



SmogHog® Kitchen Emission Control Systems

PSG Series



ENGINEERING YOUR SUCCESS.



Solutions For:

- Environmental standards
- Code compliance - UL8782, Ansul
- Limited space available
- Mixed-use buildings



Making Solid Fuel Virtually Worry-Free

When cooking with solid fuel, SmogHog's electrostatic precipitation technology (ESP) captures smoke, grease, and other contaminants in the aluminum collection cell, releasing only clean air into the environment. With a daily in-place cleaning option programmed to remove soot and grease from the collection cells, the SmogHog PSG ensures consistent, high-efficiency operation while delivering virtually worry-free results for the restaurant owner.

Cover Image

With 3 kitchens and 5 cooking stations, Nusr-ET, a premier steakhouse venue located in Las Vegas, needed to control the amount of grease and smoke that was being exhausted from the restaurant from three Solid Fuel cooking stations that produce a high amount of heat and cooking pollutant. Area resorts and casinos with outdoor guest spaces including patios, clubs and private pools were a concern so Nusr-ET selected the Parker SmogHog PSG to tackle the cooking emissions and provide industry best-in-class air pollution control to this critical cooking technique.

No More Placement Restrictions.

No More Smoke or Greasy Odor Emissions.

SmogHog Kitchen Emissions

As a retail developer, building owner, tenant, architect or engineer, you know how much a restaurant can add to the value of your venue. But you're also well aware of the environmental issues that can result from annoying smoke and greasy odors emitting from kitchens, as well as the headaches that result from designing them.

Fortunately, these concerns are a thing of the past with the SmogHog PSG series from Parker Hannifin. As a world leader in air pollution control, Parker Hannifin provides proven systems that not only eliminate problems caused by cooking ventilation, but ensure that only clean air is exhausted into the environment.

Casinos, hotels, high-rise buildings, food courts, corporate cafeterias, restaurants, stadiums and theme parks; these are just a few facilities already relying on SmogHog kitchen emission control systems to prevent odor complaints and secure a positive "good neighbor" image in their communities.

No Existing Exhaust System? No Problem

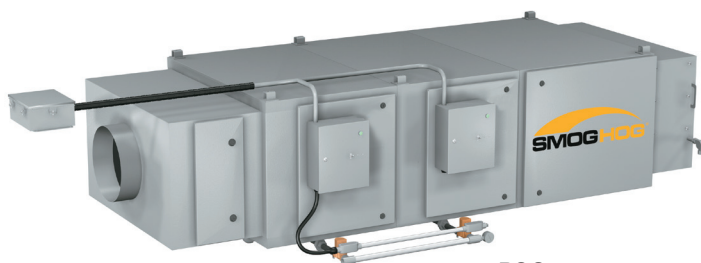
Today, many building owners have occupants who need to add a kitchen to an existing structure—a structure often without an existing exhaust-ventilation system to control grease and odors.

This used to pose a problem, but not anymore. The revolutionary design of the SmogHog emission control system provides the flexibility to install a kitchen in virtually any space, in any building. Instead of one large, all-encompassing system, we build units in modules that can be designed to fit the space available.

Minimum Ducting Maximum Savings

The best value in kitchen emission control, solving fume problems and saving you money in a variety of ways:

- **Minimum ducting** is required with our arrangements, saving expensive runs of welded exhaust ducting.
- SmogHog PSG systems combat the hazardous pollutants resulting from kitchen emissions, therefore, **ongoing operating costs are significantly reduced**. Plus, maintenance is minimized because our aluminum collection cells are easy to clean and reuse, eliminating filter replacement and disposal expenses.
- Our systems assure **compliance with even the strictest federal, state, and local environmental standards**, meeting air quality needs up front and eliminating unexpected retrofit costs later.



PSG 12-2
With Odor Control
and automatic ESP
wash system

Unmatched Design and Technical Support

We've been leading the way as a manufacturer of commercial ventilation systems since 1966. So you know you can always count on us for the most trusted experience and innovation in restaurant air cleaning technology.

We provide complete solutions and play an active role in supporting your entire project from start to finish, including unit and specifications drawings for your unique applications. Whether your application is a small installation, non-traditional, or by a historical site, you'll find our design and technical support to be unmatched in the industry.

