

# Lowering the Total Cost of Ownership for Commercial Buildings

**Customer Case Study** 



#### **PROFILE**

When purchasing filters for your facility, it is important to work with a supplier with the experience and technical knowledge needed to recommend the right product for your applications and trouble-shoot issues should they arise. Although commercial buildings mostly use air filters, TFS understands the importance of maintaining air quality, as well as consistent airflow throughout the facility to keep tenants safe and comfortable. This case study is just one of many examples where TFS has partnered with property owners and applied its technical capabilities to deliver a filtration solution that meets the customer's needs and lowers their total cost of ownership.

#### **CHALLENGE**

The customer involved in this case study manages a three-building office park located in downtown San Jose, CA, amongst several high-tech companies. Their tenants are primarily attorneys, CPA's, and bankers. In addition to leasing over 416,000 square feet of office space, these commercial buildings offer several amenities, including several large conference rooms, and a fitness center.

Due to the size of the property (5.8 acres), the logistics of changing air filters were a significant challenge for this customer. It was a lot of effort to receive filters, move them to the roof, take dirty filters from the roof to dumpsters, and then make special arrangements for disposal. With three buildings on the same plaza, this process seemed almost endless, as once the third building was finished, it was time to start changing filters at the first building again.

### THE TFS SOLUTION

After listening to the customer's concerns and performing a filter analysis, a TFS filter expert recommended the Viledon MV 85 Nanopleat filter. This product was developed specifically for intake, exhaust and recirculated air filtration in HVAC systems posing stringent requirements for clean air quality and cost-efficiency.

The Viledon MV 85 is a premium filter with pleated HSN filter media that ensures clean, efficiently conditioned air with low-pressure drop and high dust holding capacity. Its sturdy construction ensures optimum performance even under turbulent flow conditions or during load changes.

As a premium filter, the MV 85 has ultra-efficient, energy-saving operating characteristics, but carries a higher purchase price than what the customer had been using previously. TFS strongly believes in delivering the most value possible when identifying filtration solutions, so going with a premium filter is only recommended when a reduction to the total cost of ownership can be demonstrated.



At the time of this case study, TFS had several nearby customers using the MV 85 Nanopleat for their commercial buildings without a prefilter and were getting up to two years of service. However, filter selection is based on each customer's specific needs, not just what a neighboring facility is using, so a cost-savings study was necessary to ensure the new filter would lower total cost of ownership, which involves: shipping, labor, waste disposal, energy consumption, and more.

During the study, the customer provided data regarding rate per KWH for electricity and hours of operation. The customer's purchasing history provided data regarding filters currently in use, change-out frequency and price. This data was used to populate the Viledon Advantage, an energy calculator. The Viledon Advantage demonstrated cost savings in many ways and the customer was invited to make any corrections if they were needed. Furthermore, The Viledon testing service was described and offered for validation. A representative from the manufacturer also joined TFS on a call with the customer to answer any specific product questions and to reinforce the opportunity to lower TCO.

## **RESULTS**

The customer moved forward with the TFS recommended solution to eliminate the use of pre-filters and replace their final filters with the Vildeon MV 85 for all three buildings. This solution resulted in a reduction of their total cost of ownership by nearly \$36,000 in the first year, as well as a reduction of CO2 emissions by nearly 130,000 pounds.

