IAQ PARTICLES

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Deep Cleaned Coils

An Alternative to Expensive HVAC Coil Replacement

Many commercial air handler units contain coil systems 6 inches thick or greater. Over time, particulate can become packed deep inside a coil's interior restricting airflow and reducing performance efficiency of the air handler unit. Traditional methods employing "High Pressure" power washing may clean the coil's outer surface; however, pressure drop measurements taken across the coil after cleaning indicate airflow remains restricted.

PART's cleaning process penetrates deep inside a thick coil releasing particulate trapped within its core and restoring pressure drop values and airflow characteristics similar to a newly installed coil system. Our "Deep Cleaned" process includes high volumes of water at low pressures, longer dwell times for pre-rinsing and cleaner application steps, and the use of non-corrosive KOH foaming cleaners.

Coil cleaning typically costs less than 5 percent of coil replacement. Improved performance of a building's air handler units has been shown to reduce utility costs by 30 to 40 percent.

How does a "Deep Cleaned" coil system save utility costs and improve a building's air quality?

- Elimination of the sludge typically trapped inside a coil's matrix can significantly increase the lifetime of the coil.
- Cooling and heating efficiencies are improved. As a result, Variable Air Volume boxes (VAVs), Fan Terminal Units (FTUs), and/or Mixing Boxes are required to provide less secondary heating or cooling to achieve comfort zones.
- Blower assembly and motor speeds can be reduced, reducing energy use and increasing the lifetime of these expensive components.

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DEEP CLEANED COILS

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- Enhanced condensation capability of the coil eliminates water/moisture "carry-over" downstream of coils. This reduces rusting of the coil system, condensation of water on ductwork walls and lining, and the relative humidity level in buildings. These are the leading causes of mold and bacterial growth inside HVAC systems.

In summary, methodologies exist that significantly reduce pressure drops, increase airflow, and efficiently remove impacted materials from the core of severely restricted thick coils in commercial sized AHUs. Compared to the cost of coil replacement, the savings are substantial.

PART Capabilities

HVAC System Cleaning and Maintenance Services

- Air Handler Unit Cleaning and Disinfection
- Commercial Coil Cleaning - Deep Cleaning (6-inch coils or greater)
- Fiberglass Lining Repair or Replacement
- Air Duct Cleaning and Disinfection
- Microbial Remediation of Lined Ductwork
- Fire Damper Cleaning

If you experience complaints of particulate release, odors, or elevated levels of airborne mold, please contact **Barry Harris** by phone at **636-305-8881** or by e-mail at **barry.harris@part-llc.com** for a Free Inspection of your HVAC System and building. Our published paper is available via e-mail upon request.

HVAC Cleaning
Asbestos & Lead-Based Paint Abatement
Microbial Remediation

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