



Closed Loop System Products

A closed loop system is a cooling or heating system with minimal losses and therefore minimal water make up. Typically these systems are pressurized. Other types of loop systems where there are significant losses or where the system is not pressurized and open to the atmosphere will require specialized treatment programs not necessarily covered here.

An example of a closed loop system is a hot water heating system or chilled water system. A treatment program for closed loop systems will address the following:

- Corrosion - this can be due to dissimilar metals, galvanic, microbiologically induced or other.
- Scaling - this most commonly occurs as calcium carbonate but includes all types of mineral scale. The source of the scale may be from the make-up water or may be from insoluble corrosion products from within the closed loop system.
- Fouling - the most common source of fouling is microbiological growths. The most common microbiological growth in a closed system is bacteria.

There are two types of treatment programs available for a closed loop system, manual and automatic. Obviously two different types of results can be obtained.

A manual treatment system employs a bypass type feeder. The treatment is introduced to the closed loop through the feeder. Bleed off or other control on the system is all done manually.

An automatic system measures the water quality and adjusts treatment dosage with minimal operator interaction. A typical system uses a series of timers, valves, metering pumps, and controllers to provide optimum water quality at all times.

Watcon, Inc. has treatment programs for all types of closed loop systems. The treatment program is designed for an individual system by incorporating the best chemical treatment and the desired level of automation.