

MICROMAC SULFIDE - STRIPPING

ON LINE ANALYZER FOR
SULFIDE MONITORING IN WATER AND WASTEWATER

MICROMAC SULFIDE is a microprocessor controlled On Line analyzer specifically designed for automatic Sulfide monitoring on several types of waters 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 easy maintenance and long terms reliable operations.

**LFA: Loop Flow Analysis patent pending*

✓ **EASY TO INSTALL**

The analyzer is delivered after a long and successful series of factory tests ready for installation and setup; it is provided with complete set of spares for start up. To start monitoring is enough to connect reagents, sample line, waste line and power supply.

✓ **AUTOMATIC CALIBRATION**

When the Calibration Time interval expires the analyzer performs a Calibration Cycle, storing and checking the new calibrant O. D. If new O.D. exceeds selected limits, an alarm contacts is closed.

✓ **SAMPLE DILUTION**

Sample can be analyzed as it is or after automatic dilution. Automatic dilution is factory adjusted for high range applications.

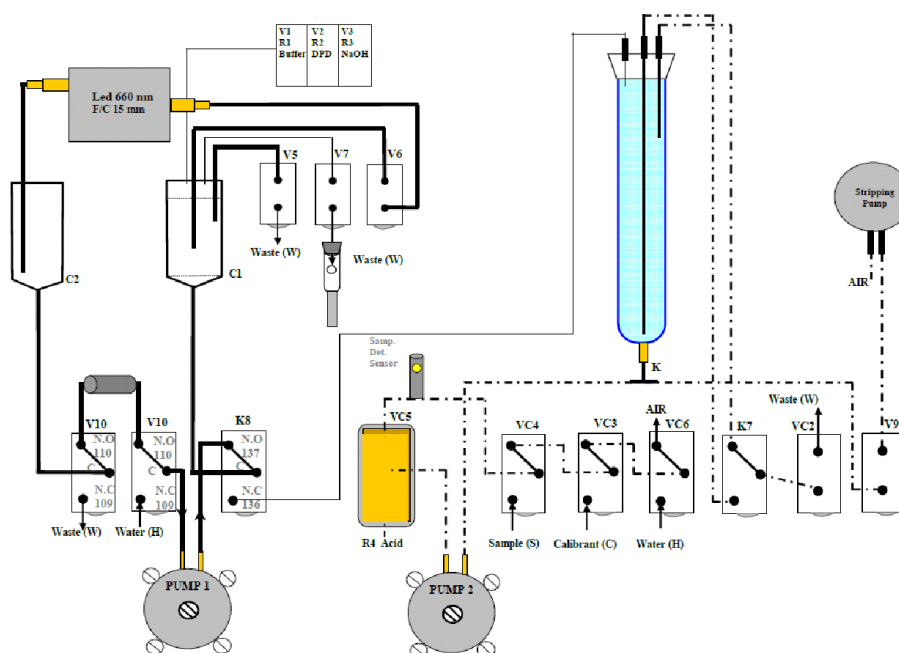
✓ **MEASURING INTERVAL**

User selectable; between two measurements the analyzer remains in stand by mode, without reagents consumption.

✓ **FEATURES AND BENEFITS**

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

Sulfide Stripping measuring principle and hydraulic diagram



The sample is acidified and Sulfide are liberated by a controlled air stream. Hydrogen Sulfide is collected in a solution of Sodium Hydroxide then the sample is introduced in the analytical stream where it reacts with N,N-Dimethyl-1,4-phenylendiammonium dichloride and ferric chloride to form methylene blue, which is measured colorimetrically at 660 nm.

Technical Specifications

MEASURING PRINCIPLE: Sulfide stripping Colorimetric reaction with N,N-Dimethyl-1,4-phenylendiammine

COLORIMETER: dual beam, silicon detector

MEASUREMENT TYPE: cyclic

MEASURING INTERVAL: programmable

MEASURING TIME: <15 minutes, depending on the range

MEASURING RANGE: 0-3/5/10/50/100 ppm range; alternative ranges available

DETECTION LIMIT: typically better 3% of the full scale, calculated as for EPA p. 136 appendix B

ACCURACY/REPEATABILITY: 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

PROTECTION: IP55

HARDWARE: PC104 industrial standard, Integrated keyboard and graphics display, RS232 option

POWER SUPPLY: 12 V DC external power supply included; 4W standby; 10 W (mean) analysis

WEIGHT: 33 Kg without reagents;

DIMENSION: 800x420x280 mm (hxwxh).

Subject to change without notice



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