



## SC2200 STREAMING CURRENT DETECTOR

### DESCRIPTION

The Milton Roy Model SC2200 Streaming Current Detector (SCD) is an on line electrokinetic charge analyzer that measures the net ionic and particle surface charge in a chemically treated water or wastewater sample. The SCD allows continuous monitoring and control of the coagulation process, thereby providing:

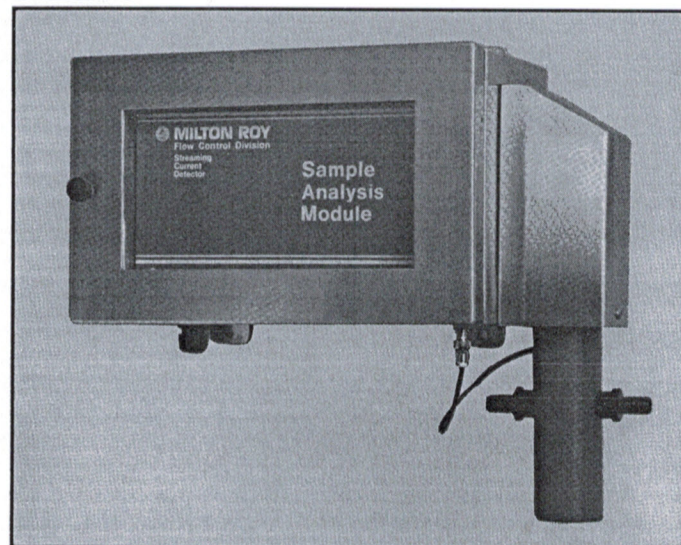
- Consistent water quality
- Uniform chemical dosing under varying conditions
- Reduced chemical costs
- Reduced manual supervision and/or automatic operation of the treatment process

The SC2200 is designed to be used with the RM6200 Remote Monitor Station or the RC7200 Remote Controller Station. It is a complete SCD that can be directly linked with computer systems, recorders, or suitable process controllers. Mounted remotely, it can be separated from the monitor or control station by up to 3000 feet without affecting signal reliability. Special coaxial cable is not required.

The SC2200 represents the most advanced level of Streaming Current Technology available today. The SC2200's electronics, sampling system and overall design are the direct result of years of studies and research and development aimed at advancing the technology. Though SCD's have been an accepted part of water treatment for over a decade, the SC2200 incorporates a number of key improvements that provide even greater stability, response, and improved operation over previous successful designs.

In addition, the SC2200 is the first of a new generation of SCD's designed to operate in wastewater treatment. Special probe designs and electronic advances have opened the door to controlling coagulant feed to belt presses, centrifuges, and other dewatering equipment.

### SC2200



### JET WASH SAMPLE CELL CLEANING

The Automatic Jet Wash is an optional patented sample cell cleaning system available on Milton Roy SCD's. The system is designed to maintain cell cleanliness and signal reliability by automatically flushing the sample cell on a predetermined cycle. Flushing is accomplished by injecting water at high velocity through the bottom of the sampling cell, which scours the cell surfaces and forces contaminants into the sample stream drain. Cleaning frequency is field adjustable to suit the application. Signal output is automatically locked during the cleaning cycle to ensure control stability.

### SC2200 MODEL SELECTION GUIDE

SC2200 — ☐

☐  
**Output Signal**  
4 = 4-20 mA

☐  
**Probe Cleaning Options**  
0 = Standard Manual Jet Wash  
J = Automatic Jet Wash\*

☐  
**Other Options**  
0 = None  
X = Special

☐  
**Operating Voltage**  
D = 115 VAC, 50/60 hz  
E = 230 VAC, 50 hz

☐  
**Probe Configuration**  
F = Standard Flow Through  
W = High Flow

☐ 0

☐ 0

\* Automatic Jet Wash is factory set at 30 seconds every 2 hours. Jet Wash timing is field adjustable. Available settings are: 30 seconds to 7 minutes (30 second intervals) every 15, 30, or 45 minutes or 1, 2, or 4 hours.



