

AOX analyzer

multi X[®] 2500



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General

- The multi X[®] 2500 is suitable for the determination of AOX, EOX and POX, as well as for the determination of TOC in aqueous samples and for total chlorine (TX) determination in solid samples.
- The Double Furnace Technology combines horizontal and vertical combustion in a single instrument.
- Sophisticated sample feeding systems allow both fully and partially automated AOX determination in connection with diverse combinations of sample preparation.
- The analyzer works in conjunction with a number of relevant standards such as DIN, EN, ISO, ASTM.
- The multi X[®] 2500 can be extended and modified on an individual basis.

Highlights at a glance

- **Uniquely wide application spectrum** – AOX, EOX, POX, TOC, TX/TOX analysis
- **Free selection of operating mode** – vertical and horizontal sample feeding in one system
- Analysis of the AOX samples using the column and batch method in the container, or directly after push-out of the activated charcoal from the columns – **with a single system**
- **Versatile sample feeding systems** – automation with unique throughput for all parameters using only one sample feeder
- **Effective analysis** – high sample throughput, precise measurements, low operational costs
- **Unique wide-range coulometer** – for precise measurements in the range of ng to mg chlorine absolute
- **Integrated gas box**
- **Self Check System (SCS)**
- **Intuitive software navigation**
- **Minimal amount of maintenance**

Optimal adjustment for each sample matrix – efficient combustion

The innovative **Double Furnace Technology** combines vertical and horizontal combustion in a single instrument. This allows optimal adjustment of the combustion process to the requirements of diverse samples or parameters.

Digestion temperature

Up to 1100 °C in vertical or horizontal operating modes.

Required gases

Oxygen 99.995 % for AOX and TOC determination in vertical mode, additionally argon 99.996 % for EOX, POX or TX/TOX determination in solids as well as for all horizontal applications

Combustion in the vertical operating mode

- Outstandingly suited for **AOX** using the batch or column method
- Optimal for AOX direct feeding
- Also suited for EOX, POX and TOC determination
- Rapid analyses
- Small space requirement
- Low operational cost
- Optional push-out technology

Combustion in the horizontal operating mode

- Outstandingly suited for **EOX** determination
- Also for AOX or determination of TX in solid samples
- **Flame sensor technology** prevents effectively soot formation with difficult samples

AOX, EOX, POX, TX determination	TOC determination
Detection	
Microcoulometry	NDIR
Measurement Range*	
1000 µg Cl absolute	Up to 10,000 mg/l TOC
Detection limit*	
10 ng Cl absolute	0.2 mg/l
Precision (reproducibility)*/**	
Better 2 % RSD at > 5 ug Cl absolute, direct injection into coulometer cell	Better 2 % RSD at > 10 mg/l TOC, 500 µl injection volume
Sample amount**	
Max. 100 µl for EOX extracts Max. 100 mg for TX in solid samples	Max. 500 µl water sample
Analysis time**/**	
8–10 min	3–5 min
Furnace temperature	
max. 1100 °C	max. 950 °C
Gas supply	
Oxygen 99.995 %, 4–6 bar, approx. 40 l/h For EOX/POX/TX/AOX horizontal: Additionally argon 99.996 %, 4–6 bar approx. 10 l/h	Oxygen 99.995 % 2–5 bar, approx. 10 l/h
Power supply	
100–230 VAC; 50/60 Hz; max. 16 A	

Measurement, basic instrument (vertical operating)	Approx. 810 mm x 460 mm x 550 mm (W x H x D)
Measurement, basic instrument (horizontal operating)	Approx. 1400 mm x 460 mm x 550 mm
Additional TOC module	Approx. 300 mm x 460 mm x 550 mm
Sample feeder autoX 112 (Assembly is done on the device)	Approx. 500 mm x 500 mm x 430 mm
Weight, basic instrument Additional TOC module Sample feeder autoX 112:	Approx. 30 kg Approx. 8 kg Approx. 8 kg

* Depends on the options

** Depends on the sample matrix and operating mode

*** Depends on the concentration of elements