Food Processing Division

Venturi Dry Scrubber for Oven and Fryer Exhaust Removal

The Venturi Dry Scrubber is a proven design that effectively removes smoke from your plant while simultaneously keeping your roof clean by filtering, then exhausting.

Most commonly used in food plants on oven and fryer exhaust systems, the Venturi Dry Scrubber can be used in any food-processing environment that requires the removal of harmful contaminants from the air. This design allows for a low profile and compact arrangement and installation in restricted spaces.

Why Use The VDS
- Reduces Steam, Oils and Particulates
- Reduces Oil On Roof
- Clean Work Environment
- Eliminates Smoke From Cooking Area

Who Uses The VDS
- Food Processing Plants
- Pork & Poultry Plants
- Oven & Fryer Exhaust Systems
- Industrial Kitchens

VDS Series Features
- Stainless Steel for all wetted parts on roof
- No moving parts in the air stream
- Majority of oil removed before reaching roof
- Simple maintenance
- Clean in place (CIP) sprayball for easy cleaning

VDS Series Benefits
- Less particulate and condensed vapors, means a cleaner roof
- Cleaner roof means a longer lasting roof
- Standard packages for a variety of exhaust requirements
- Longer blower life due to no sludge build up on blower
- Easy access in to the dry scrubber
- No filter change

Venturi Dry Scrubber - See Immediate Results
Minimize Oil Vapor Carryover

- Weekly Rooftop Oil Carryover From Fryers
- Rooftop Blower/Venturi System - After 1 Year
- Rooftop Blower/Venturi System - After 1 Year
- How it Works - Venturi Blower
- Dry Scrubber Installed Internally
- Venturi Exhaust
- Air Handling
- Venturi

The fryers were vented straight to the roof, and enough oil collected on the roof to require weekly cleaning, and cause environmental concerns.

Stainless steel dry scrubber housings with internal spray balls and replaceable/cleanable elements are mounted indoors.

The venturi systems with blowers mounted out of the process stream are mounted on the roof. After 1 year installation there is still minimal oil carryover.

The exhaust passes by the blower, leaving behind no residue on the blower, on its way out of the venturi, and off of your roof.
## TECHNICAL SPECIFICATIONS

### VDS Model Comparison

<table>
<thead>
<tr>
<th>HP</th>
<th>Flow</th>
<th>Inlet</th>
<th>Outlet</th>
<th>Venturi Model #</th>
<th>Scrubber Separator Model #</th>
<th>Assembly Part #</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F id</th>
<th>G id</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>3,000 CFM @ 6&quot; W.G.</td>
<td>10&quot;</td>
<td>10&quot;</td>
<td>SV30005</td>
<td>SVE1015SF5W3000</td>
<td>2182-SRS-05</td>
<td>160&quot;</td>
<td>155 3/8&quot;</td>
<td>59 1/16&quot;</td>
<td>52 1/4&quot;</td>
<td>23 1/2&quot;</td>
<td>10 1/2&quot;</td>
<td>18&quot;</td>
<td>798</td>
</tr>
<tr>
<td>20</td>
<td>4,500 CFM @ 5.4&quot; W.G.</td>
<td>16&quot;</td>
<td>12&quot;</td>
<td>SV4500201</td>
<td>SVE1220SF12W450</td>
<td>2182-SRS-12</td>
<td>158 5/8&quot;</td>
<td>154 7/8&quot;</td>
<td>66&quot;</td>
<td>54 1/4&quot;</td>
<td>23 1/2&quot;</td>
<td>11 7/8&quot;</td>
<td>20&quot;</td>
<td>832</td>
</tr>
</tbody>
</table>

Note: Ports are standard on same side of separator, but may be adjusted 90 or 180 degrees to fit your application requirements.

System Specification:
(1) each assembly part number _______ with working capacity exceeding _______ CFM through appropriately sized stack. The equipment hood is ventilated through a Condit Scrubber Separator by the venturi-induced flow. Each unit is designed to provide a static pressure of -1" water gauge at the vent hood when pulling through the Scrubber Separator and 20 feet of vertical stack. For fryers with rectangular discharge, a smooth transition is required to minimize pressure loss at desired flow.

### VDS How it Works

1. Cooking oil, vented off cookers and fryers, exhausts to meat and poultry plants roofs.
2. On its way there it passes through the dry scrubber, where the majority of the oil, particulate and condensed vapors are knocked out of the exhaust suspension.
3. Passing through the dry scrubber, the rooftop blower creates a vacuum, drawing the rest of the exhaust skyward.
4. The exhaust passes by the blower, leaving behind no residue on the blower, on its way out of the venturi, and off of your roof.

### Venturi Portion – Mounts on Roof

- Height: 47.42" (SRS-05)
- 53.42" (SRS-12)

### SS Scrubber Separator – Mounts in Plant

- Height: 47.42" (SRS-05)
- 53.42" (SRS-12)

- Diameter: 14.66"

- Approx. Weight: 360 lbs.