

## Cold Heading and Thread Rolling Solutions Company Gets Clean Air

### Summary

The team at a facility that needed to have most air cleaners cleaned every two weeks and a filtration rate that was often at unacceptable levels reached out to Bee Clean Specialties for help. Bee Clean Specialties has been helping customers with clean air issues since 1977.

### Challenge

A cold heading and thread rolling solutions company was faced with air pollution control issues. They were using a single pass electrostatic filtration system. Using this system, when the filters were clean they could filter out 95% of the sub-micron particles generated by the cold formers. However, once the filtration system in place operated for a few weeks filtration effectiveness began decreasing to unacceptable levels. Additionally, this company had many machines that had too little extraction airflow or simply were not connected to the filtration system.

### Solution

Bee Clean recommended a SmogHog® double-pass electrostatic filtration system, the SGN which improved the filtration and capture of submicron particles to over 99%. Air volumes and ductwork were also improved with the project.

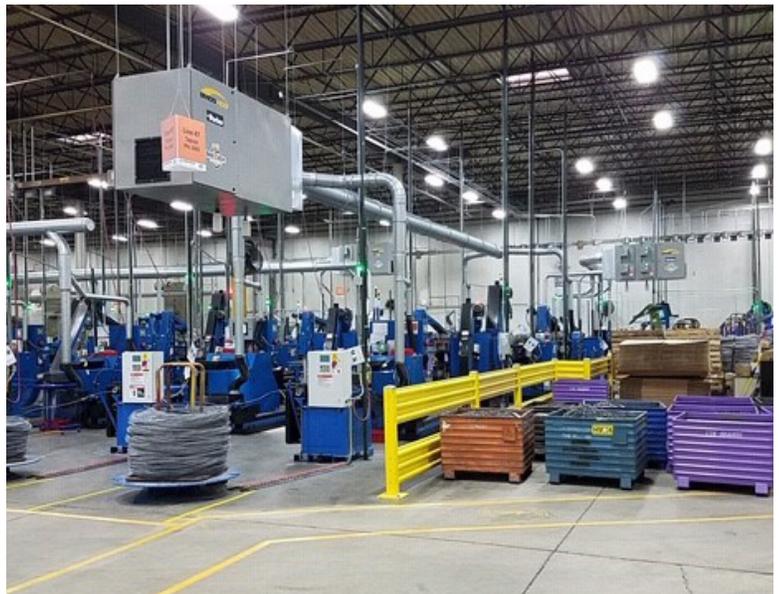
### Impact

Healthy, clean air. The SmogHog SGN delivered improved filtration efficiency to 99+% of submicron particles. The system filters were still achieving the same level of filtration after three weeks. Now service for the first pass filtration is scheduled at 50% longer frequency than previously. Service on the second pass of filters every second or third time we service the first pass, and we still maintain 99% efficiency!

- On a per unit basis the company had the same or lower cleaning cost, plus maintained 99% filtration efficiency
- Air volume was increased to capture all the smoke generated because the new, double pass filtration units have higher efficiency
- Now the dock doors can remain closed during the winter, saving heat and lowering expenses while making employees more comfortable



Before Installation



After Installation

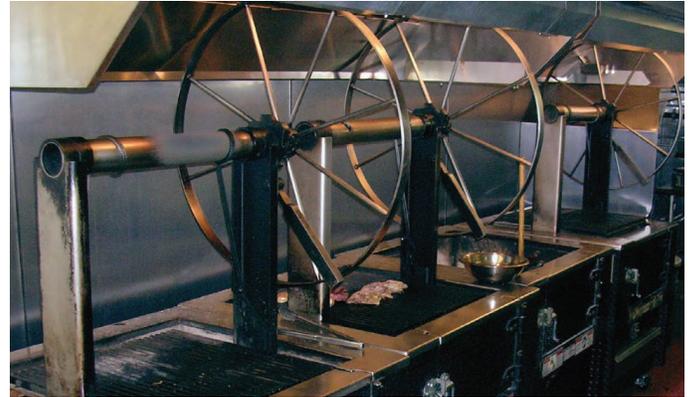
## Kitchen Emission Control Systems

The installation experts planned and coordinated each component of the SmogHog PSG system, preparing the necessary plumbing and electrical requirements in advance of the installation date. Delivery of the system was expedited, and when it arrived at Mas (la grillade), the rooftop installation was completed in less than one day and was operational for dinner service. The SmogHog's electrostatic precipitation technology (ESP) captures smoke, grease, and other contaminants in its 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.

### Impact

The immediate result was the removal of smoke emissions and odor from the cooking operation and the release of treated exhaust air into the surrounding Greenwich Village neighborhood. Needless to say, the neighbors and restaurant owner were both very pleased with the return of clean air. All complaints and threats of shutting down Mas (la grillade) ceased. Finally, the restaurant became a safer and more pleasant place to work, since the proper exhaust volume is now being pulled from the kitchen hoods, improving the environment for employees and patrons.

The SmogHog PSG installation is fully compliant with New York City's air quality standards — as inspected and approved by the Department of Environmental Protection (DEP). The SmogHog equipment is also approved by the city's Materials Equipment and Acceptance (MEA) Agency and certified by the NYC Bureau of Electrical Control. In addition, Parker worked closely with the Fire Department of New York in 2011 to achieve the FDNY Certificate of Approval for the SmogHog PSG, making it a preferred choice for restaurants throughout New York City.



Mas (la grillade)'s wood-burning grills which churn out smoke equivalent to burning four fireplaces year-round.

*“After a flawless and fast installation, the reaction of the neighbors has been immensely positive. We are all able to breathe clean air again, and for that we are extremely thankful.”*

— Eric Blinderman, Mas (la grillade) owner



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