MICROMAC MANGANESE
ON LINE ANALYZER FOR
MANGANESE MONITORING IN WATER

MICROMAC MANGANESE is a microprocessor controlled On Line analyzer specifically designed for automatic Manganese monitoring on several types of water matrix.

✓ ROBUST AND RELIABLE

Designed for industrial and Environmental On Line applications Micromac C 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.

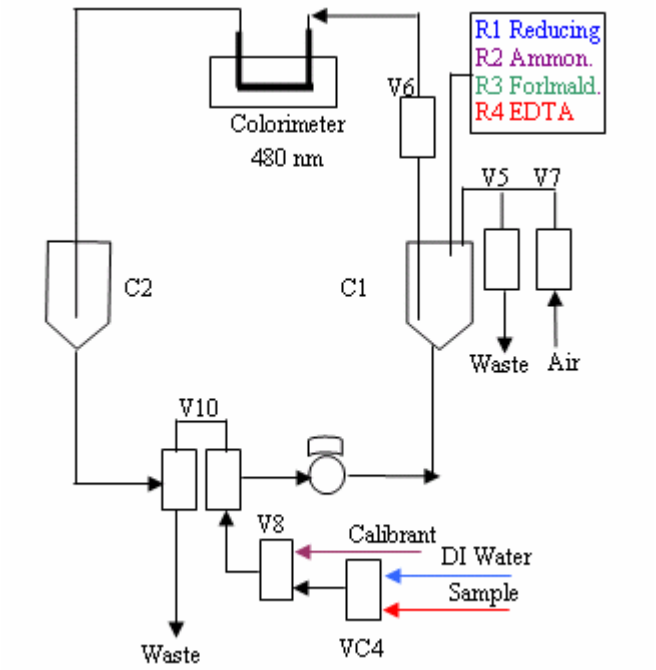
✓ FEATURES AND BENEFITS

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

SYSTEA

Manganese measuring principle and hydraulic diagram

The sample after proper filtration is pumped in the LFA reactor; Manganese determination is based on the formaldoxime method, where manganese (II) is oxidized to form a colored permanganate ion.
The colored complex is measured at 480 nm.



Technical Specifications

MEASURING PRINCIPLE: Colorimetric, Fomramldoxine method
COLORIMETER: dual beam, silicon detector
MEASUREMENT TYPE: cyclic; **MEASURING INTERVAL**: programmable
MEASURING TIME: 13-15 minutes depending on the ragem
MEASURING RANGE: 0-0.5/1.0/2.0/5.0/10/20/50 ppm Mn, other ranges available on request
DETECTION LIMIT: typically better 4% of the full scale, calculated as for EPA p. 136 appendix B
REPEATABILITY: better than 4%
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 from local power to 12 V DC included
WEIGHT: 33 Kg without reagents; **DIMENSION**: 800x450x300 mm(hxwxd)

Subject to change without notice

SYSTEA S.p.A.

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