STREAMING CURRENT METER

The Streaming Current Meter provides a valuable tool for Water Treatment Plant operators to optimize and control polymer and flocculant dosage.

- Automatic Control
- Polymer Savings 25~30%
- Maintain Cake Dryness
- Minimize Process Upsets

SPECIFICATIONS

Measurement	Streaming Current	**Response Time**	1 Second	**Zero Adjust**	Full Range
Power	110 Vac / 230 Vac (Optional)	**Self Diagnostic**	Sensor LED	**Enclosure**	IP 65
Range	-1000 to +1000 mV	**Probe Materials**	Delrin, 316 SS, PTFE	**Mounting Holes**	297,4 x 152,4 mm
Accuracy	0.10%	**Outputs**	4~20mA, -10~+10V, 0~10V	**Depth**	164 mm
Display Type	LED - Digital	**Communication**	Modbus (Optional)	**Weight**	9 kg
Flow	1 Liter/min (low flow) 5 Liter/min (high flow)	**Alarms**	High / Low Relay Contacts		

Water analysis

Gas detection

Gas analysis

Service

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QSENZ

water- and gas analysis

STREAMING CURRENT METER

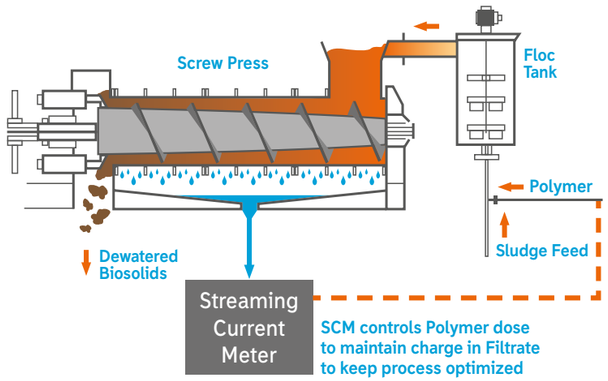
A valuable tool for chemical dosing savings!

QSENZ
water- and gas analysis

STREAMING CURRENT SYSTEM INTRODUCTION

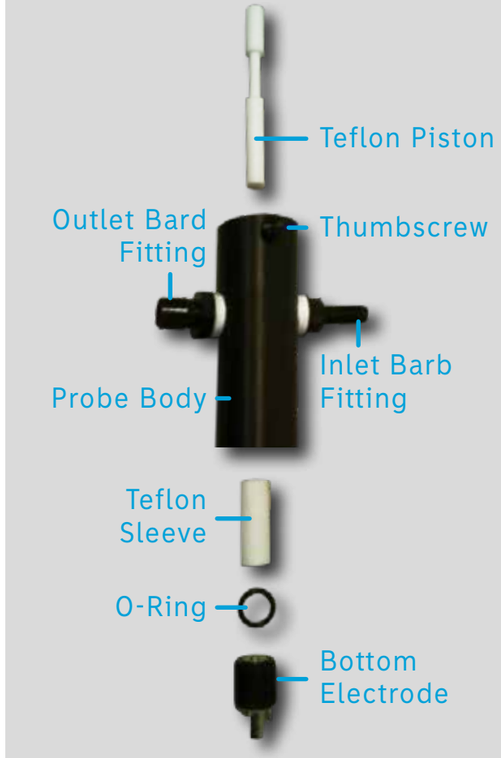
The Streaming Current Meter (SCM) continuously measures ionic and colloidal charge, which indicates coagulant dosage in treated water. A Streaming Current Meter consists of a Streaming Current Meter (Signal Processor) and a Streaming Current Sensor. The SCM ensures optimum coagulant dosage. The typical applications include potable water treatment, polymer control for sludge dewatering in wastewater treatment, anionic trash detection in whitewater loops papermaking wet end processes or other applications requiring a chemical coagulation process.

APPLICATION EXAMPLE



APPLICATIONS

- Surface water clarification
  (drinking water, paper mill, power plant)
- Laundry wastewater
- Tertiary wastewater
- Sludge dewatering
- Papermaking
- High purity water pretreatment



STREAMING CURRENT SENSOR

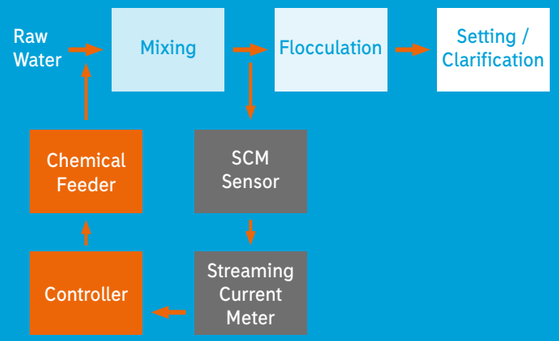
The Streaming Current Sensor is a sensing module of the SCM. As treated (dosed) water continuously passes through the probe of the sensor from its inlet to outlet, the movement between the piston and cylinder of the probe generates a continuous alternating streaming current signal. This measurement indicates the net ionic and colloidal surface charge (positive and negative) of the sample. This signal is then sent to the Streaming Current Meter for processing and display. The Streaming Current Meter (signal processor) is electronics module of SCM. The Meter receives the raw streaming current signal from the Sensor and converts it into industrial standard output signals, 4-20 mA and 0-10VDC, for treatment control applications. The SCM provides an LED digital display to illuminate the streaming current value in the range from -1000 to +1000mV. The range from -1000 to 0 indicates that the sample water is negatively charged, from 0 to +1000 indicates the sample water is positively charged, and 0 indicates that the sample water is electrically neutral. Additionally, the SCM provides absolute and relative signals, variable sensitivity adjustment; high and low alarm adjustments and indicators, and a sensor operation indicator.

SCM features a patented sensor design to provide years of trouble free service. The sensor probe is "user serviceable". The user can easily replace a disposable sleeve and piston within the sensor probe to restore accuracy and sensitivity. This approach drastically reduces the cost of ownership of an SCM.

LIMITATIONS FOR MEASUREMENT

- Conductivity over 3000 micro Siemens
- pH less than 4, greater than 11
- TSS greater than 0.1%

STREAMING CURRENT CONTROL SYSTEM



STREAMING CURRENT AND TURBIDITY RELATIONSHIP