Hudson Yards



With 40 years of kitchen emissions control expertise and thousands of installations in NYC, Parker collaborated with engineers and architects to meet each specific project requirement on this site. The SmogHog PSG provided a consistent design, a repeatable parts list for maintenance teams, and a robust filtration system for various cooking types including "Solid Fuel".

Google



Providing employees with a 24-hour operational kitchen and an extensive menu was the primary goal for Google. Employees couldn't leave for meals in a timely fashion due to the size of the building, one full city block in size. To ensure the kitchen was open 24 hours a redundant system with SmogHog allowed one unit to be in cleaning mode while the other continued capturing grease and odor, keeping the kitchen emissions out of the air 24/7.

Whole Foods



Serving ready-to-eat, take-out gourmet meals has provided customers with a way to save time in an ever-changing, fast-paced society. Whole Foods has stores in multi-purpose buildings with offices and tenants. SmogHog provided a way to capture grease and odor so that office employees and residents could enjoy a clean-air environment. SmogHog PSG allows for installations in tight spaces, minimum maintenance requirements, and a self-cleaning wash system that provides consistent high filtration in their Kitchens throughout the US.

More Architectural Freedom

Our wide selection of configurations and sizes, ranging from 825–35,000 CFM, is ideal for virtually any building design parameter and performance requirement. So regardless of kitchen hood size, our emission control systems provide for the ultimate flexibility in location. Feel free to mount our systems through exterior walls, on top of buildings, inside mechanical rooms or above the ceiling.

Best in class Odor Control Module

“V-bank” odor control design allows for high filtration efficiency of gaseous odors utilizing various media options.

Collection Cells

Reusable two-stage Penny Type collection cells for efficient cleaning with low static pressure.

Injector-TEE Assembly

Systematically controls detergent use and allows for optimal cleaning while eliminating facility maintenance required to dilute detergent.



Inlet Plenum

Effectively transitions airstream to collection cells.

Impingement Baffle Prefilter

Adjustable interlocking “U” channels provide tortuous path for even airflow distribution and protection from large contaminants.

