

HOSPITAL

AIR FILTERS. MAJOR METROPOLITAN CITY-OWNED HOSPITAL REDUCES LABOR BY 60%, CUTS PRODUCT COSTS BY 40%, AND SAVES OVER \$600,000 IN ENERGY.

COMPANY PROFILE

New York City Health and Hospitals Corporation (HHC) is the largest municipal hospital and healthcare system in the country. A network of 11 acute and community hospitals offer quality surgery, rehab and inpatient care Metropolitan Hospitals. HHC's 21st century medical centers are part of the most extensive public hospital modernization program in New York City's history. New ambulatory care pavilions and long-term care facilities, modern labor and delivery suites, and cutting-edge equipment and technology provide modern comfort for patients and allows optimal delivery of safe, efficient, quality services.

THE SITUATION

To meet the commitment made to HHC, the corporate facility management company was seeking ongoing cost savings. Recent efforts to reduce filter program costs through pricing events yielded only minor product cost reductions that were quickly offset by increases in other costs. Converting to lower priced/lower performance filters only increased overall filter program costs due to increases in energy, labor, and equipment maintenance. Faced with ongoing reductions in Affordable Care Act reimbursements, escalating expenses, and an increased demands on maintenance personnel, the facility management company realized the need to re-direct their focus toward high performance air filtration products that would require less frequent changes and would operate at lower resistances. They also realized the need to partner with an air filter vendor capable of accurately predicting optimum product life cycles and providing documentation that proved significant cost reductions to the facility management company's customer.

THE ACTION

Camfil, the corporate air filter contract holder, was asked to survey the 18 facilities to make recommendations. Camfil representatives proposed various filter combinations based on individual airflow, contamination levels, particle capture requirements, and equipment configurations. The recommendations were accumulated in a comprehensive report detailing the ideal total cost of ownership solution for every air handler in the 18 hospital organization. An analysis was included showing accumulated cost reductions for all 18 locations.

THE RESULT

Working closely with Camfil enabled the facility management group to justify that the higher price of the high performance filters would quickly be offset by overall reductions from longer filter life, more efficient particle capture, and system fan speed reductions due to lower system resistances. Camfil proved labor reductions of 70%, overall product cost reductions of over 40%, and a five-year energy savings of close to \$600,000.





"HHC's facility management company worked with Camfil to prove a five year savings of almost \$2 million."





THE PROOF

Side-by-Side Comparison

After surveying every air handler in the HHC network, Camfil's proprietary Life Cycle Cost analysis software was used to model the current airflow, contamination levels, particle capture requirements, and equipment configurations. Using the result-

ing model, Camfil developed an optimum solution for every individual air handler in the network. To confirm the proper solution was recommended throughout HHC network, Camfil documented the product, labor, and energy savings in detailed spreadsheets for all 18 locations. The

data collected compared the total cost of ownership of the current filter combinations to the optimized Camfil solutions. The five year cost analysis proved a significant savings of almost \$2 million in total product, labor and energy costs for all 18 HHC locations combined.

| FIVE YEAR COST ANALYSIS SUMMARY | | | | | | | | | |
|---------------------------------|------------------------|-----------|-----------------------|-----------|-------------|--------------|-----------|------------|-----------|
| SITE INFO. | CURRENT SPEND ESTIMATE | | CAMFIL SPEND ESTIMATE | | SAVINGS | | | | ENERGY |
| Care Site | Product | Labor | Product | Labor | Product | Product % | Labor | Labor % | Reduction |
| Bellevue | \$369,170 | \$64,295 | \$310,746 | \$30,142 | \$58,424 | 16% | \$34,153 | 53% | \$275,710 |
| Woodhull | \$320,078 | \$77,470 | \$260,512 | \$30,142 | \$59,566 | 19% | \$47,328 | 61% | \$(1,872) |
| Elmhurst | \$161,946 | \$34,710 | \$82,190 | \$10,939 | \$79,756 | 49% | \$23,772 | 68% | \$9,189 |
| Segundo Belvis | \$23,643 | \$7,780 | \$17,414 | \$2,065 | \$6,229 | 26% | \$5,715 | 73% | \$9,175 |
| Morrisania | \$33,652 | \$11,000 | \$17,063 | \$2,250 | \$16,589 | 49% | \$8,750 | 80% | \$3,901 |
| Jacobi | \$217,630 | \$37,930 | \$101,731 | \$16,592 | \$115,899 | 53% | \$21,338 | 56% | \$80,227 |
| Harlem | \$431,301 | \$104,490 | \$139,173 | \$18,007 | \$292,128 | 68% | \$86,483 | 83% | \$14,177 |
| N. Central Bronx | \$202,094 | \$52,315 | \$172,423 | \$14,604 | \$29,671 | 15% | \$37,712 | 72% | \$(1,448) |
| Queens | \$99,174 | \$31,315 | \$103,350 | \$11,200 | \$(4,177) | -4% | \$20,115 | 64% | \$87,423 |
| Gouverneur | \$28,025 | \$5,275 | \$32,501 | \$2,638 | \$(4,476) | -16% | \$2,638 | 50% | \$16,673 |
| Seaview | \$21,962 | \$2,990 | \$17,147 | \$1,474 | \$4,815 | 22% | \$1,516 | 51% | \$11,890 |
| Lincoln | \$344,842 | \$90,805 | \$234,106 | \$19,153 | \$110,737 | 32% | \$71,653 | 79% | \$54,163 |
| Cooler | \$26,479 | \$9,465 | \$13,442 | \$4,395 | \$13,037 | 49% | \$5,070 | 54% | \$28,810 |
| Coney Island | \$135,277 | \$10,790 | \$62,056 | \$5,182 | \$73,221 | 54% | \$5,608 | 52% | \$59,582 |
| Susan McKinney | \$14,715 | \$5,220 | \$15,170 | \$1,450 | \$(456) | -3% | \$3,770 | 72% | \$22,513 |
| Henry J Carter | \$146,561 | \$22,160 | \$106,578 | \$9,715 | \$39,983 | 27% | \$12,445 | 56% | \$29,454 |
| Renaissance | \$736 | \$5,220 | \$834 | \$280 | \$(98) | -13% | \$4,940 | 95% | \$3,129 |
| Kings | \$607,892 | \$78,295 | \$326,926 | \$33,943 | \$280,966 | 46% | \$44,353 | 57% | \$145,591 |
| TOTAL | \$2,495,927 | \$509,760 | \$1,442,104 | \$153,884 | \$1,053,823 | 42% | \$355,876 | 70% | \$574,449 |

