

### Introduction

Condenser and evaporator coils are an integral part of HVAC systems, and one of the quickest and safest ways to maintain them is through a comprehensive coil-cleaning program. Even the best, most expensive system will not reach its optimum performance without proper maintenance, and a building's heating and cooling systems account for 60 to 70 percent of its total energy use.

But, HVAC systems are not the only cooling coils that benefit from regular maintenance. Process cooling equipment like blast chillers and refrigeration equipment greatly benefit from scheduled maintenance to maintain peak efficiency. It is certainly not an area to cut corners.

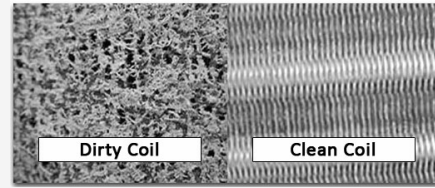
Rising energy costs and the accumulation of dust and debris in the coils or ducts are two indications that it is time to clean your system. It also is important to keep the process equipment clean and free of any contaminants or potential hazards for safety and health reasons. You do not need to wait until red flags like rising energy costs to appear, however. You can be proactive and address the concerns before they become an issue to ensure a clean and safe processing or manufacturing environment..

<http://www.process-cooling.com/articles/88908-spring-maintenance-to-do-coil-cleaning>

### Cleaning Air-Handler Coils

- ☐ Be sure the system is shut down.
- ☐ Locate the air handler and make sure there is proper access to get close to the coils.
- ☐ Eliminate any dry debris by using a vacuum to clean coils and fins.
- ☐ Be sure the condensate pan and lines are free from blockage before you begin cleaning.
- ☐ High pressure cleaning equipment can damage delicate fins, and high flow units can overwhelm drain pans. Consider a coil-cleaning system that delivers around 125 psi and 0.5 gal/min.
- ☐ Apply noncaustic, nonfuming coil-cleaning chemicals and let them sit for a few minutes to penetrate. Pay close attention to the instructions on the coil cleaner.
- ☐ Thoroughly rinse off the chemical and repeat the cleaning if necessary.
- ☐ Treat coil and plenum with an EPA-registered mold inhibitor to prevent bacterial and mold growth.
- ☐ Clean the condensate pan and drain line. Use drain pan biocide tablets to minimize the risk of future blockage and flooding.
- ☐ Restart the system and get back to business

### Clean & Dirty Coils



### Cleaning Condenser Coils

- ☐ Be sure the system is shut down.
  - ☐ Make sure there is access to water and power to use with the coil-cleaning system.
  - ☐ Avoid high pressure cleaning systems that can damage fins. Consider a cleaning system that produces 400 psi at around 3 gal/min in order to flush out dirt and debris.
  - ☐ Apply noncaustic, nonfuming coil- cleaning chemicals and let them sit for a few minutes to penetrate. Pay close attention to the instructions on the coil cleaner.
- Flush coils with water, working opposite the airflow to push dirt out the way it came in.