## AIPR culs

## There is a cost when operating dirty air conditioning \& refrigeration equipment.

## Clean Coils Save Money

Having indoor air quality problems? Operating costs increasing? Air conditioning not cooling enough? It could be due to dirty air conditioning/refrigeration coils and condensate pans.

Both condenser and evaporator coils are engineered for performance according to the area being cooled. However, optimum performance is predicated on having clean coil surfaces.

The air moving across coils will, in most cases, contain dust, dirt, pollen, grease, and moisture. These airborne contaminants settle on the coil surfaces, adversely affecting the coils' ability to function properly.

Pollen, bacteria, and mold spores on evaporator coils will not only reduce functionality, but will also affect the indoor air quality. Additionally, dirty condenser coils increase power costs.

Equipment operating with dirty coils can use more than 30\% more energy than equipment with clean coils.

The Costs of Dirty Coils Add Up
The cost of dirty coils goes beyond energy use. Dirty coils can cause the compressor to work harder, which increases the head pressure.

Rising head pressure results in a loss of cooling capacity of up to $30 \%$, which will be most noticeable on hot days when cooling is needed the most.

Higher operating pressures and temperatures may also reduce the equipment's life expectancy by leading to the breakdown of the compressor's lubricant.

Additionally, acid formation can occur, leading to an acid burnout. Lubricant breakdown and acid formation will seriously compromise the compressor and ultimately lead to equipment failure.

## Choosing the Right Cleaner

Coil cleaners are divided into two categories, acid and base (alkaline). Acid types are usually made with hydrofluoric acid. They are typically much more dangerous than alkaline types and not recommended by most equipment manufacturers.


The alkaline group is divided into foaming coil cleaners (caustic) and non-foaming detergent cleaners. The caustic formulations use sodium hydroxide and tend to be more aggressive than detergent products.

Always match the coil cleaner to type of cleaning required. Have questions? Contact your local HVACR wholesaler for specific answers.

## Safety Comes First

When working with any chemical cleaners, use safety measures and follow label directions such as using face shields, chemical gloves, respirator masks and proper clothing. Chemical-resistant safety boots protect feet when standing near coils during the cleaning application and the rinsing away of any residual cleaners.

Keep all SDSs in a clear protective cover fastened in the same storage area as the chemicals in your service vehicle. Be prepared to handle first aid emergencies and review safety procedures annually.

## When to Rinse Coils:

Evaporator Coils: When using non-evaporator cleaners. Condenser Coils: When using any coil cleaner.
Air Filters: When using any coil cleaner.


6601 COBRA Foaming Alkaline Condenser Coil Cleaner


6606 RATTLER Evaporator Coil Cleaner


2720 GREENSCAPES Concentrated Neutral Cleaner (condenser \& evaporator)


2050 CHARGE
Condensate
Drain Cleaner


5430 COPPERHEAD Foaming Coil Cleaner


5410 COBRA Water-Based Evaporator Cleaner


5470 PYTHON EZ A/C CARE EPA Evaporator Coil Cleaner \& Disinfectant


5390 SIDEWINDER Foaming Evaporator/ Condenser Coil Cleaner

