



Water Management for Data Centers

What you can't see can make
all the difference.

Visionary business leaders mindful of their environmental impact, see optimizing water usage as fundamental to both the economics and long-term sustainability of their data centers.

Black & Veatch makes the invisible invaluable by offering water solutions on the forefront of conservation and innovation while serving as your trusted advisor throughout planning, design and commissioning.



BLACK & VEATCH

Innovations and Solutions



Cooling Technology

- Immersion cooling
- Air cooled vs. liquid cooling
- Chilled water systems / chillers and CRAHs
- Evaporative cooling
- Direct liquid cooling
- Heat rejection
- Water-side economizers



Water Quality & Treatment

- Water quality
- Water treatment systems
- Filtration & softening
- Deionization
- Ozone
- Ultraviolet
- Water reuse, recycle and treatment



Source Redundancy

- n+1 redundancy and concurrent maintainability for every component level



Sustainability

- Corporate carbon reduction mandates
- LEED design principles
- Renewable power options
- Water reclamation systems
- Artificial intelligence
- Green rooftops



Water Saving Retrofit & Replacements

- Thermal storage systems
- Side stream filtration
- Reverse osmosis filtration
- Water-side economization with heat exchanger

Achieve Water Optimization

Finding the optimal water usage level for your data center takes careful consideration of the available water supply and a broad technical understanding. Black & Veatch's proven processes and expertise is intended to uncover the potential of your operation and ensure resources are used to their maximum value and designed for your specific needs.

Ensure Water Availability Through Integrated Resources Planning

If you're evaluating a new site or expanding an existing one, Black & Veatch can perform a water balance study to evaluate your water demand, assessing all possible sources including surface water, groundwater, brackish water, seawater, reclaimed water, etc.

We consider factors such as climate, data center design and cooling systems, and sustainable use through reclaiming or recycling water, or treating and using reclaimed effluent or discharge water. These services, along with our deep relationships and involvement in national and international water associations, as well as knowledge of the applicable regulations, allows us to factor in multiple perspectives to ensure you receive a cost-effective, integrated water resources plan.

Learn more at bv.com.