

## Technical Articles & Hot Topics

## **Filtration for Closed Loop Systems**

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The closed loop system is a vital yet often overlooked system when it comes to preventative maintenance. Depending on the design, closed loop systems can be used to heat or remove heat from a building. Closed loops also are used in various process type systems such as plastic injection molding. When the closed loop is not maintained properly, it can result in problems like corrosion and have serious and sometimes expensive consequences for the property.

Side-stream filtration for a closed loop is recommended to minimize the risk of corrosion, fouling, and/or plugging of system strainers, valves, and heat exchangers caused by foreign debris and contaminates in the water. Filtration can help remove some of these harmful contaminates, reducing the risk of system issues.

It is not always necessary to perform a drain and flush on a closed loop when the system is fouled with corrosion and foreign matter. Sometimes filtration will get the job done without having to flush the system.

Different filtration units are available for closed loop systems at a reasonable cost. The most common is a chemical bypass or pot feeder with a filter attachment. These provide a way to add treatment and filter your closed loop system. They come in cartridge and rope wound filters and typically vary from 1-20 micron filtration rating.

There are multiple stainless steel filter units for different size systems as well. These are constructed of high quality stainless steel and hold several filters at once. They tend to cost more money; however, they provide much better filtration than a standard single bypass filter unit.