RTC-SRT Software Module

Product #:   **LXZ518**

OBSOLETE ITEM
This item is no longer available.

Are you wasting resources chasing ideal sludge age?

A winning combination of sludge retention time, biological health and MLSS level in the treatment basin is key to BOD/COD compliance, stable nitrification and energy efficiency in your activated sludge system. But with DO, temperature and sludge waste volume in constant flux, you could instead be experiencing poor settleability, filament outbreaks, discharge permit violations, process instability, or increasing labor and chemical costs to manage your biomass. If sludge age isn't right, it can seem as if your system's positive energy balance will never quite reach its full potential.

With the aid of technology, however, you can ensure that the amount and type of biology in your treatment basin are always correctly aligned with the conditions. Hach's RTC-SRT Software automatically calculates the ideal sludge age to correspond with real-time sewage temperature and MLSS concentration, as well as biological growth and decay rates, then it determines the required amount of excess sludge to be removed in order to meet your system's exact aerobic demands. Especially important with intermittent or carousel ASP's, RTC-SRT can be used to maintain ideal conditions for ammonium removal during winter MLSS lows and summer MLSS peaks that place undue pressure on blowers. Although RTC-SRT is a standardized solution, it has built-in flexibility. Manually enter a sludge age (e.g. 3.5 days) to inhibit nitrification, or specify minimum and maximum MLSS levels to protect against sludge blanket loss in the event of temporary poor settlement.

Claros Process Management **solutions for BOD/COD removal and nitrification/denitrification** like RTC-SRT are designed to make the most of your plant's real-world conditions by transforming every uncertainty into an opportunity for measurement, responsive action, and savings.

Stable compliance
Maintaining ideal SRT and MLSS concentration provides better settleability, removes more COD/BOD and improves filament control. For enhanced performance, use with RTC-N to avoid undesired nitrification in non-nitrifying facilities.

Typical energy savings of up to 10%
Prevents excessive air demand on blower system—especially in warm weather—by activating aeration only when necessary.

Increased visibility
Understand your MLSS trends with a glance at the dashboard, or delve into the factors that affect your solids inventory by generating a historical report.

Greater precision
Software computation enables sludge age to be calculated from much larger datasets and validated measurements with minimal potential for human error.

Increased methane yield in digester
Correct retention time maximizes organic content in excess sludge and improves efficiency.

Specifications

Application:	Sludge age
Industry:	Wastewater
Input Parameter:	TSS_{AT}, TSS_{RLS}, O_2, Temperature
Model:	RTC-SRT
Number of channels:	1 or 2
Output:	$Q_{waste\ activated\ sludge}$
Parameter:	Total Suspended Solids, Temperature, Oxygen
Process:	Aeration - sludge age control
Prognosys:	Yes
Solution Type:	Software