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Tis' the Season to Start Your Air-Cooled Chillers

Monday Morning Minutes | by Norm Hall, April 12th, 2021

Many air-cooled chillers do not have glycol and are drained for the winter season. Most cooling towers are also drained for our cold winter months. This might be a great time for engineers and contractors to contact their customers about the proper way to fill and start up these pieces of equipment.



Air-Cooled Chillers System Fill

We interact with many owners for parts and small service issues they may have. One thing we see too many times is a maintenance person who is responsible for chiller startup with little instruction. The scenario is simple. It is time to change over from heating to cooling. They open the shutoff valves on the outdoor chiller and start the pump to fill the pipes. The pump growls and shakes, but eventually starts pumping. Meanwhile, 10 cubic feet or more of air was pushed into the "closed" system. Now the maintenance person carries a hose around for weeks to bleed the system as tenants complain.



BirminghamPierce Middle School Chiller

This can and should be avoided. Prior to opening the shut-off valves, connect a hose to a drain connection at the chiller. Open a vent in that same chiller piping. Fill the pipe with water and then close the vent. Now open the shutoff valves and wait for the fill valve at the expansion tank to re-adjust the pressure. Depending on the system size this could take a couple of hours to a day. Now start the chilled water control valves and pumps.

Satisfy Your Client and They Will Notice

This can be designed into a new project to make it easier for the customer, your client. Visit the R. L. Deppmann Monday Morning Minutes article [Hydronic Primary/Secondary Heating-Cooling \(Chiller\) Changeover Systems.](#)

Meanwhile, for your existing clients and customers. Drop this start-up tip in your newsletter or email a copy as a value you provide for them.