



Walker Station Scale Prevention

Customer: Walker Station, Fort Bend ISD, Texas

Category: Commercial

Application: Cooling Tower and Chiller Installation



US Case Study



The Challenge: Walker Station was struggling with heavy scaling issues in their HVAC cooling tower / chiller system despite the use of scale prevention chemicals. The system was so heavily scaled and corroded that following a system assessment it was determined that replacement of the system would be more economical than repair.

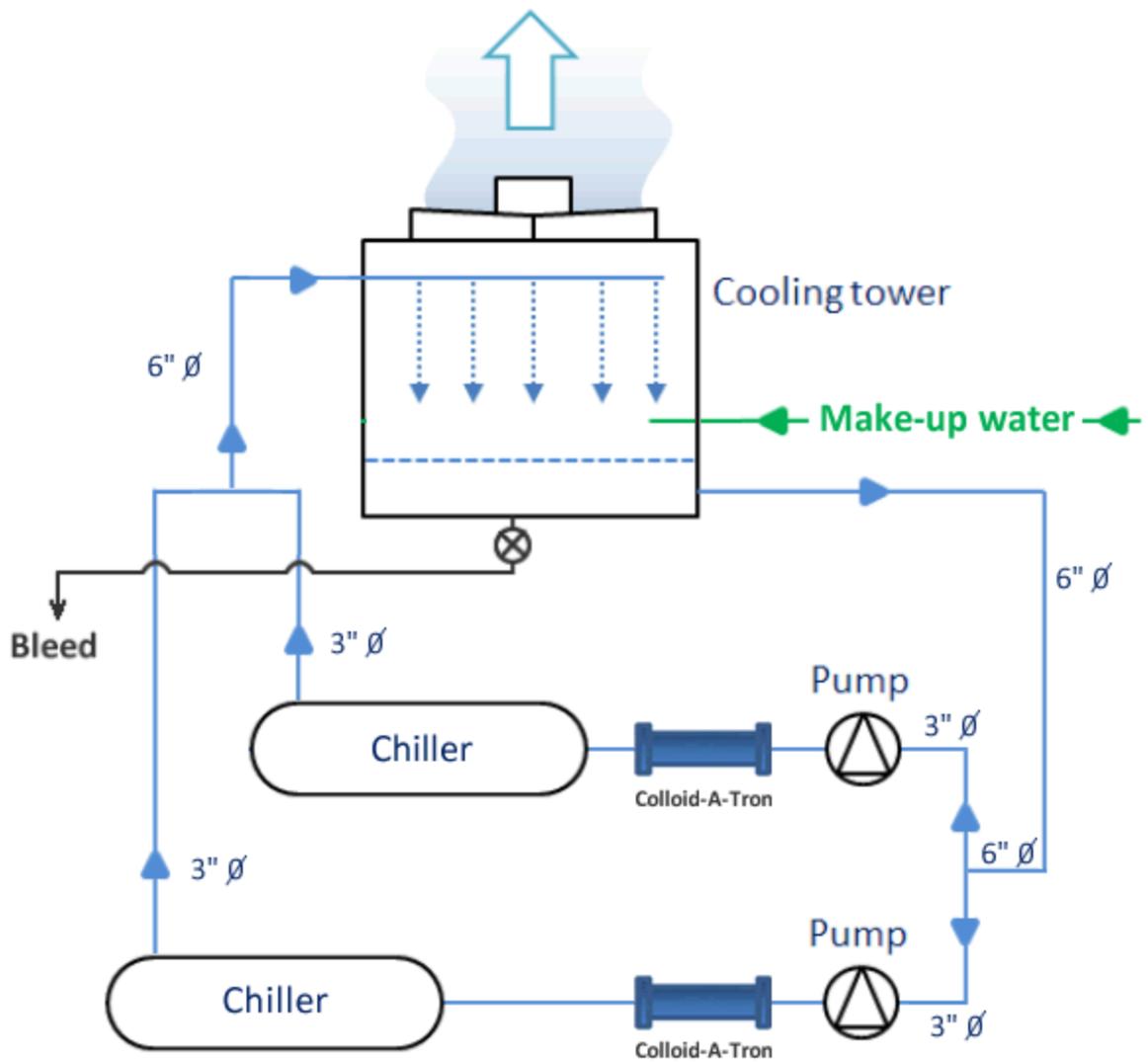
As chemical dosing had failed previously to protect their equipment from the damaging effects of scale, Fluid Dynamics were called in to provide a chemical free environmentally friendly alternative by an engineering contractor familiar with their successful scale prevention technology.

The Solution: Following an assessment of the water using the Fluid Dynamics Expert 5 simulator two 3" Colloid-A-Tron units were specified for installation after the circulating pumps (as shown in the diagram on the following page). The units were installed at the same time as the other new equipment in February 2013.

Results: Since the new system went back on line the operators have maintained their cycles of concentration within the range recommended by the Expert 5 simulator program. As a result the cooling tower and the system as a whole has remained scale free to this day without the use of scale prevention chemicals. In addition, the use of the Fluid Dynamics Colloid-A-Tron's has allowed the consumption of algaecides and biocides to be reduced by 50% providing additional cost savings while further reducing the environmental impact of the system.

Installation configuration follows...





Walker Station Installation