

- On-line analyzer
- organic carbon (TOC) and total carbon (TC)

### Applications

- Final effluent control for sewage treatment and industrial water treatment plants
- Waste water monitoring at airports using de-icing chemicals
- Process control in the chemical and pharmaceutical industry
- Paper and pulp production
- Discharge water from refineries
- Surface and river water monitoring
- Waste water from the milk industry
- Brewery waste water

## MoniTOC



**Automatic analyzer for the continuous measurement of total organic carbon (TOC) in water, with automatic sample preparation and the capability to measure individual samples.**

MoniTOC is a space-saving and economical alternative for routine TOC analysis. It was specially designed for process monitoring and its wide range makes it very adaptable.

### Comprehensive Standard Equipment

The standard version of MoniTOC is delivered complete with an automatic pre-treatment system which acidifies the sample and eliminates interference from inorganic carbon such as carbonates. It has the facility to present a sample manually for an instant test result.

A serial interface, a dilution unit and the GO-Win-Soft software for evaluating and documenting results are included.

### Advantages

- In general no sample preparation
- Simple operation
- Accurate monitoring of chemical processes allows lower rawmaterial and energy consumption
- Cost savings due to the continuous monitoring of the organic load of waste water
- Reduced risk of environmental pollution

### Options

- Chart recorder
- GO-RIF sample filter
- Solid sample accessory
- Limit value alarm relay

### Operation

After the inorganic carbon has been automatically removed the sample undergoes thermo-catalytic oxidation to convert organic carbon compounds to carbon dioxide. This takes place in an oxidation furnace at temperatures of 850 °C - 950 °C. All the necessary stripping and combustion gas is taken from the atmosphere and automatically conditioned in the analyzer.

After oxidation the sample gas stream is cooled and dried and then passed to an NDIR gas analyzer. The sample result is presented in milligrams of carbon per litre (mg C/l).

### Technical Data

**Pump**  
4-channel peristaltic pump

**Sample: requirement**  
125 ml/h

**Sample: volume analyzed**  
25 ml/h

**CO<sub>2</sub>-Detector**  
NDIR array

**Display**  
4 ½ place digital

**Range**  
0 - 300 mg/l or as specified

**Reproducibility**  
+/- 2% of full range

**Output signal**  
0/4 - 20 mA

**Detection limit**  
> 2% of full scale

**Oxidation temperature**  
ca. 850°C

**Time to 90% signal (T90)**  
ca. 4 minutes

**Carbonate elimination**  
acidification with HCl,  
gas stripping

**Waste discharge**  
treated atmospheric air

**Sample contact materials**  
ceramic, glass, Viton, PVC

**Power consumption**  
max. 1600 VA

**Power supply**  
100/110/230 V, 50/60 Hz

**Environmental temperature**  
5 - 30°C (no direct sunlight)

**Housing**  
painted aluminium with  
Plexiglas door

**Weight**  
apprx. 34 kg

**Dimensions (H x W x D)**  
700 x 590 x 400 mm