

# **Case Study**

## Customer comes from the Far East to get a "Hog and a Peach" to get air flowing.

#### Summary:

This customer is one of the leading suppliers of electrical protection, sensing, control, and power management solutions in the world. With locations in 12 countries including China, Japan, Korea, and Malaysia, because of both company's global reach, Parker was the logical choice to solve the organization's airflow problems.

### Challenge:

In a facility that supplies power management equipment, airflow maximization and quality are paramount to keeping air clean and safe. When this customer came to Parker, it had multiple competitive ESP systems in one of its facilities with an incompetent ducting design that didn't render enough airflow to equipment. The result was visible coolant both in the air as well as on the parts equipment in the facility. Additionally, the poor performance of the system didn't provide enough airflow for the equipment in the facility to be effective. Employees needed help and reached out to our Parker Distributor.

### Solution:

After assessing the situation, the Distributor recommended the SmogHog<sup>\*</sup> SHM with Peach filters. In this application, the SmogHog SHM is the perfect solution because;

- SmogHog SHM units feature proprietary, state of art coalescing filter media technology in a 100% fully synthetic blend of fibers built into a tubular filter arrangement that optimizes drainage.
- SmogHog SHM united with Peach media filtration provide the best in class particulate removal, higher efficiency, and long filter life.
- SmogHog SHM units easily adjust airflow to optimize system performance without the use of mechanical dampers or complex and expensive variable frequency drives. Rather than operating at full RPM at all times, the fan can be adjusted to operate only when required. Lower speeds mean significant energy savings over mechanical dampers, plus there will be less noise.
- Air volume is measured, and the fan automatically adjusts to maintain a specified target as process or filter pressure drop changes.





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#### Impact:

- The unit only needs to run at 46% blower output to achieve the company's air pollution requirement goals. When the system was designed, it was assumed blower output would run at 75%.
- After 32 months, there is a .84" wc on the primary and a .39" wc with 95% on the final filter (inches of water column is a measurement of how clogged the filters are). These filters are performing exceptionally well and with the above readings there is no need to replace these filters in the foreseeable future!
- The facilities and maintenance supervisor loves the equipment. He's thinking of ordering new filters to have on the shelf for, "whenever he does need them." He's also said, "See how crisp and clean the air is? The (CNC) machines are sparkling clean. No smoke, no nothing. It's gone baby! Well worth the investment!"

**Filter Technology and Performance.** PEACH Saturated Depth Coalescing<sup>™</sup> media provides best in class filtration efficiency, removing over 99% of contaminants, and delivering long filter life.

## Three Airflow Paths Remove Over 99% of Contaminants





#### Axial

Media structure forces a large percentage of airflow to take a stair-step path improving particle removal



#### Helical

The wrapped structure of the fiber matrix creates a corkscrew air pattern that increases dwell time and resulting particle capture





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Air passes directly through

the thickness of the media

removing contaminant

impacting the fiber structure

Radial



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