THE WORLD LEADER IN CLEAN AIR SOLUTIONS

Long-Lasting MEGApleat® M8 Proves to be Just What the Doctor Ordered

CASE STUDY - HEALTHCARE

Customer Profile

- New hospital addition adding 144 beds, outpatient surgery center, cancer care center, palliative care, orthopedics, neurosciences, women's health units, and a cafe.
- Headquartered in Louisville, Kentucky
- One of Kentucky's largest healthcare systems

Situation

With over fifty air handling units (AHUs) to oversee, facility engineers and staff were constantly replacing filters throughout the hospital. The hospital operated a 71,000 CFM AHU with 36 pleated filters that required changeouts every two to three months. Each changeout was costly and took the facility staff away from more critical maintenance work.

In October of 2012, AAF Flanders introduced the MEGApleat M8 filter—the longest-lasting MERV 8 pleated panel filter in the market. AAF Flanders approached the hospital, outlining the cost savings potential of using the MEGApleat M8 filter through AAF Flanders' exclusive Total Cost of Ownership (TCO) program.

Solution

AAF Flanders recommended replacing the hospital's standard capacity filters with the long life and durable MEGApleat M8 filter. The MEGApleat M8 filter is made with a heavy-duty, galvanized expanded metal support grid and moisture-resistant adhesive, making it the strongest filter available—perfect for outside air intake units where moisture may be an issue. In addition, the MEGApleat M8 filter has uniform media with controlled fiber size and blend to eliminate performance variations that impact pressure drop and filter life.



MEGApleat® M8 filters in service over eight months show a resistance of only 0.5" w.g. Standard capacity filters would have been changed out three times at this point.



MEGApleat® M8 filters initially installed. The hospital's AHU utilizes outside air with a small amount of recirculated air.

With a high dust holding capacity (DHC), the MEGApleat M8 filters load at a slower rate, increasing the life of the filter. While the hospital's main concern was the life of its filters, there was an added bonus in the low operating resistance associated with the MEGApleat M8 filters; low resistance means less energy consumption is required, which results in lower operating costs and energy savings.

Benefits

The hospital's study is still ongoing but the benefits were immediately realized. After eight months, a representative MEGApleat M8 filter was pulled from service. The filter was tested by a third-party independent test laboratory for efficiency and resistance per ASHRAE 52.2. Results showed an expected increase in



MEGApleat® M8 Filter

efficiency and a resistance of 0.51" w.g. Based on the results, the MEGApleat M8 filters are expected to last a year in service in this application. Having filters that last a year means the hospital could save nearly \$200 on filter costs alone.

A TCO analysis comparing AAF Flanders to "Competitor K," whose filters are also used by the hospital, showed that the hospital could save over \$1,100 a year for one AHU alone, once you add in energy cost, disposal cost, and the labor cost associated with changing the filters. Implementing this simple change to over 50 AHUs would save the hospital over \$55,000 a year. With savings so high, the MEGApleat M8 filter is just what the doctor ordered.

 $\textit{MEGApleat} \ ^{\circledcirc} \ is \ a \ registered \ trademark \ of \ AAF \ International \ in \ the \ U.S. \ and \ other \ countries.$



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