

Common Myths About Closed Loop Systems

Myth #1: Closed Loop systems are clean.

Nonsense.

Have you ever opened your closed loop and were surprised what you found? Pretty bad, wasn't it?

Myth #2: Flushing out debris on a new system ensures it will be clean and remain clean indefinitely.

The Reality: Whether by pre-flushing or installing a "token" cartridge filter on a closed loop system, much of the suspended solids will remain. Continuous filtration is the only effective answer, and a LAKOS separator will require much less ongoing maintenance than other filter-like options. With minimal liquid loss.

Myth #3: The dirt and suspended solids in a closed loop system aren't really corrosive enough to cause noticeable damage to system components.

The Reality: Suspended solids in closed loop systems will lead to long-term damage and shorten the operational life of equipment, such as:

- Conventional chillers
- Chillers with Plate Evaporators
- Fan coil units
- Water source heat pumps
- Fin tube radiation
- Plate and frame heat exchangers
- Valves (mixing, diverter, solenoid, flow control, etc)

The effects of this damage include fouling and plugging, pitting, increased Kw usage, valve failure, and increased maintenance costs.





The LAKOS Solution

Keeping chillers, compressors, heat exchangers and other closed loop equipment in good working order and operating and maximum efficiency is an ongoing challenge.

Scale, corrosion, biofilm, weld slag, dirt, iron oxides, and suspended solids are interactive with each other and can result in serious operational problems, including:

- Pitting and clogging of chiller tubes
- Creates a prime environment for bacterial growth
- Decreased effectiveness of a water treatment program

Proper filtration using LAKOS can assist in the control of scale, corrosion, biological growth, and suspended solids.



Selection and Sizing of LAKOS Equipment for Closed Loop **Applications**

- eHTX Models (refer to LS-924) or HTH/HTX 5-25% of closed loop total system flow Full flow of closed loop system
- SideStreamClean Systems, eTCX (refer to LS-910) or TBI/TBX 5-25% of closed loop total system flow

Solids Removal Chart 90 80 70 60 50 40 30 20 74-40 Microns @ Specific Gravity 2.6 Single Pass Recirculated Flow



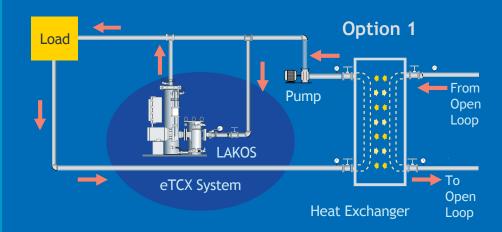
LAKOS is a proud and contributing member of ASHRAE for over 30 years

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Closed Loop Installation Option





Prevent the need for time-consuming cleaning of your heat exchanger.

Lakos Separators are manufactured and sold under one or more of the following U.S. Patents: 5,320,747; 5,338,341; 5,368,735; 5,425,876; 5,571,416; 5,578,203; 5,622,545; 5,653,874; 5,894,995; 6,090,276; 6,143,175; 6,167,960; 6,202,543; 7,000,782; 7,032,760 and corresponding foreign patents, other U.S. and foreign patents pending.

