

MICROMAC PHENOL

ON LINE ANALYZER FOR
PHENOLS VOLATILES MONITORING IN WATER

MICROMAC PHENOL is a microprocessor controlled On Line analyzer specifically designed for automatic volatile Phenols 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 CFA* hydraulics managed in batch mode allows easy maintenance and long terms reliable operations.

**CFA: Continuous Flow Analysis*

✓ 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 contact is closed.

✓ SAMPLE DILUTION

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

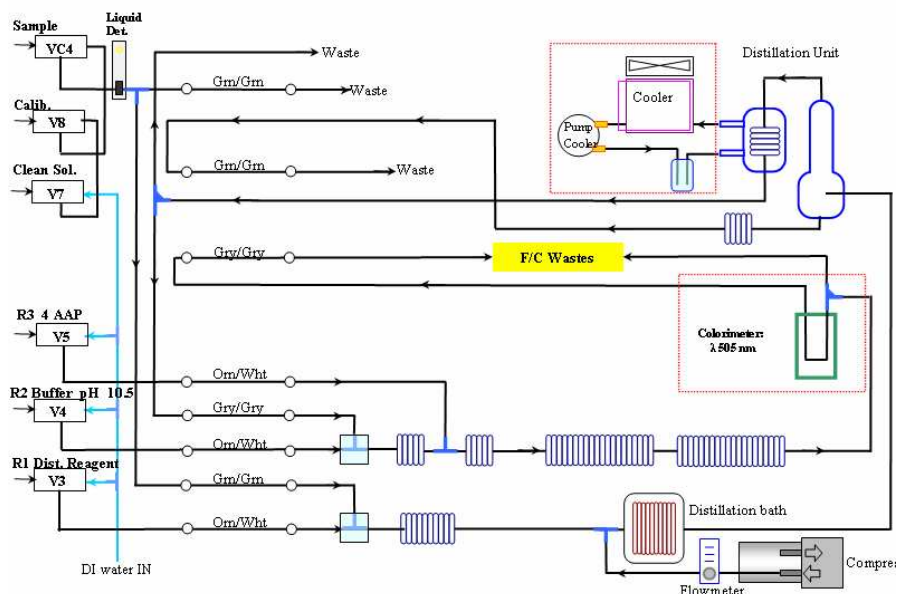
✓ MEASURING INTERVAL

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)

Phenol volatiles measuring principle and hydraulic diagram



The sample, after proper filtration is pumped and mixed with a solution of 10% phosphoric acid; the solution is then sparged by compressed air and it is introduced into a distillation bath heated at 165-170°C. The condensed phase is added with a buffered solution of potassium ferricyanide and 4-aminoantipyrine in alkaline solution to produce a complex that is measured colorimetrically at 505 nm.

Technical Specifications

MEASURING PRINCIPLE: Colorimetric.

COLORIMETER: dual beam, silicon detector

MEASUREMENT TYPE: cyclic

MEASURING INTERVAL: programmable

MEASURING TIME: 24 minutes

MEASURING RANGE: 0–100/200/500 ppb Phenol; higher ranges available in dilution mode

DETECTION LIMIT: typically better 2% of the full scale, calculated as for EPA p. 136 appendix B

REPEATABILITY: better than 2%

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: 800x450x300 mm(hxwx d)

Subject to change without notice



SYSTEA S.p.A.

HEADQUARTER AND MANUFACTURING FACILITY:

VIA PADUNI, 2A - 03012 ANAGNI (FR) ITALY

TEL: +39 0775-776058 FAX +39 0775-772204

A member of Consorzio NDI

Web Site: <http://www.systea.it> Email: info@systea.it

Document ID: MicC_Phenols_Volatiles -03-E