MICROMAC E
ON LINE ANALYZER FOR
CHLORIDE MONITORING IN WATER

MICROMAC E **CHLORIDE** is an Ion Selective Electrode (I.S.E.) based microprocessor controlled On Line analyzer specifically designed for automatic Fluoride monitoring on several types of water matrix.

✓ ROBUST AND RELIABLE

Designed for industrial and Environmental On Line applications ensures the highest level of robustness in the electronics, mechanics and hydraulics components. Complete separation between electronics and hydraulics plus a simple and robust LFA* hydraulics allows long and reliable operations.

✓ EASY TO INSTALL

The analyzer is delivered only after a long and successful series of final tests. It is ready for installation, without any further adjustment and it is provided with a spares set for start up operations. To start monitoring, it is sufficient to connect sample line, waste line and power supply.

**LFA: Loop Flow Analysis patent pending*

✓ STANDARD ADDITION

To eliminate matrix interferences the sample is measured as it is then after a known addition of a concentrated calibrant solution.

Sample concentration is calculated using a proper equation.

✓ AUTOMATIC CALIBRATION

As soon as a user selectable Calibration Time expires, the analyzer performs a Calibration Cycle, storing and checking the new calibrant mV measurement. If new mV exceeds selected threshold limits, an alarm contacts is closed.

✓ FEATURES AND BENEFITS

- Fully automatic operation
- Long autonomy; low maintenance, low operating cost
- Low reagents consumption; short preparation time & disposable costs
- Easy operation; fully documented plug in analyzer, no special training is required
- Electronics and hydraulics completely separated
- Serial interface for PC local and remote connection.

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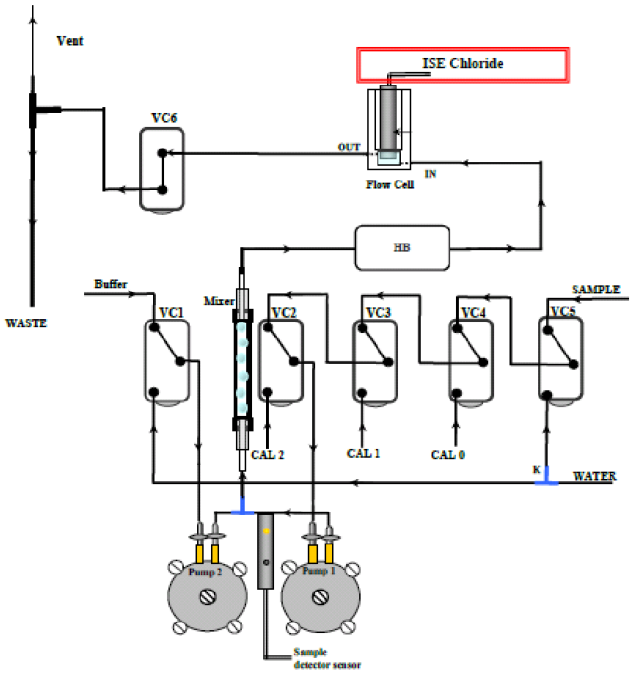
Chloride measuring principle and hydraulic diagram

The sample after proper filtration is mixed with a Ionic Strength Adapter (ISA) buffer solution, thermostated and then measured in a flow-cell by a combined type Chloride Ion Selective Electrode (ISE).

The sample concentration is calculated using a proper equation.

The analyzer is periodically calibrated using two solutions, the second one with a decade of concentration higher of the first one.



Technical Specifications

MEASURING PRINCIPLE: ChlorideIon Selective Electrode (ISE)
MEASURING CELL: flow cell including combined measuring electrode or separated Ag/AgCl reference
MEASUREMENT TIME: 3 minutes depending on the range
MEASURING RANGE: 2-1000 mg/L as Cl^-
DETECTION LIMIT: typically better 5% of the full scale, calculated as for EPA p. 136 appendix B
REPEATABILITY/ACURACY: better than 5%
OUTPUT SIGNAL: 4-20 mA
INPUT SIGNALS: n. 1 Analysis, n. 1 calibration; digital contacts
ALARMS: n. 1 High Limit, n. 1 General, n. 1 Calibration; potential free contacts
SAMPLE AND WASTE DELIVERY: pressure free;
SAMPLE TEMPERATURE: 10°C - 30 °C
REAGENTS REPLACEMENT: 3/4 weeks depending on the operating temperature
ENVIRONMENTAL TEMPERATURE: 10 °C - 30 °C; Protection: IP55
HARDWARE: PC104 industrial standard, Integrated keyboard and graphics display, RS232 option
POWER SUPPLY: 12 V DC; external power supply from local power to 12 V DC included
WEIGHT: 33 Kg without reagents; Dimension: 800x420x280 mm(hxwxd)

Subject to change without notice

SYSTEA S.p.A.

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