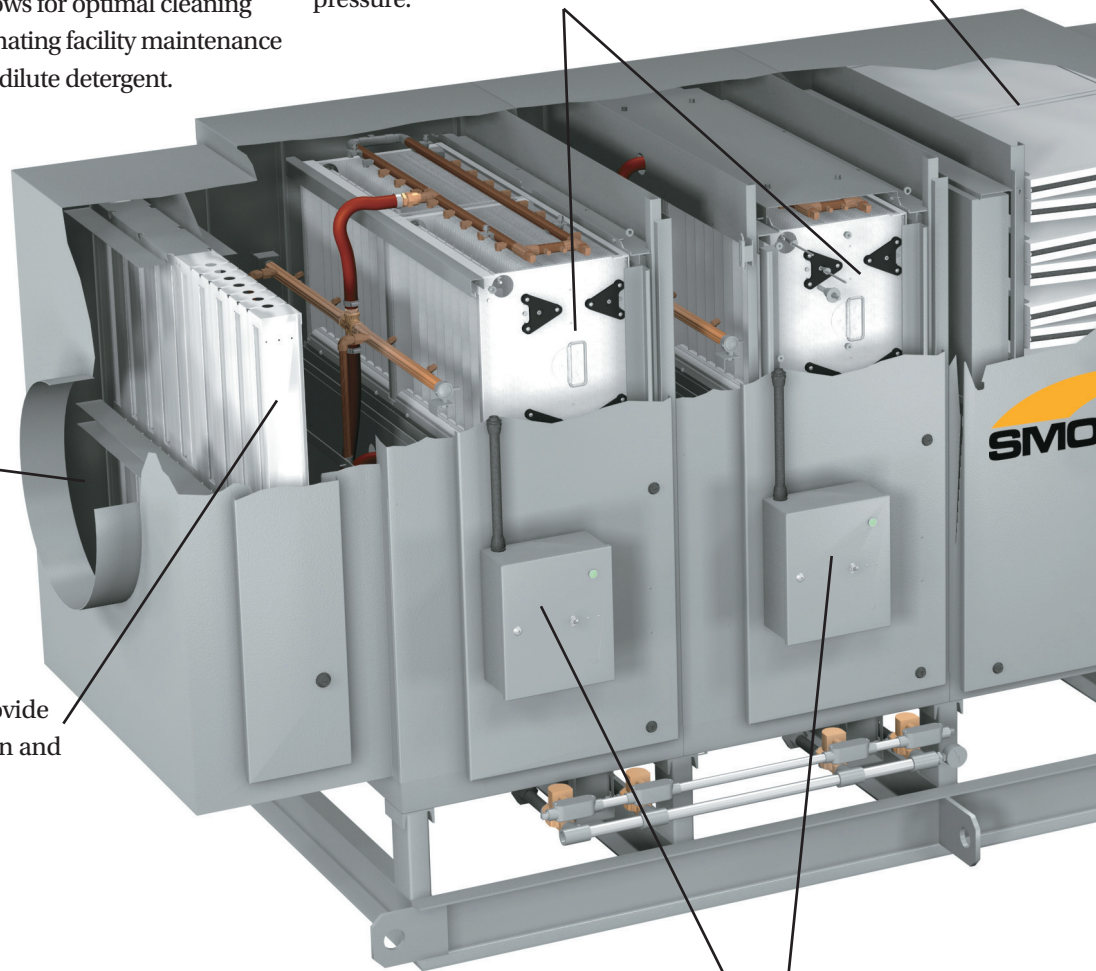


Control Panel

Single or separate panels can operate all equipment functions. Panels can be remote-mounted as required, and entire system can be tied to a building maintenance system.

Transformer Power Packs

UL listed electronic circuitry with self-regulating components provides maximum collection of grease and odor emissions.





Outlet Plenum

Effectively transitions airstream to blower system.

System Blower

UL 762 listed, energy efficient blower with backward inclined wheels for quiet, efficient operation. (In-line blowers also available.)

Motor Starter

Provides system on/off control.

Detergent Tank

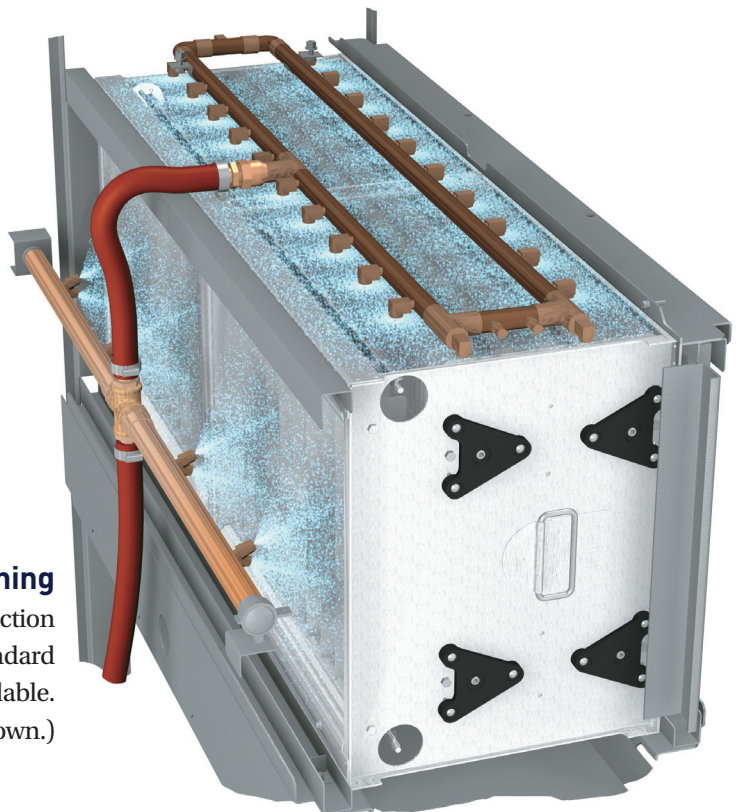
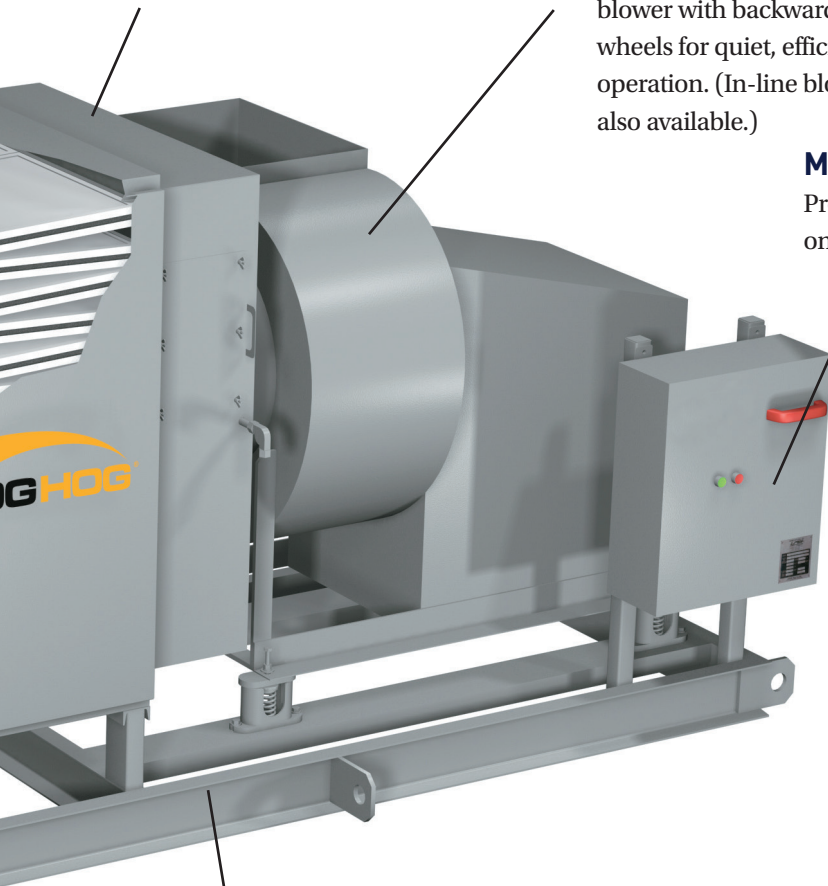
Self-contained tank holds concentrated detergents used to clean kitchen emissions from commercial and industrial applications. (Includes integral mounted pump and five gallon pail.)

