

# COOLING TOWER BLOWDOWN RECYCLING SYSTEM



HydroReserve Cooling Tower Reuse System

## HYDRO RESERVE'S REUSE SYSTEM

is for commercial and industrial facilities with 200 ton or larger cooling towers. This equipment takes concentrated water and polishes it for reuse. It will improve water quality and reduce chemical usage with less cost and more efficiency than separators, sand filters and screen filters.

Larger Cooling Towers can use over 40,000 gallons of water per day. The blowdown generated from these systems can be as much as 10,000 gallons per day. The solutions available for handling blowdown have, until recently, been inadequate for facility managers to meet sustainability requirements.

Hydro Reserve offers a way to increase the cycles of cooling tower usage, even with challenging water quality.



## TECHNOLOGY

Hydro Reserve uses filtration technology that provides a physical physical barrier between the blowdown water and clean water.

### FILTRATION

The Hydro Reserve system uses PES filtration to filter TSS, BOD, COD, and oil and grease. This includes substances that enter the water stream from the air or from mechanical equipment.

### SANITATION

In addition to removing chemicals from water the Hydro Reserve system also will significantly reduce bacteria and viruses such as legionella.

## SYSTEM BENEFITS



### LOW MAINTENANCE

Reliable for long intervals with minimum maintenance required. The system backwashes automatically and system controls alert operators to status of primary components.



### SCALABLE

The Hydro Reserve System can be scaled to treat 35GPM to 5000GPM. The only real limitation is the available mechanical space.



### AUTOMATED CONTROLS AND REPORTING

Hydro Reserve's Proprietary Control System monitors all system activity. Data and alarms are reported locally and communicated to the Building Automation System through BACNET or MODBUS.



### INTEGRATED SYSTEM DESIGN

Comprehensive system designs include all pumps, storage, filtration and controls. Systems are pre-built on skids, tested and delivered ready for installation.

HydroReserve Water Quality Data	
Turbidity	≤ 0.5 NTU
TSS	none detected
pH	6.0 - 9.0 pH will be the same as influent
E.coli	7 log reduction none detected
CBOD	≤ 2mg/L MDL
Odor	no odor