



CASE STUDY · BIO-AUTOMATION

A PREMIER CANCER CENTER IN NEW YORK CITY



AIR HANDLERS

30

TOTAL CFM

810,000

AVERAGE PRESSURE DROP

45%

CASE STUDY

OVERVIEW

SITE

A premier cancer center in New York City

AIR HANDLERS

30

TOTAL CFM

810,000

ELECTRICITY PER KWH

\$0.20

The cost of fouled coils

Most facilities lose \$50,000–\$500,000 per year to coil fouling, which restricts airflow and heat transfer, increases equipment wear and tear, and reduces indoor air quality.

The Blue Box approach

Blue Box is a coil management platform that penetrates deep coils and automates them so they stay self-cleaning. Our patented system is chemical free, odorless, and causes no disruption to facility operations.



WHAT WAS DONE



1 DEEP CLEAN

Blue Box technicians injected our odorless, chemical-free enzyme foam into the coils while the systems stayed on.

- Perfect surface area coverage
- Breaks down bio-fouling
- Fully restores airflow and heat transfer



2 BIO-AUTOMATION

After the deep clean, technicians installed a control panel, an enzyme reservoir, and nozzles upstream of the coils.

- Easy to install
- No need to connect to the BMS
- Refill the enzyme reservoir once a year



3 WEEKLY BIO-TREATMENT

Enzymes are injected as a fine mist once a week. Regular treatment keeps microbes from re-fouling the coils.

- pH neutral
- Odorless
- Non-corrosive

45% AVERAGE PRESSURE DROP

AVERAGE PRESSURE DROP

45%

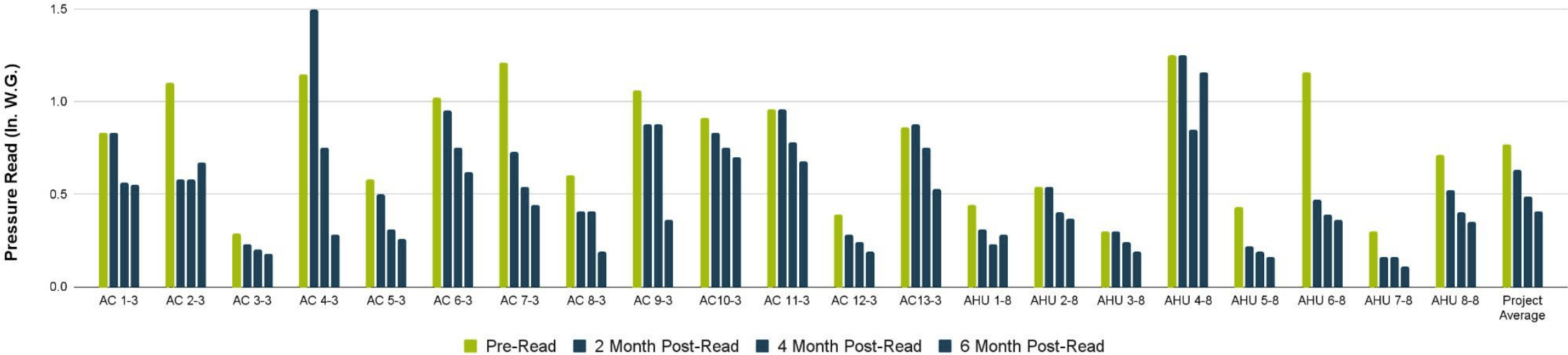
AVERAGE AHU SIZE

27,000 CFM

AIR HANDLERS

30

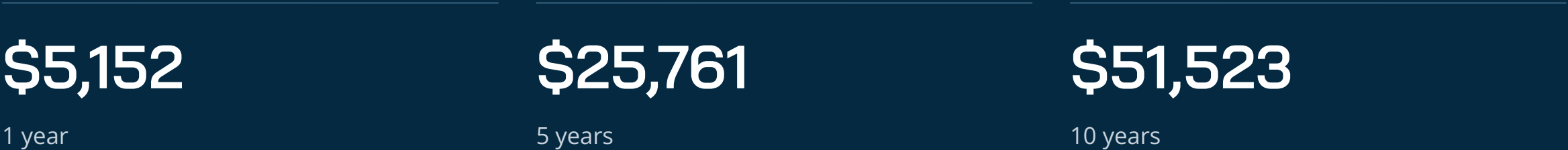
Pressure read by unit (in. W.G.): pre-read and 2, 4 and 6 month post-reads