Structural Steel Skid

Heavy-duty structural channel base integrates system and facilitates easier installation.

In-place Cleaning

Fixed wash headers clean collection components without removal. Standard and heavy load options available. (Heavy load option shown.)





Proven Technology, Optimum Performance

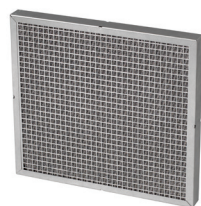
The SmogHog ESP Advantage

Electrostatic precipitation technology (ESP) is the key to the superior performance of the PSG. SmogHog ESP systems are over 95% efficient on mist, smoke and fume removal to keep factory air clean and your processes running at peak performance. Unlike bag or box filters that remove only the largest particles, ESP electrically charges both large and microscopic contaminants, and then strips them from the air stream collecting on grounded collection plates.

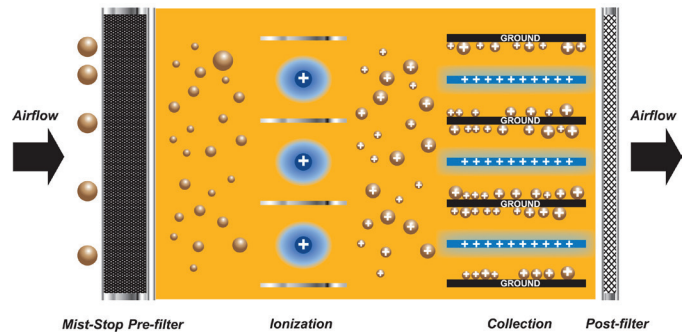
The resulting discharged air leaves virtually no oil mist, grease or hazardous particle untouched, releasing only clean air from the system to help you comply with even the strictest federal, state and local environmental standards and keep your workers safe. The SmogHog ESP technology ensures constant airflow, unlike barrier filters that can plug and become ineffective. Since the ESP cells are washable, reusing the collection cells eliminates costly filter replacements and disposal which allows for a greener environment and increased operational savings.



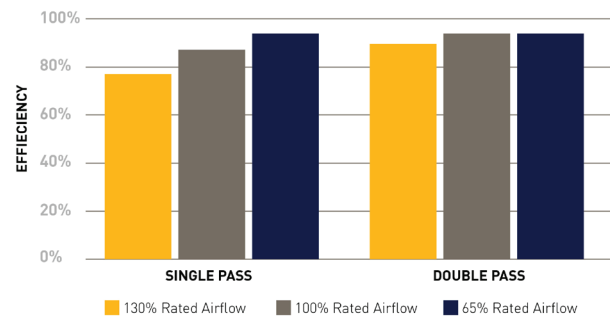
Electrostatic (ESP)
Filter Module



Mist-Stop Filter



Fractional Efficiency at 0.3 μm



*95% efficiency has been independently verified in accordance with EN-1822-5 standards.

