

THE WORLD LEADER IN CLEAN AIR SOLUTIONS

# Hospital Realizes Cost Savings, Fewer Changeouts, and Less Odors with AAF VariCel M-Pak® Filters

## CASE STUDY – HEALTHCARE

### Customer Profile

- 462-bed hospital
- Part of a major regional healthcare network that includes over 70 facilities
- Internationally renowned, high-tech referral center

### Current Filtration Situation

A hospital needing to upgrade its filtration gave AAF the opportunity to provide a solution for two extremely wet Air Handling Units (AHUs). The units, located in a basement area, were installed with Koch® 95% DuraMAX™ 2V filters and were emitting a musty, mildew type odor requiring frequent and costly changeouts.

### Technical Situation

Due to the wet environment, the Koch filters were quickly loading within three months of installation, causing the musty, mildew type odor that was coming from the HVAC system. In order to decrease the odor, the hospital was forced to replace the filters every three months. The frequent changeouts resulted in higher cost of ownership for the Koch filters. Not only were filters being purchased every three months, there were increased labor costs associated with the additional changeouts.

### The AAF Solution

AAF's key objective was to find an economical solution to relieve the hospital of the costly changeouts and offensive smells. AAF recommended the VariCel® M-Pak filter, a 149 mm-deep filter constructed with a moisture resistant wet-laid fiberglass. The recommend-



VariCel® M-Pak

ed VariCel M-Pak filter can withstand exposure to free moisture in the atmosphere, making it ideal for installation in applications where moisture is an issue. The dual-density media design utilizes the full filtering potential of the media and maximizes dust holding. Maximized dust holding capacity (DHC) extends the life of the filter and minimizes operating costs.

The hospital HVAC staff was presented with AAF's recommendation, along with independent test reports to compare the Koch 2V filter and AAF VariCel M-Pak filters. The staff was hesitant to switch to a 149 mm depth filter, but they were willing to order the recommended filters for a trial in one AHU.

*The VariCel® M-Pak filter has the same media area of a standard VariCel® filter.*



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## The Results

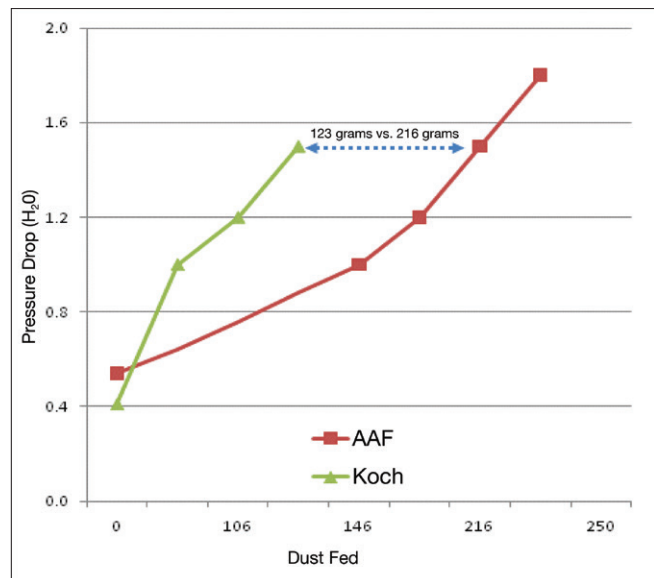
The VariCel M-Pak filter solution was able to capture almost two times as much dust as the Koch filter at a final resistance of 123 grams water gauge. As a result, the filter life was extended, and the hospital was able to utilize the VariCel M-Pak filters for seven months versus three—a significant cost savings for the hospital!

### ...the added benefits

Additionally, the smaller footprint of the VariCel M-Pak filter meant less space required for storage. VariCel M-Pak filters weigh less than traditional filters. That means reduced maintenance cost and time savings, as the VariCel M-Pak filter is easier to handle. As a result of its reduced depth, the VariCel M-Pak filter is packed two to a carton, lowering freight costs and reducing the amount of space required for storage. The VariCel M-Pak filter also reduces disposal costs.

As seen in the graph below, the VariCel M-Pak filter holds more dust than the Koch 2V filter. The hospital ran trials of their own on the filter, and the results were the same. The hospital therefore immediately made the switch to the VariCel M-Pak filters.

Dust Fed vs. Pressure Drop



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