

Labtech s.r.o.

LTX Unique Site Requirements

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Minimum requirements for labs to start AOX/EOX measurement

1. Laboratory

Dimensions and weight of the analyzer

dimensions with module: (L x W x H) 1002 x 360 x 310 mm weight: 25 kg (without PC)

Benchtop meeting the requirements for comfortable placement of the device, including a PC Source of working gases and el. the connection should be from the back of the device.

2. Power supply

3x socket for PC, screen and printer (if a printer is required). Connection: 220-230V, 50/60 Hz, 6A. 1x socket for LTX UNIQUE .. Connection: 220-230V, 50/60 Hz, 6A.

Power supply circuit should be compliant to international applicable electrical standards.

3. Working gases

Pressure vessels located within reach of supply hoses as standard up to 2.5 m by arrangement up to 10 m

- AOX, EOX - oxygen 2.5 (99.5%) or cleaner with a reduction valve with one-stage regulation

- EOX - argon 4N.6. (99.996%) with reducing valve with one-stage regulation

LABTECH recommends pressure reducing valves with Swagelok or from GCE. The working pressure is max. 0.2 MPa for both gases and these are supplied to the device via a connection polyurethane hoses with a diameter of 4/6 mm (oxygen) resp. 5.5 / 8 mm (argon)

<u>4. PC</u>

Control computer - All In One PC LENOVO - touch 20 ", Intel Pentium Dual-Core G620, RAM 4GB DDR3, Intel HD graphics, HDD 500GB, DVD burner, WiFi 802.11n, keyboard + mouse, Windows 7 Professional.

The manufacturer reserves the right to change the type of computer to a more powerful one.

5. Laboratory equipment

i) AOX Batch method – samples filtered through polycarbonate filters

- Horizontal rotary shaker
- Erlenmeyer flasks: 250 mL
- Vacuum filter holder
- Vacuum flask
- Vacuum pump (diaphram or other vacuum source)
- Stoppers and tubings
- Polycarbonate filters

ii)AOX batch method – samples filtered through quartz frits

Horizontal rotary shaker Erlenmeyer flasks: 250 mL LTPF-3 sample preparation system Quartz frits

iii) AOX column method – samples filtered through columnsLTPF-3 sample preparation system

Columns

iv) EOX method

Automatic Extractor acc. to Randall incl. accessories or Equipment for extraction and concentration of samples

6. Chemicals and accessories

i) AOX method (ISO 9562)

Sulfuric acid 96% p.a.

Electrolyte - Sodium perchlorate p.a.

- Acetic acid, 99% p.a.

- Deionized water

Other equipment

Standard NaCl solution (1 mgCl / ml)

4-chlorophenol standard solution (0.2 mgCl / ml)

Activated carbon for AOX

Automatic pipette 5-50 ul

ii) EOX method (DIN 38414 -S17 or EPA9023)

Sulfuric acid 96% p.a.

Electrolyte - Sodium perchlorate p.a.

- Acetic acid, 99% p.a.

- Deionized water

Other equipment

Standard NaCl solution (1 mgCl / ml)

Standard CONOSTAN oil (0,05% Cl)

Solvent for extraction (Hexan or Ethylacetate)