TAMPA BAY HOSPITAL AIR HANDLER RESTORATION SAVES CAPITAL

Completion Date:
2023

Building Type:
Healthcare

Tampa Bay, Florida

The Challenge:

To improve their facility operations, a 479-bed hospital in Tampa Bay conducted a series of energy and performance surveys to understand the energy efficiency of their building systems. During the study, two air handler units were identified as candidates for replacement due to their degraded condition.

Drain Pan before

Drain Pan after

The Solution:

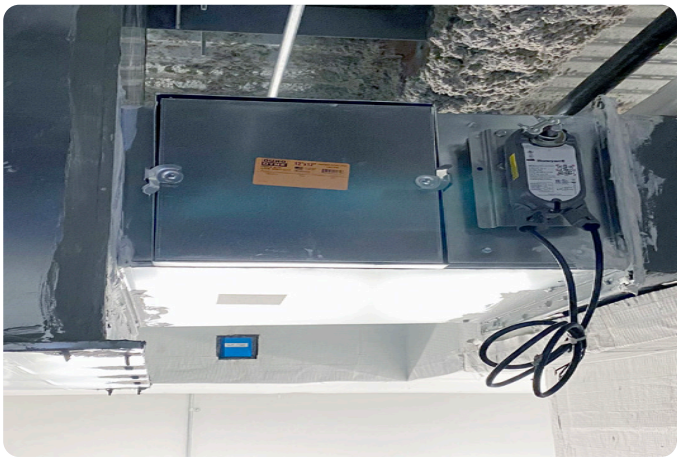
After further review, it was determined that the hospital's air handler units could be restored rather than replaced to minimize cost and disruption while still upgrading the system's efficiency. Using WTI Pure Air's HVAC New Life program, the restoration process was phased out over consecutive nights to clean, refinish and restore the AHUs without losing supply air during peak operating hours.

Project Photos:

Blower wheel before

After high performance coatings

Damper before



Damper after

The AHU Restoration Process

The process began with HEPA-vacuuming the interior of the AHUs, followed by airflow resistance readings across the cooling coils using a Coil Cleanliness Verification (CCV) test. After sanitizing the interior and cooling coils, CCV readings were retaken to confirm improved performance. Metal components, including condensate pans and exteriors, were refinished with antimicrobial, corrosion-resistant polyurethane coatings designed for HVAC equipment. The AHUs were also retrofitted with new outside air dampers and upgraded control components.

Ultimately, the hospital's two AHUs were restored in less time and at a fraction of the cost of replacement, achieving a remarkable 76% capital avoidance. By choosing HVAC New Life, the hospital saved significant capital while ensuring their refurbished units will deliver reliable service for years to come, benefiting both patients and staff.