Streaming Current Detector

Flumsys 10SC

The streaming current detector is used to continuously measure the electric charge on the tiny suspended particles and colloids in the liquid. The electric charge is measured by electronic signal processing.The measurement result is converted into A.C signal or streaming current (SC). The value of streaming current (SC) isproportional to the charge density. The charged state depends on the water after flocculation.The excess positive andnegative charges can quickly react to changes in water characteristics (such as chromaticity and turbidity) by detecting the changes in the streaming current (SC) value, thereby making the operation.The personnel can adjust the metering of the flocculant accordingly.

The Flumsys 10SC streaming current can be equipped with a pretreatment system to ensure the long-term trouble-free operation of the instrument, with continuous measurement, automatic cleaning,PID control function can be connected to the existing dosing system and start automatic dosing control. The amount of flocculant will be automatically adjusted.

Measurement parameters

Streaming Current Detector (SCD)

Applications

Water quality purification

Sludge dewatering

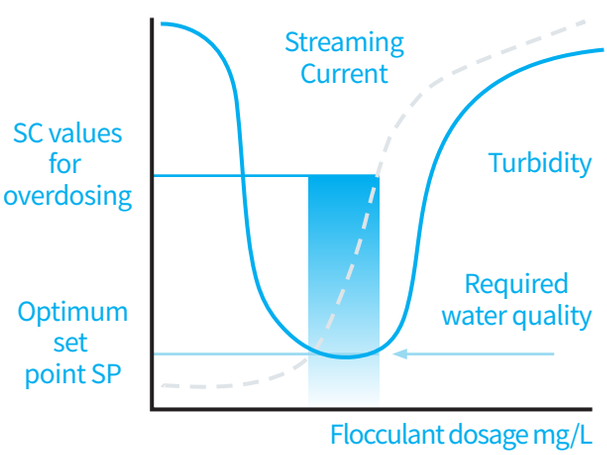
Wastewater Treatment

Need to add flocculant process

Flumsys 10SC provides water treatment plant operators with an effective tool to optimise and control the amount of flocculant and polymer used!

Advantage

- Automatic control of flocculant dosing
- Reduces overall flocculant costs
- Guaranteed effluent quality
- Low operation and maintenance costs

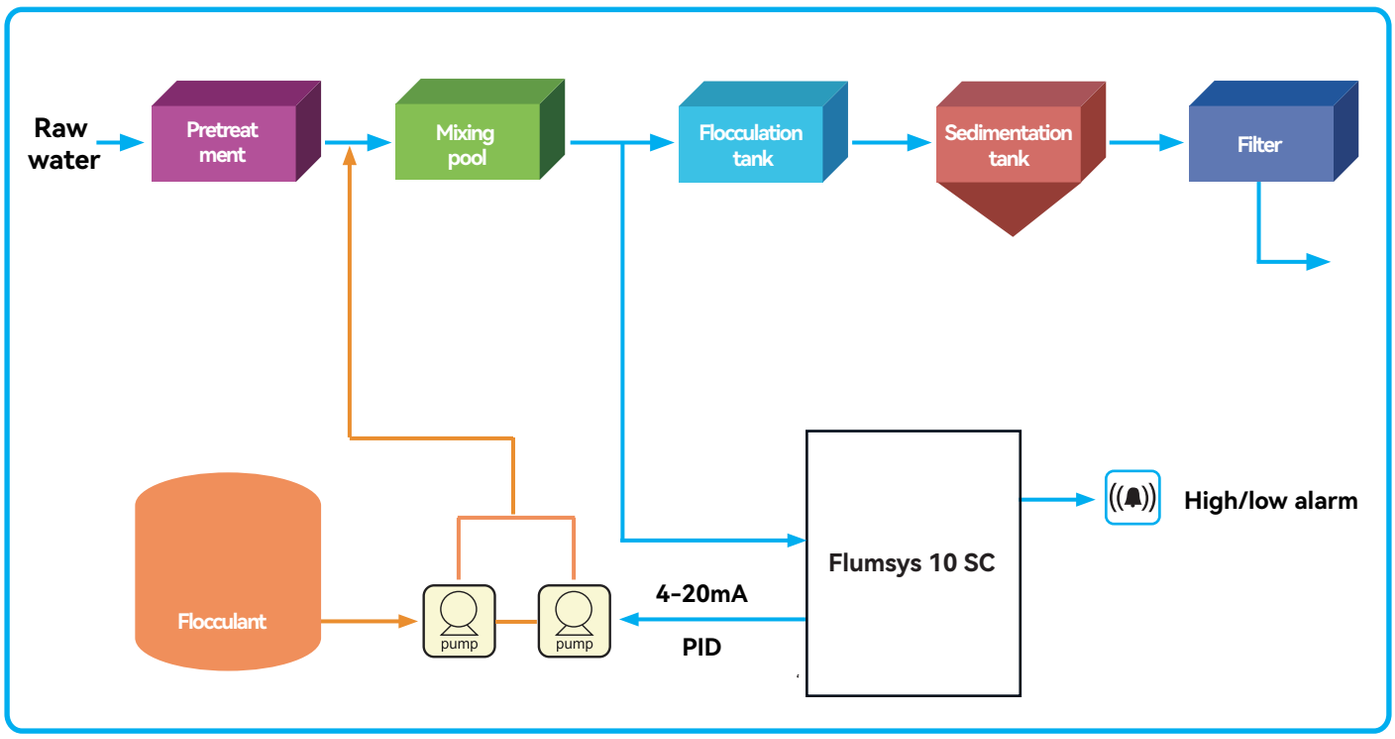


Features

- Simultaneous display of actual SC values and relative SC values
- Real-time SC trend graph
- Automatic cleaning function (optional cleaning solenoid valve)
- PID control function
- SC 4-20mA and PID 4-20mA outputs
- 2 high/low alarm outputs
- RS485 Modbus RTU communication
- Password protection against unauthorised operation
- Data logging function, supports U disk to export (Excel)
- Two modes of automatic/manual control
- Optional pre-treatment system for extended maintenance intervals

Water Quality Requirements

Conductivity: < 3000μS/cm
pH: 4~11pH (pH < 7 after controlled flocculant application, SCD measurement is best)
TSS: < 1000mg/L



Technical parameter

Measurement parameters:	Streaming Current
Measurement range:	-1000~1000SC
Accuracy:	±0.1%
Repeatability:	±0.1%
Response time:	1s
Operating temperature:	Operating temperature: 0-50℃
Power supply:	220VAC,50/60Hz
Display:	7"Touch screen LCD display
Analogue output:	SC 4-20mA and PID 4-20mA output, Max. 500Ω
Communication:	RS485 Modbus RTU
Alarm relay:	High/low alarm contact output, 24VDC/1A
Automatic cleaning:	cleaning interval: 0-9999min cleaning time: 0-999s
Data storage:	Real-time data recording, support U disk export (Excel format)
Sampling requirements:	flocculant dosing point to sensor time about 3 ~ 5min
Flow rate requirements:	1 ~ 4L/min
Protection class:	Controller: IP65, Sensor: IP54
Dimensions:	Controller: 300x350x200mm, Sensor: 250x350x150mm
Weight:	Controller: ca. 10Kg, Sensor: ca. 10Kg

Order Guide

Order No.	Description
33-5510-10	Flumsys 10SC Streaming Current Detector
33-5510-11	Flumsys 10SC cleaning solenoid valve
33-5510-12	Flumsys 10SC matching filter
50-5510-10	Flumsys 10SC PTFE kit