

Energy Saved at Cancer Treatment Center with AAF Flanders MEGAcel® I Filters

CASE STUDY – HEALTHCARE

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

The Filtration Situation

Specialized medical practices impose various demands on HVAC systems at healthcare 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 Flanders' distributor partner approached CTCA with an energy savings solution using AAF Flanders MEGAcel I filters. CTCA welcomed a joint call from the distributor partner and an AAF Flanders sales representative to explain the energy saving benefits of using MEGAcel I filters, as well as to show the potential cost savings through AAF Flanders' exclusive Total Cost of Ownership (TCO) program.

The AAF Flanders Solution

AAF Flanders and the distributor partner recommended replacing the current customized HEPA filter with the MEGAcel I filter. MEGAcel I filters incorporate AAF Flanders' unique ePTFE Filtration Technology, a proprietary, durable



Cancer Treatment Centers of America® at Western Regional Medical Center.

media, combining ultra-high efficiency with extremely low pressure drop.

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 Flanders MEGAcel I filters were impressive. The energy required to move the air through the HEPA filter section of the pharmacy AHU went from 4.54 kW to 2.27 kW, while the surgery area AHU energy usage went 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. This simplifies the ordering process. In addition, CTCA will recognize considerable energy savings using AAF Flanders MEGAcel I filters.



MEGAcel® I filters installed in Cancer Treatment Centers of America.®

MEGAcel® is a registered trademark of AAF International in the U.S. and other countries.