PROJECTED PROGRAM SAVINGS



AVERAGE SAVINGS PER AIR HANDLER



Projected savings at \$0.20 per kWh.

FAN & COOLING SAVINGS

FAN SAVINGS

\$73,906

369,529 kWh

COOLING SAVINGS

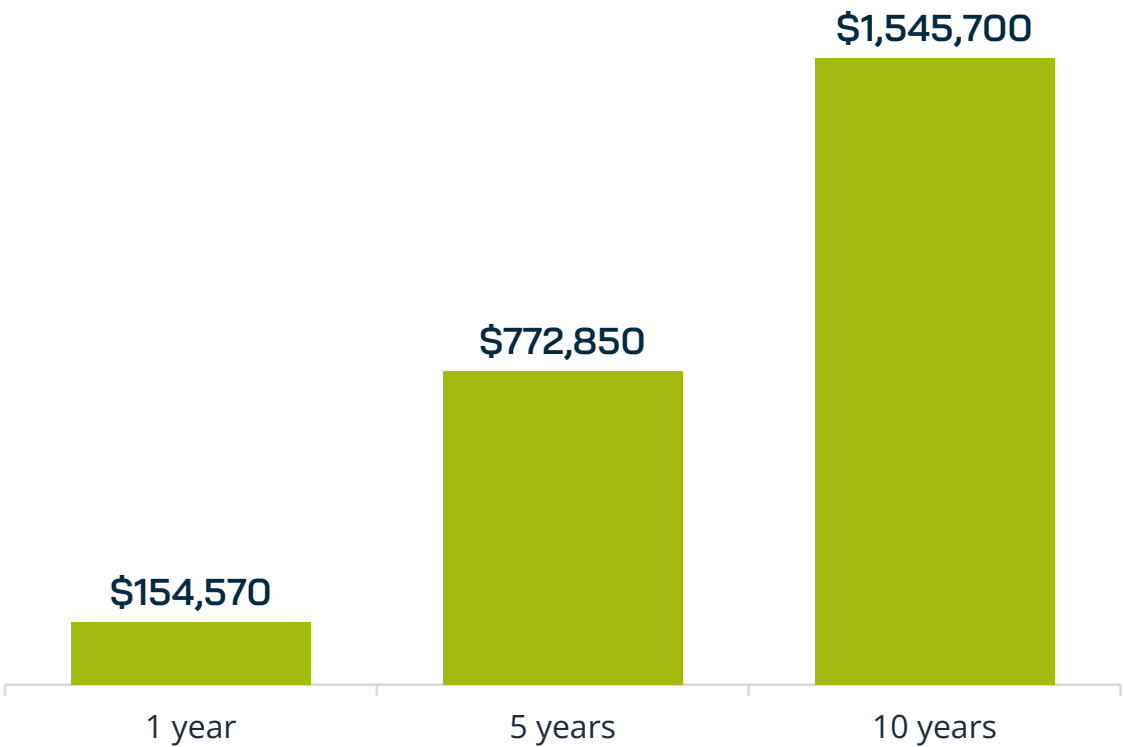
\$80,664

403,309 kWh

YEAR 1 PROJECTED TOTAL

\$154,570

Projected program savings



RESULTS · OPERATIONS

OPERATIONAL SAVINGS

- Reduced labor
- Lower energy costs
- Extends capital equipment life

Blue Box's coil management platform can be applied to any type or size of HVAC system.



BLUE BOX

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