

Spotlight on Conductivity

Conductivity is the ease with which water conducts electricity. It is determined by the amount of minerals or chemicals in the water and is a measure of quality and tendency to corrode or produce scale and solids deposits.

An Important Role in Water Quality and Safety

Conductivity in water delivered to your building may change with temperature, rainfall, supply system disturbances (water main breaks or construction) and natural variations in source water.

Recommended Actions for Water Storage and Treatment

1. Define conductivity as a control measure in your maintenance protocols.
2. Understand how conductivity varies over time in your water systems and document the range of values observed in your treatment program.
3. Make sure your conductivity meter includes temperature compensation for accurate readings and is rated for the range of values expected.
4. Regularly clean, maintain and calibrate probes including conductivity and Oxidation Reduction Potential (ORP) sensors.
5. Use conductivity readings to alert you of changes in your water system.
6. Adjust your water surveillance or treatment program (see below).

***Higher
Conductivity
May Impact
Operations
and Water
Treatment***

Cooling Towers

Update your maintenance program and plan (MPP) to set bleed and chemical feed rates that are responsive to changes in conductivity.

Drinking Water Tanks

Increase visual checks for scale and corrosion in tank and pipes. Clean and flush if needed.

Nonpotable Water Reuse Systems and Supplemental Drinking Water Treatment Systems

Monitor conductivity routinely and adjust water treatment. Check sensitive devices for impacts such as buildup and clogs .