



## FG IAQ Helps McCarran International Airport Benefit from Substantial Cost Savings

**HIGH-EFFICIENCY, MINI-PLEAT  
FILTERS LAST LONGER, REQUIRE  
FEWER CHANGEOUTS, AND IMPROVE  
ENERGY CONSUMPTION.**

### INITIAL SITUATION

Located in Las Vegas, NV, McCarran International Airport has experienced annual growth for more than a decade and served a record 49.7 million passengers in 2018. To maintain high Indoor Air Quality (IAQ) for a

large volume of customers and employees, the airport's maintenance staff were replacing pre-filters every three months and replacing bag efficiency filters semi-annually. These air filter changeouts were labor intensive and with growth projected to continue for the coming years, cost-effective filtration was becoming increasingly important.

David Alsbury, Airport Maintenance Superintendent, sought new filtration products that would require fewer changeouts and reduce preventive maintenance labor hours. By considering the Total Cost of Ownership (TCO), HVAC customers are able to optimize their operations and save on the complete costs of filtration – including labor, product, maintenance, disposal and energy consumption. McCarran International Airport staff wanted to make sure their system was operating as efficiently and as effectively as possible.

### CHALLENGE

Filterworks, a wholly-owned distribution partner of Filtration Group IAQ, was consulted to determine if there was a product that could better fit their needs. The airport's HVAC system had a 100% external intake and

it was essential that the product effectively remove all contaminants from the outside air.

After assessing the space, energy consumption and reviewing the changeout frequencies, the FP V-Bank mini-pleated filter with a more rigid, longer-lasting plastic frame, was suggested to replace the pre-filters and bag filters. The large quantities of media in the FP mini-pleats made the product a good choice to last longer than the incumbent filters and reduce energy, labor, disposal, and filter costs.

The FG IAQ team provided McCarran International Airport the product to trial at Terminal 3. Time was allowed to compare the new filters to the former and each month the pressure drop of the filters was assessed.

### SOLUTION

With the new mini-pleat filters in place each month it became increasingly apparent that the new product would last considerably longer and save a significant amount of energy. By the 12-month mark, the filters had not required any changeouts. The mini-pleat filters performed to the highest standards for 18 months before needing to be replaced.

## CASE STUDY

### FG IAQ

Air Filtration

MAKING THE WORLD  
SAFER, HEALTHIER &  
MORE PRODUCTIVE



Today, air handler units at Terminal 3 are completely equipped with the high-efficiency filters and the airport has chosen to install the higher-capacity products on the air handler units at the D Concourse. The FP mini-pleat filters have demonstrated a savings of more than \$1,400 per air filter changeout, which is projected to equate to a savings of \$123,500 by Year 3 and more than \$235,000 by Year 4. McCarran International Airport operates with a fully optimized system in Terminal 3 and the D Concourse and the staff can be assured that they have achieved their goals for TCO in these areas.



*THE FP 4V-BANK MINIPLEAT PROVIDES EFFICIENT MEDIA AND INDUSTRY-FIRST DESIGN RESULTING IN HIGH DUST HOLDING CAPACITY FOR LONG LIFE. THIS FILTER CONSUMES LESS ENERGY DUE TO ITS LOW PRESSURE DROP, OFTEN SAVES ALL THE COSTS ASSOCIATED WITH A PREFILTER, AND PROVIDES THE BEST SAVINGS WHEN CONSIDERING TCO.*

“Filtration Group HVAC (now FG IAQ) has allowed us to maintain the highest levels of indoor air quality for our passengers and employees. The mini-pleats have saved us significantly on labor and filter costs.”

**DAVID ALSBURY**

Airport Maintenance Superintendent  
McCarran International Airport

#### United States

Phone: 1 800 739.4600  
Email: [aerostar@filtrationgroup.com](mailto:aerostar@filtrationgroup.com)  
Website: [FiltrationGroupIAQ.com](http://FiltrationGroupIAQ.com)

#### Canada

Phone: 1 888 628.3458  
Email: [inquirycanada@filtrationgroup.com](mailto:inquirycanada@filtrationgroup.com)  
Website: [FiltrationGroupIAQ.com](http://FiltrationGroupIAQ.com)