# SC2200

PD 1022 SC

Effective 9/15/93



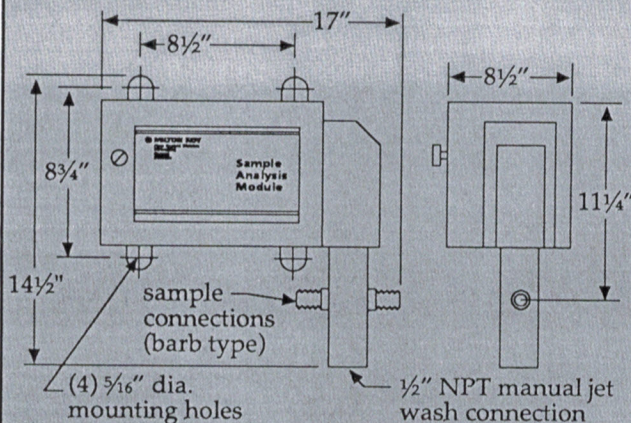
# MILTON ROY

## SC2200 SPECIFICATIONS

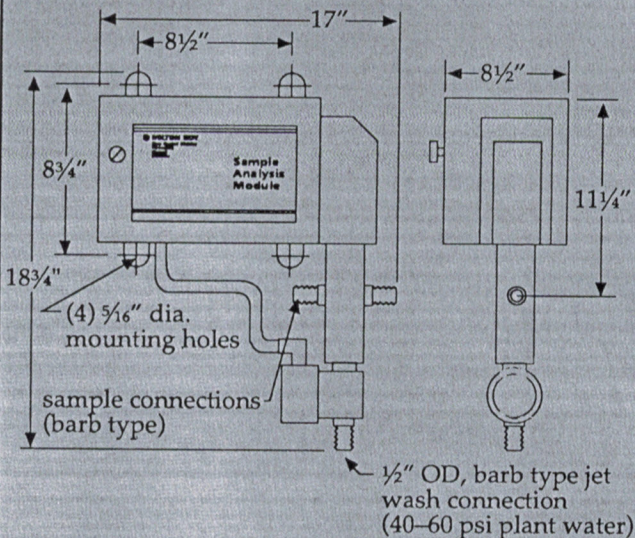
Power Required .....	115 VAC, 50/60 hz (standard) 230 VAC, 50 hz (optional)
Instrument Output .....	4–20 mA Streaming Current Signal (max. 500 OHM load)
System Accuracy .....	1% of full scale
Response Time .....	Less than 5 seconds
Gain Adjustment .....	Full range
Zero Adjustment .....	Full range
Signal Filter .....	Adjustable low pass
Sample Cell .....	Flow through, external type, Manual Jet Wash conn. (std); Automatic Jet Wash System (opt)
Sample Flow Rate .....	Standard probe: 2–4 L/min (0.5–1 gal/min) High flow probe: 4–20 L/min (1–5 gal/min)
Sample Flow Sensor ..	Optional, consult Milton Roy
Sample Wetted Parts ..	PVC, Delrin, PTFE, & Silver
Sample Connections ..	Barb Type, 1/2" ID tube (standard) Barb Type, 1" ID tube (high flow)
Operating Temp. ....	32 F to 120 F (0 C to 50 C)
Enclosure .....	NEMA 4X, 316 Stainless Steel
Weight .....	24 lbs.
Remote Display Option .....	RM6200 Remote Monitor Station or RC7200 Remote Controller Station (accepts 4–20 mA signal from SC2200 via 2 wire, twisted pair 22 AWG); max 3000 ft. separation

## SC2200 DIMENSIONS

### Manual Jet Wash



### Automatic Jet Wash



## FEATURES

- 4–20 mA Streaming Current signal output
- Full range Zero, Gain, and Filter adjustments
- Robust industrial design, including 316SS enclosure
- Advanced probe design featuring high flow to 5 GPM
- Advanced electronics; patented "Phase Correction" circuitry
- Standard manual Jet Wash bottom flush connection
- Compatible with Milton Roy RC7200 Controller or other PID controllers for closed loop automatic control
- Compatible with Milton Roy RM6200 Monitor Station for remote display and operation

All in

**Milton Roy Company**  
**Flow Control Division**  
**A Sundstrand Subsidiary**



**Harrington  
Robb Co.**

41 TWOSOME DRIVE - UNIT #4 • MOORESTOWN, NJ 08057  
PHONE: 609-642-9605 (NJ) • FAX: 609-642-9606

Notice.



3M597a