Superior ESP Efficiency

SmogHog ESP technology offers proven performance as a superior solution for challenging industrial air pollution control applications. SmogHog ESP technology provides high levels of particle removal efficiency on submicronic particulate (less than 1 micron) which is common in smoke, fume and mist applications. A single pass SmogHog ESP unit removes up to 95%* of 0.3 micron particles while a double pass SmogHog ESP configuration increases the overall removal efficiency to over 97%.

Unsurpassed Collection Technology

It's not just the SmogHog ESP technology that provides superior cleaning. Unlike competitive ESP cells, the SmogHog collection cell plates are aligned more closely to improve collection efficiency. For routine maintenance, the PSG's 40 lb. collection cells are much easier to handle than competitive cells that weigh 80 lbs. or more!

Reliable Power

Only SmogHog includes a self-regulating power pack. This provides continually high collection-efficiency over a variable range of cooking conditions. In the unlikely event of a power pack failure, SmogHog also provides multiple power packs so that the entire system need not be shut down.



Sandia Resort & Casino installation



Nusr-Et Steakhouse Las Vegas



Los Tacos No. 1

Accessories/Options

- Custom control panels
- Custom paint colors
- Fire suppression system
- Inlet plenum with grease impingement prefilter
- In-place cleaning systems
- Insulated weather enclosure
- Motor starter
- Odor control modules
- Outlet transition plenum
- Prefilter options
- Remote start/stop control panel

SmogHog Installations

- Amazon New York and Arlington VA
- Applebee's
- AT&T
- Bryant Park Hotel
- Caribe Hilton Puerto Rico
- Caesar's Palace Las Vegas
- Chipotle
- Empire State Building
- Facebook HQ New York
- Blue Ribbon Sushi Bar & Grill Fairfax District
- Fenway Park
- Fogo de Chao
- Four Seasons Hotel of Boston
- Freedom Tower
- Goldman Sachs Tower
- Google New York
- Grand Hyatt Nashville
- Hearst Tower
- Hilton Palacia del Rio San Antonio River Walk
- Hudson Yards New York
- Juniors
- LinkedIn
- Mandarin Oriental Hotel
- McDonald's
- Mohegan Sun
- Montage Beverly Hills
- Morton Williams
- Neiman Marcus
- Original Farmers Market at the Veggie Grill
- Nusr-Et Steakhouse Las Vegas
- Rockefeller Center Rainbow Room and Ted's Montana Grill
- Ted's Montana Grille
- Sandia Resort and Casino
- SpaceX Hawthorne, CA
- Spotify New York
- The Beast – Miami Florida
- The Grove Los Angeles
- University of Texas
- Urban Space
- USS Intrepid: Sea-Air Space Museum
- Walt Disney World Rainforest Café and La Brea Bakery
- Brea Bakery
- Westin New York
- Whole Foods
- Yankee Stadium

POLLUTION CONTROL LISTINGS/APPROVALS

SmogHog® PSG is certified by ITS. This certification indicates the product has been tested and meets the minimum requirements of a widely recognized (consensus) U.S. and Canadian products safety standard, that the manufacturing site has been audited, and Parker agrees to a program of periodic plant follow-up inspections to verify continued performance.

UL 8782 - POLLUTION CONTROL UNITS

Unit is listed to UL 8782 a requirement of 2021 International Mechanical Code, while also furnished with a UL 762 listed inline or utility set fan with motor and drive mounted outside of the air stream per NFPA96.

FOR COMMERCIAL COOKING.

City of Los Angeles RR8374

City of New York - COA and BEC Approved

UL 710 - Standard for Exhaust Hoods

UL 867 - This Standard addresses the safety of portable and fixed (including duct-connected) electrostatic air cleaning equipment.

Agency Listings/Approvals





Parker Hannifin is committed to providing clean air solutions that protect your customers, employees, and neighbors, eliminate environmental issues, improve plant performance and enable you to improve the value of your venue.

Our commitment is backed by continuous investment in research, leading-edge technology and product development, our people whom are the most knowledgeable in the industry, and a product portfolio that is proven to deliver results. We have been solving problems for you, our customers across the globe for over 50 years.



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