

MICROMAC ARSENIC*

ON LINE ANALYZER FOR LOW LEVEL
TOTAL ARSENIC IN WATER

MICROMAC ARSENIC is a microprocessor controlled On Line analyzer specifically designed for automatic Low Level Total Arsenic monitoring on several types of water matrices.

✓ 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.

**Micromac Arsenic: 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.

✓ MEASURING INTERVAL

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

✓ REMOTE CONTROL

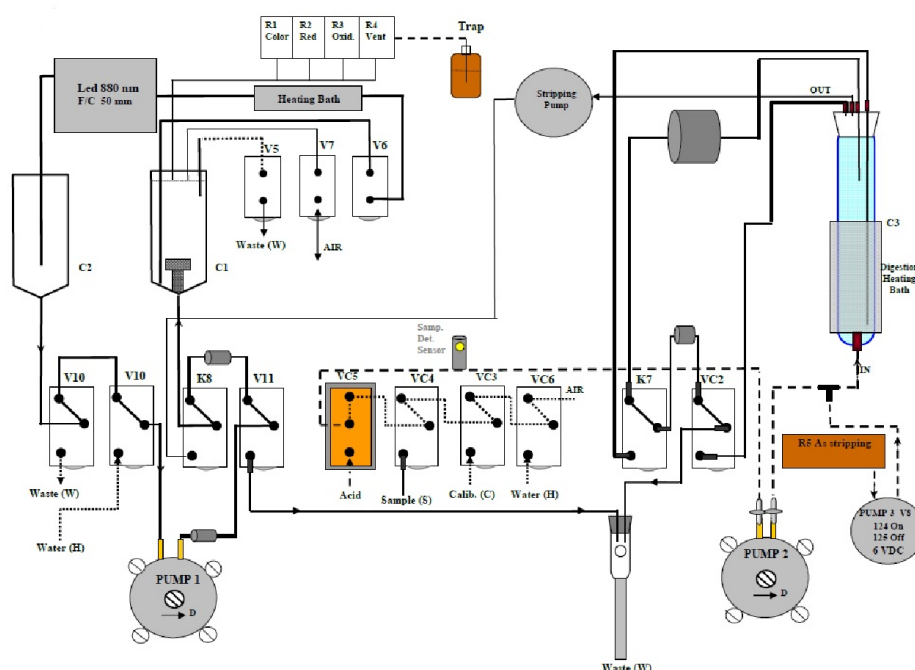
The analyzer can be controlled by remote trough a GSM modem and or connected to a local Datalogger to send data on a Zetaced a Systea Software available on Web Server.

✓ 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)

Total Low level Arsenic measuring principle and hydraulic diagram

Sample is acidified and heated to have all the Arsenic bounded with organic matter available for the stripping steps. Arsenic III and V contained in the sample are converted into Arsine that is sparged inside a strong oxidant where is converted to As V. Arsenic V reacts with Molibdate and Ascorbic acid to form a blue compound measured at 880 nm.



Patent pending

Technical Specifications

MEASURING PRINCIPLE: Arsine generation, Oxidation to As V, colorimetric measure by ammonium molybdate and ascorbic acid

COLORIMETER: dual beam, silicon detector

MEASUREMENT TYPE: cycles

MEASURING INTERVAL: programmable

MEASURING TIME: < 60 minutes

MEASURING RANGE: 0- 20/30/300 ppb other ranges available on request

DETECTION LIMIT: better than 2 ppb on 0-20 ppb range

REPEATABILITY: better than 1 ppb on 0-20 ppb range

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: 80 °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: 12/24 V DC external power supply included; 10W Standby; 20 W (mean) analysis.

WEIGHT: 33 Kg without reagents;

DIMENSION: 800x420x380 mm (hwxwd)

Subject to change without notice



SYSTEAL S.p.A.

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