Frequently Asked Questions: RTC-DAF

Q: What is "RTC," "Claros Process Management," and "RTC-DAF?"

A: "RTC" means Real-Time Control and refers generally to solutions that utilize real-time data inputs for process automation and control. "Claros Process Management" is a suite of Hach® RTC software solutions and personalized support that helps manage, optimize, and automate water treatment processes. "RTC-DAF" is a single software module that optimizes and controls the chemical water treatment processes occurring in Dissolved Air Flotation (DAF) systems.

Q: How does the RTC-DAF software work? What technology does it use?

A: Hach's RTC-DAF software evaluates multiple inputs such as flow, pH, solids, turbidity and other influent / effluent water characteristics to determine and deliver optimal coagulant and flocculant dosing setpoints in the DAF process. The software uses a combination of modified PID loops and algorithms to determine the right dosing strategy for DAF process stability and efficiency.
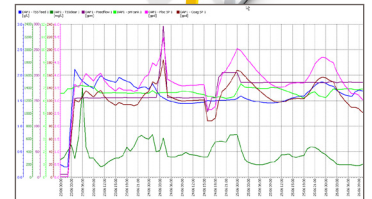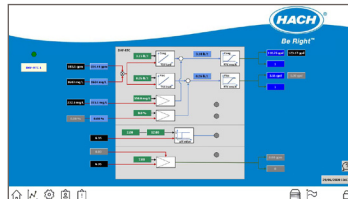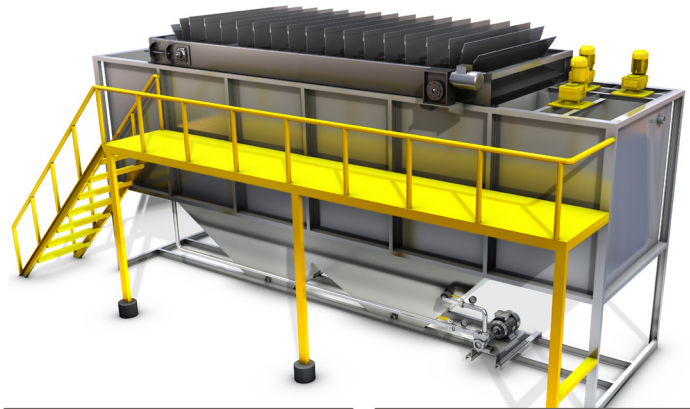
Q: What are the benefits of HACH's RTC-DAF?

A: The RTC-DAF offers many benefits:

Real-time visibility: with real-time data and visualizations, you can see and understand exactly what is going on in the DAF process at any time, and how the software is responding. This visibility eliminates guesswork and uncertainty!

Consistent results: Achieve your target effluent water and sludge quality in variable conditions and across all staff shifts, 24/7. This means peace of mind as it helps ensure production continues, you comply with permits, and your public reputation is protected.

Reduced effluent costs: Real-time control improves your DAF performance allowing for higher removal efficiency and a cleaner discharge. This reduces downstream utility fees and any environmental discharge costs, and aids with avoiding costly violations.

Time savings: RTC-DAF's constant monitoring and automatic adjustments relieve you and your team of manual tasks, freeing up time and focus for other higher-value production tasks.

Chemical and sludge treatment optimization: RTC-DAF minimizes chemical use while meeting your target DAF effluent water quality, avoiding both over-dosing and under-dosing. Most often, this leads to chemical savings and improves sludge quality, reducing your sludge treatment and disposal costs.

Training and knowledge preservation: DAF process knowledge is built into the software logic. With its powerful visuals and reports, RTC-DAF facilitates conversations and experiences to more easily train staff and share information.

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Q: What parts or components are needed?

A: RTC-DAF is a software solution. However, other components are needed for implementation, including a touchscreen Industrial PC, transmitter, and instrumentation. All of these components are available through Hach, and many can be obtained through other suppliers. Your Hach sales manager and specialist are available to perform a free site survey to determine your specific needs.

Q: How is this different than SCADA, or a PID loop built by a local integrator or programmer?

A: Hach RTC is much more than simple PID loops and works with any existing SCADA system. With over 1300 installs globally, our RTC solutions are proven and come with a deeply experienced support system for ongoing success.

The RTC-DAF solution will work with a wide range of DAF configurations.

Q: How does RTC-DAF safely connect to my network and systems?

A: RTC-DAF integrates with your systems using the highest standard of security protocols. We are flexible to meet the IT security needs of your organization. Click here or visit us at hach.com/claros to read the Claros Security Whitepaper.

Q: How do I know this will work for my site's DAF processes?

A: Through deep experience (over 1300 RTC installs), we have seen and successfully overcome many unique, site-specific challenges. This solution is proven and standardized, but tailored to the needs of your site and process. We encourage you to contact your Hach sales manager for RTC-DAF references and to explore our existing case studies.

Q: What fallback or protection strategies are included in case something goes wrong?

A: Every one of Hach's RTC solutions, including RTC-DAF, has built-in fallback strategies in case of malfunction and in other user-defined scenarios. We support you as you define the what, when and how these strategies are employed.

Q: I'm not ready yet for automation, can RTC-DAF be used for recommendations only?

A: Yes. The RTC-DAF may be used in a feed-forward, recommendation-only mode if desired. Maximum benefits are obtained through automation, but there is absolutely stand-alone value in the new data and recommendations.

Q: Does RTC-DAF integrate with other Hach Claros™ solutions like Mobile Sensor Management™?

A: Yes. Customers can implement RTC-DAF alone or combine it with other Claros solutions such as Mobile Sensor Management™ to unlock additional value. Please discuss these possibilities with your Hach sales manager.

Q: What is the process for set up and installation?

A: Post-purchase, Hach's RTC Project Management and RTC Tech Support teams meet with you to verify your order and site requirements and to map out a plan for a successful installation, commissioning and optimization.

Q: What upkeep or maintenance is required?

A: RTC-DAF software does not require regular maintenance. However, customers highly value ongoing RTC Tech Support for proactive monitoring and re-optimization if needed. Underlying instruments should be maintained normally.

Q: What Hach Service Plans and Support Plans are available?

A: Commissioning and initial RTC Tech Support services are included in each RTC-DAF purchase to ensure success. The RTC Tech Support service may be renewed thereafter. Learn more and explore our full service set at hach.com/service.

Q: How much does the RTC-DAF cost and what return on investment (ROI) can be expected?

A: Because each site is unique and may require different supporting components, we provide RTC-DAF pricing in a tailored proposal. ROI can vary due to many factors, but most RTC customers see payback periods of 1-3 years.

Q: We don't spend a lot on chemicals for our DAF, why use this?

A: Chemical savings are important, but not the only reason to use the RTC-DAF. Other key drivers include peace of mind, improved DAF performance and consistency, process visibility, time savings, effective training and knowledge sharing.

Q: How do I order an RTC-DAF solution?

A: Speak with your local Hach sales manager to request a proposal. You can also start by emailing orders@hach.com, filling out an interest form at hach.com/claros/process-management-overview, or by calling us at the number listed on your local hach.com page.

Q: How can I learn more?

A: To learn more and access additional RTC-DAF resources, reach out to your local Hach sales manager, visit hach.com/claros/process-management-overview, or explore Hach Support Online at support.hach.com/app/home.

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