



Preventative Maintenance, Like it or Not!

Whether you call it preventative, routine or planned maintenance it is likely everyone reading this is familiar with the benefits of maintenance to mechanical systems. As Spring approaches (the start of cooling season in some areas of the country), it should be a priority.

During the inspections and site visits that often result from programmatic maintenance, there is a lengthy list of important, if not essential, tasks to be completed. Regardless, things get missed, forgotten or poorly **executed** by your competitors...

On the other hand, there is also a chance inadequate budgets force the use of another name to describe the problem...**Deferred Maintenance! It's just a** way to describe "to complete tomorrow what should have been done today..." (*sounds like my college years!*)

In highlighting the public sector, statistics from Government Accounting Office (GAO) suggest K-12 schools deferred \$500 billion worth of maintenance and upgrades (not just HVAC Systems) nationwide, and the US Federal Government facilities have nearly \$200 billion in deferred maintenance.

Deferred maintenance can lead to inadequate airflow which results in any and all of the following...

- *Premature compressor failure*
- *Liquid Slugging/Compressor Floodback*
- *Coil frosting*
- *Erratic TXV operation (hunting)*
- *Low Superheat*

Without adequate airflow across the evaporator coil (regardless the reason), refrigeration circuit and system performance will be compromised; not forgetting that operating efficiencies drop significantly also.

The addition of the APR Control could be one of the best preventative choices a contractor or facilities management firm can offer. Adding the APR Control (during the maintenance process) offers capacity modulation that makes the system capable of responding to and eliminating the impacts of low airflow.

One of the excellent contractors with whom we at Rawal Devices, Inc. have worked for years recently told us about a project they had installed but lost the maintenance contract for after the original installation. The system had included an APR Control for performance benefits. They were called back to



the job years later to investigate a system (the system they had originally installed) that was not cooling properly. Turns out that little (or no) maintenance had been done on the system for years resulting in plugged filters and poor blower operation. The only thing that had saved the system, the refrigeration circuit and compressor in particular, from grinding to a complete failure, was the benefits of the APR Control that had been installed on the system at the outset. With limited other safeties in place, this was the ultimate in refrigeration circuit and compressor protection.

APR Control is available for new and retrofit applications...