



QuadDetect™

Tagged Polymer

Advanced Cooling Treatment Technology

The deposition of unwanted materials on equipment surfaces can be a significant cause of industrial water system failures. Deposits can reduce system performance, cause unexpected shutdowns, and necessitate environmentally challenging cleaning operations.

ChemTreat's QuadDetect™ technology can help facilitate superior deposit control agent (DCA) management for cooling systems. It accurately and reliably measures DCA residual in your cooling systems, which can enable you to monitor system stress and detect the possible onset of scale formation.

Your facility can reduce your total cost of operation and preserve equipment by maintaining system performance with QuadDetect™ technology.

Benefits

Performance monitoring is a key benefit of QuadDetect™. This tagged polymer solution can be monitored via our CTVista®+ intelligent water management software with a dedicated dashboard, custom trend charts, and reporting options.

Other benefits include:

- Direct measurement of active polymer helps long-term stability of chemical concentrations
- Ensures system performance more accurately than PTSA tracing alternative
- No reagents needed for on-line monitoring, accurate measurement, and control
- Can be used with a hand-held or on-line probe



ChemTreat cannot guarantee results.



Detecting System Stress and Scale at a Chemical Plant with QuadDetect™

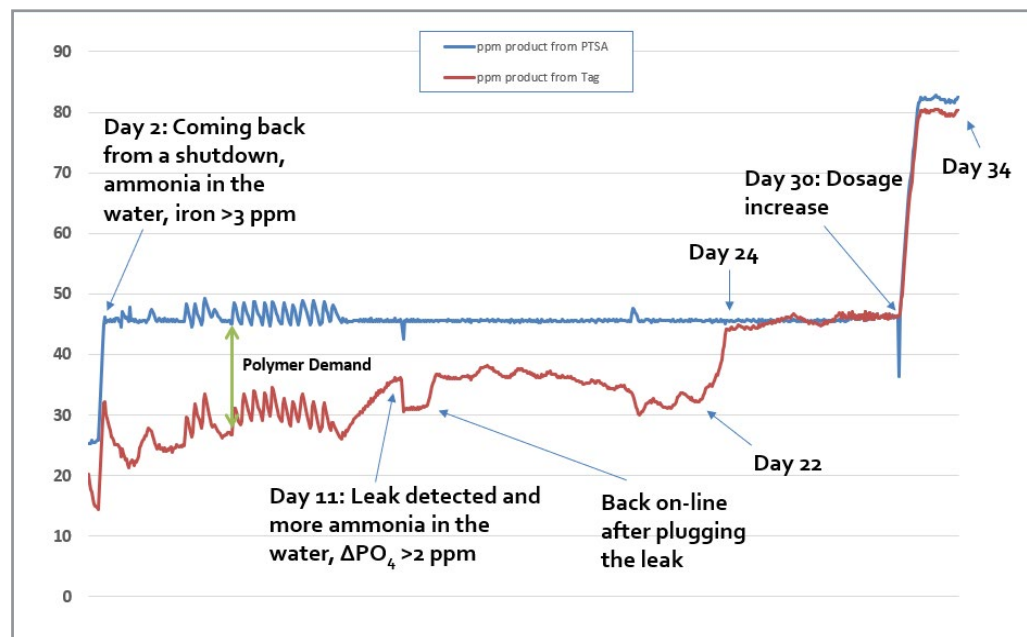
A large chemical plant in the southeastern US started using QuadDetect™ technology in their cooling system before a two-month maintenance shutdown. Plants coming on-line from an extended shutdown often experience higher levels of contaminants (iron, suspended solids, process contamination, etc.) during startup, contributing to system stress and increased polymer demand. The below graph shows the significant initial polymer

demand, demonstrated by the difference between the product levels using legacy PTSA fluorescent tracing and QuadDetect™ on-line polymer measurement.

When the system cycled up and took in fresh water, the active polymer levels increased as demand was reduced. On the 11th day, a process leak and subsequent contamination in the cooling system increased polymer demand once more. The leak also led to an increase

in cooling water pH and possible calcium phosphate formation in the bulk water, correlating to the increase in polymer demand.

The process leak was quickly corrected, and the plant returned back on-line. However, the contamination and stress continued causing high polymer demand between days 14 and 22. Once the system demand was met, the QuadDetect™ tagged polymer correlated well with the PTSA tracking.



Results are examples only. They are not guaranteed. Actual results may vary.



Water and
Energy Savings



Expert
Staff



Smart
Technology

