

RTC-ST MODULE REAL-TIME SLUDGE THICKENING CONTROL SOLUTION

Applications

- Municipal wastewater
- Industrial wastewater



Sludge Thickening. Under Control.

Hach®'s RTC-ST System controls polymer dose in real time, helping you to stabilise the thickening process, increase solids capture and improve gas production while saving money on chemical costs.

Elevated biogas production

Adjusting sludge thickening based on real-time data significantly improves gas production in the digester. The RTC-ST system continually calculates sludge load and monitors filtrate quality and responds automatically to changes, keeping your system running smoothly and efficiently. Controlling your process has never been so simple.

An off-the-shelf system

RTC is a plug-and-play system that is ready to use after a very simple set up. Minimal downtime is needed to install the system and once installed Hach will help you choose your setpoints so you are fully prepared to monitor and treat your sludge in real time.

Save money on treatment

The RTC-ST module is preprogrammed with algorithms that adjust polymer and flow rate to maintain your desired solids concentration. By treating only what's needed you can ensure you do not spend more on chemical and hauling costs than absolutely necessary.

Predictive diagnostics

Prognosys is a predictive diagnostic system that allows you to be proactive in your maintenance, by alerting you to upcoming instrument issues. Know with confidence whether changes in your measurements are due to changes in your instrument or your sample.

When we say Service, we mean Service!

A complete Service package includes local field service experts to provide routine maintenance visits and warranty repair, plus a team of remote technical experts with the ability to monitor your system to ensure optimum performance. It's like having a Hach Technician right there with you at the facility.

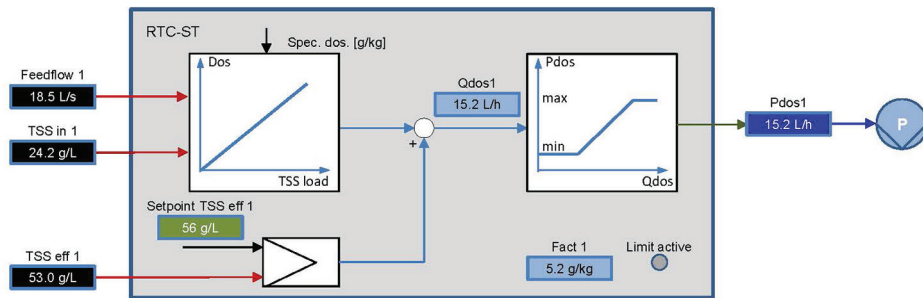
Principle of Operation

The RTC-ST (sludge thickening) controller optimises polymer dosing rate or feed flow rate in mechanical sludge thickening on biological waste water treatment plants. Based on the current solids load (TSS concentration and flow rate) in the feed flow, either the polymer dosing rate or the feed flow rate is controlled.

The control module features the capability to combine feed forward and feed back control advantages when applying TSS measurements for the inflow in combination with TSS measurement in the thickened sludge or in the filtrate. The thickened sludge TSS measurement is automatically compensated to allow for interference in the operation of the hopper pump due to hopper filling and emptying cycles.

If input signals for inflow or TSS concentration are not available the system automatically switches to fallback strategies.

The RTC-ST control software can be combined with other control software modules and has to be hosted by a specific hardware.



Order Information

RTC-ST Module

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| LXV412 | RTC-ST Module, complete solution, incl. software & hardware. Module for sludge thickening control. Available as 1- or 2-channel version. |
| LXZ517 | RTC-ST Module, software only. To be used with LXV515. Module for sludge thickening control. Available as 1- or 2-channel version. |
| LXV515 | IPC Hardware |

Please note: Using RTC Module requires SC1000 controller and RTC card.

Be certain in your control with a first class Service Partner. Be confident with Hach Service.

Hach's Commissioning Service for RTC provides the insurance that your complete Real Time Control solution is installed and configured properly as well as optimised efficiently. During the commissioning period (Start Up phase, Commissioning phase, Hand over phase), Hach will thoroughly monitor your system and review and analyse your data remotely in order to provide guidance to optimise your RTC at its highest performance and efficiency levels for your application.