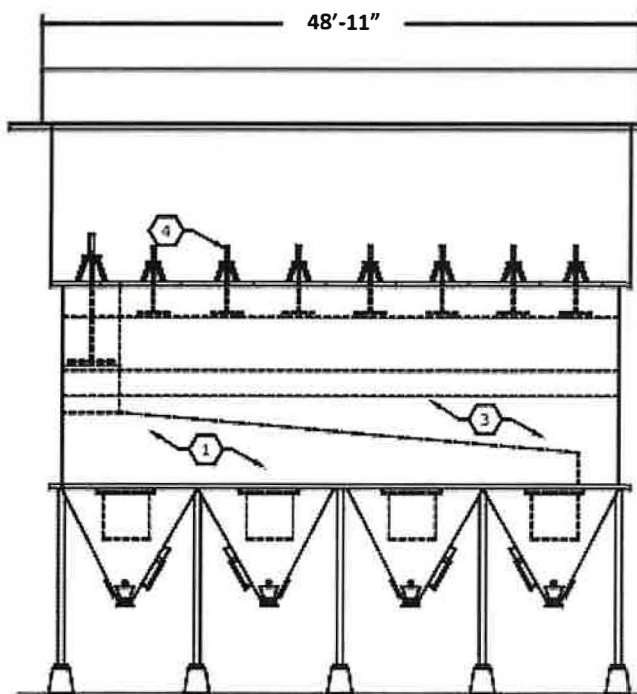
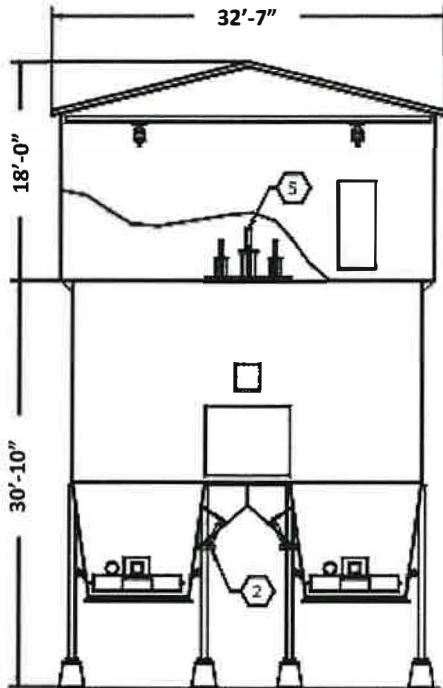


Service: Incinerator flue gas containing fly ash particulate and spray dried powder from the spray drying of incinerator scrubber brine



**Operating and Mechanical Details**

Gas flow rates at baghouse inlet: 145.500 ACFM at 425°F.

Temperature in online mode: 510°F.

Temperature in bypass mode: 650°F.

Casing design pressure: -30 "W.C.

Ash discharge: 20,000 lb/hr. max.

Number of compartments: 8.

Air/Cloth ratio:

- All modules online: 3.45:1
- One module offline: 3.94:1

Cleaning: Pulsejet. Normally Online. Offline when ΔP is high.

Operating ΔP: design 0 to 12" W.C.

Insulation designed to limit gas temperature drop to 10°F with 425°F gas in winter.

Hopper below each compartment with 60° min side angles, hopper heaters, and sonic horn to aid hopper discharge if needed.

**Air Flow**

**Mark**

Inlet manifold: Tapered rectangular extension of baghouse wall located between the two rows of compartments.

1

Inlet dampers: Eight 2'-6" x 3'-4 1/2" butterfly dampers – one for each compartment.

2

Outlet manifold: Tapered rectangular extension of baghouse wall located between the two rows of compartments. The outlet manifold and inlet manifold are one structure split by a steel sheet.

3

Outlet dampers: Eight 3'-6" dia poppet valves – one for each compartment.

4

Bypass damper: 5'-0" dia poppet valve allowing flow (when open) between the inlet and outlet manifolds.

5

**Materials of Construction**

SS 316-L

**Instrumentation**

Bag pulse sequencing timer boards.

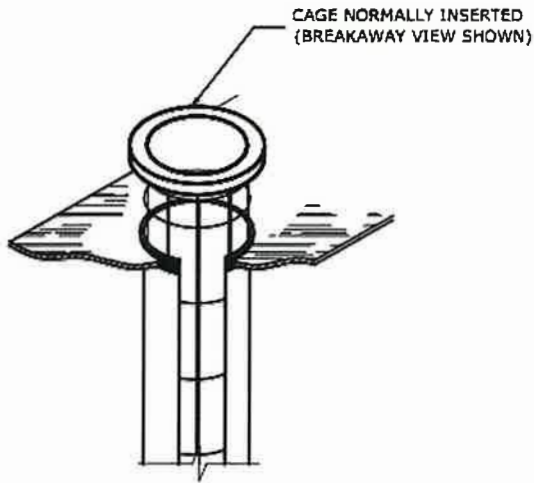
Baghouse inlet and outlet static pressure and temperature transmitters.

Local differential pressure indicators for each compartment.

Hopper level switches.

PLC system that includes bypass initiation for high or low inlet temperature, high ΔP, power failure, or by operator initiation.

**Baghouse Filter Specifications**



Number of compartments: 8  
 Filter bags / compartment: 240  
 Total bags in baghouse: 1920  
 Surface area / bag: 22 ft<sup>2</sup>  
 Surface area / compartment: 5280 ft<sup>2</sup>  
 Surface area / baghouse: 42,223 ft<sup>2</sup>  
 Bag dimensions: 6" dia x 14' long  
 Tube sheet attachment: Snap ring  
 Support cage: 5 7/8" dia x 14' long with integral venturi; 20 wires around circumference x 6" spacing

**Cleaning**

**Online Cleaning:**

- This is the normal mode of cleaning. Starts when the baghouse ΔP exceeds adjustable setpoint SP1.
- Compartments inlet and outlet dampers stay open. One row of bags is pulsed per compartment and then it shifts to the next compartment.
- Pulsing continues until ΔP falls below SP1.

**Offline Cleaning:**

- This mode is used when online cleaning is not sufficient to control the baghouse ΔP. Starts when the baghouse ΔP exceeds setpoint SP1 + adjustable setpoint SP2.
- Outlet damper for selected compartment is closed.
- All 16 rows of bags for the selected compartment are pulsed, one-at-a-time, with a few seconds time delay between pulses.
- Outlet damper for selected compartment is re-opened.
- The sequence shifts to the next compartment and repeats until ΔP falls below SP1+SP2.

**Material**

**Cloth:**

100% Teflon  
 Suitable for 500 °F continuous service

**Cage:**

1/8" thick steel wire