

Process Improvement for Hackensack Meridian R & D Building and Medical Plaza

TARGET: REDUCE ENERGY COSTS, IMPROVE LABOR PRODUCTIVITY, AND IMPROVE INDOOR AIR QUALITY

- Reduce energy consumption for cost savings in line with local and hospital initiatives
- Improve labor allocation and use by identifying an air filter solution that provides longer service life, requiring less labor for filter changes and inventory management
- Improve indoor air quality (IAQ) to ensure guideline compliance and reduce the risk for spread of airborne infectious diseases.

A presentation by Camfil, as a HealthTrust GPO supplier, was presented to your facilities department to become familiar with air filtration requirements in a healthcare setting and understand that by using 5-Star energy savings products you can reduce costs and maintain rated efficiency.

General Aire Systems performed a site survey, completed a Life Cycle Cost (LCC) analysis. We noted HVAC conditions and made recommendations for system and application improvement. The site survey was completed for 6 air handling units (total of 282 filter openings) with 2 stages of filtration. The below is based on filter cost only.

The objective was to compare the air filters currently used in the hospital to the optimum Camfil pre and final filter combinations saving on labor, waste, and energy.

FINANCIAL: Solution #3 provides HUMC the lowest total cost of ownership. According to the Department of Energy, for every dollar a healthcare facility saves on energy has the same impact of \$40 in new revenue. The energy savings in solution #3 over your current solution is \$72,710.00. Assuming the above your energy savings equates to \$2,908,400.00 in new revenue over four years. See chart below.

	1: APIII Pre Pleat 4x Hi Flo ES MV 14 Yearly	2: 30/30 Pre Pleat 2x Hi Flo ES MV 14 Yearly	3: 30/30 Pre Pleat 2x Durafil ES MV 14 Every 2 years
Filter Cost 1st Year	\$17,126.49	\$17,178.11	\$31,171.30
Filter Cost 2nd Year	\$17,126.49	\$17,178.11	\$3,792.10
Filter Cost 3rd Year	\$17,126.49	\$17,178.11	\$31,171.30
Filter Cost 4th Year	\$17,126.49	\$17,178.11	\$3,792.10
Total Filter Cost over 4 years	\$68,506.00	\$68,712.00	\$62,343.00
Total Energy Cost over 4 years	\$156,064.00	\$136,826.00	\$83,354.00
Total Cost of Ownership = 4 yr	\$224,570.00	\$205,538.00	\$145,697.00
Total Savings over 4 Years	0	\$19,032.00	\$78,873.00

ACTION: General Aire Systems will continue to work with HUMC facility and procurement teams to provide a seamless transition to the upgraded filter solution.