

American Air Filter Case Study Healthcare

Energy Saved at Cancer Treatment Centerwith AAF MEGAcel™ I Filters

Customer Profile

- State-of-the-art Cancer Treatment Center located in Arizona, serving the Western U.S.
- 213,000 sq. ft. facility residing on a 25-acre site
- Center includes 24 private, ICU-capable inpatient rooms; radiation oncology, surgical suites, and infusion center, pharmacy, rehabilitation oncology department and more



Specialized medical practices impose various demands on HVAC systems at health care facilities, which must operate at the highest efficiency. Under new state regulations, Cancer Treatment Centers of America® (CTCA) was required to update its air filtration system at the Western location. The new regulations call for HEPA filtration to be used in the air handling units (AHUs) to maintain a sterile environment when mixing chemotherapy drugs in the surgery area and pharmacy.

The original AHU racks in the surgery area and pharmacy were not designed for HEPA grade filters, but for single header ASHRAE grade filters. The regulation change required single header, HEPA filters that resulted in a custom size filter. These customized HEPA filters were a costly expense for CTCA.

AAF's distributor partner approached CTCA with an energy savings solution using AAF MEGAcel™ I filters. CTCA welcomed a joint call from the distributor partner and an AAF sales representative to explain the energy saving benefits of using MEGAcel I filters, as well as show the potential cost savings through AAF's exclusive Life Cycle Valuation (LCV) program.

The AAF Solution

AAF and the distributor partner recommended replacing the current customized HEPA filter with the MEGAcel I filter. MEGAcel I filters incorporate AAF's unique Helior® filtration technology, a proprietary, durable media, combining ultra-high efficiency with extremely low pressure drop.



Cancer Treatment Centers of America at Western Regional Medical Center.

Lower initial resistance significantly reduces energy consumption resulting in substantial energy savings and cost benefits. Additionally, the racks were replaced with MEGAcel holding frames to maximize airflow.

Energy Saving Benefits

The advantages of switching to the AAF MEGAcel I filters was impressive. The energy required to move the air through the HEPA filter section of the pharmacy AHU reduced from 4.54 kW to 2.27 kW, while the surgery area AHU energy usage reduced from 6.49 kW to 2.92 kW. This was a 50% decrease in energy consumption!

The MEGAcel I filter was the clear solution for the customer. As a result of the decision to install MEGAcel I filters, CTCA is able to order standard sized filters, eliminating the need for customized filters which simplify the ordering process. In addition, CTCA will recognize considerable energy savings using AAF MEGAcel I filters.



MEGAcel I filters installed in Cancer Treatment Centers of America



AAF International Building 9920 Corporate Campus Drive Louisville, Kentucky 40223-4051

Customer Service 888.223.2003 Fax 888.223.6500





AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.

ISO Certified Firm