

Is your closed loop system **LOSING WATER?**

Closed heating and cooling water systems typically require little makeup water and minimal chemical additions following the initial system charge. However, when leaks occur, it can be costly and difficult to maintain the treatment levels necessary for corrosion, deposit, and microbiological control.

HOW TO IDENTIFY YOU HAVE A LEAK?

Makeup Water Meter



Unexpected increase in makeup water usage. (Some water meters will not measure water losses unless they are significant.)

Water Chemistry



A decrease in both conductivity and inhibitor levels (e.g., nitrite, molybdenum) usually indicates a water loss.

HOW TO FIND LEAKS?



Check the expansion tank. A full expansion tank can result in water losses due to over-pressurization



Check all automatic air vents to see if they are leaking water. Some air vents may be hard-piped to the drain.



Check any liquid in air handler condensate drain pans for indications of a closed system leak (conductivity, pH, inhibitor, color).



Check the backflow preventer for leaks.



Check all circulating pumps for leaks around packing seals.



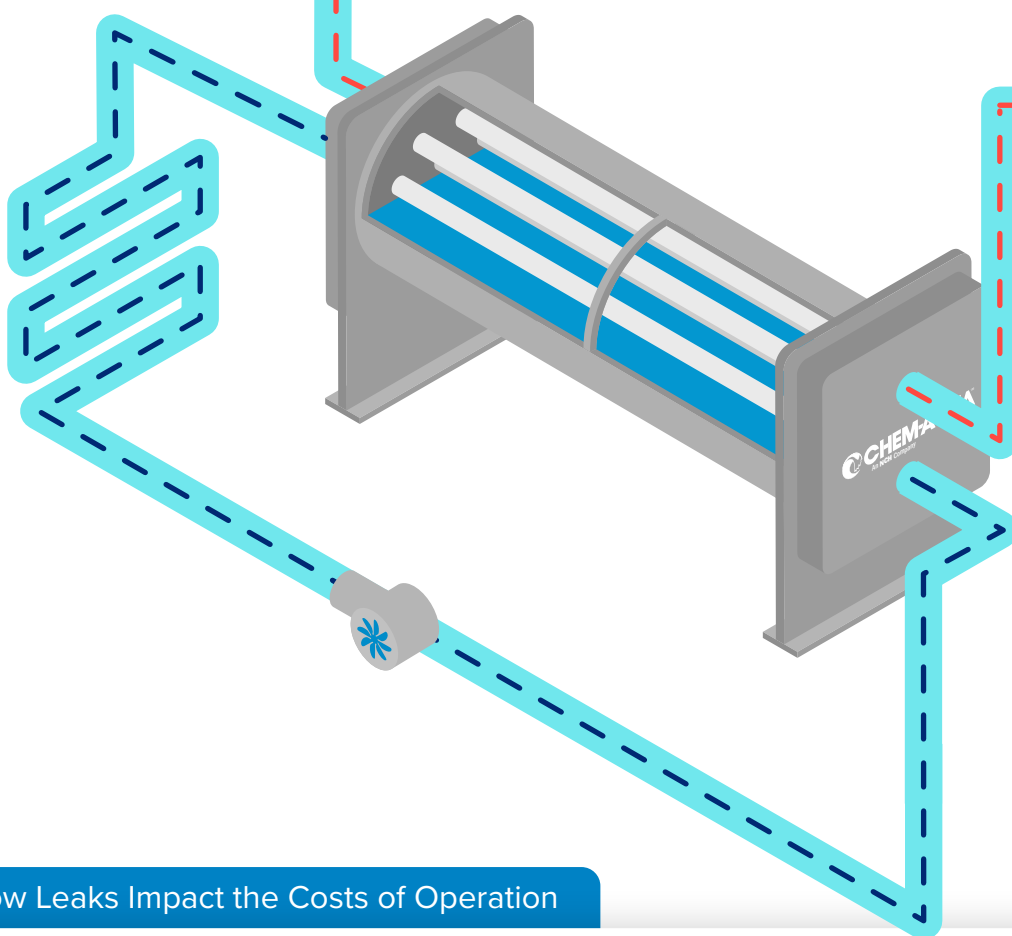
Check all pressure relief valves for leaks.



Check to make sure you are NOT backwashing filters with system water.



Where steam is used to heat a hot water system (via a heat exchanger), check for contamination in the various boiler system waters.



How Leaks Impact the Costs of Operation

While closed loop systems are designed to minimize water loss, even a small leak can result in significant water usage if allowed to continue. Water chemistry added for corrosion, deposit, and microbiological control are lost with the water as well, leading to an increase in water treatment chemical usage and potential equipment damage and system downtime. Lastly, the addition of fresh makeup water may introduce fresh corrosion, deposit, and microbiological contaminants to the system.

For help identifying, addressing, and preventing future water loss from your closed loop system, contact Chem-Aqua today.

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