Technical Data

Measurement and Sample Preparation

Type of measurement :	COD measurement by electrochemical oxidation
Measurement range :	Ranging from 1 - 100 to max. 1 - 100.000 mg/l COD
Accuracy :	5 %
Repeatability :	5 %
Response time :	30 sec (application dependent)
Measurement cycle :	2 min. (application dependent)
Sample preparation :	Maintenance-free particle separator “Flowsampler”

Operation and Data Output

Graphic-LCD-screen, high resolution, back-lit
Autostart-Function
Self-explaining software including maintenance checklists and support
Industry-standard data interface
Data storage on flash card

Connections

Waste water, drain:	Tube 30 mm ID or threaded 32 mm OD or as specified
Electrical power:	230 / 100 V~, 50 / 60 Hz, 50 VA
Analog output:	0/4 - 20 mA
Serial interface:	for data transfer and remote control
	Malfunction Alarm, Life-Zero
	Connection for printer
Remote control :	via TCP/ IP protocol (internet)

Protection Class, Dimensions and Weight

Elox100:	Steel cabinet IP 55 (NEMA 13)
Elox100 plus:	Stainless steel cab. IP 65 (NEMA 4x)
Dimensions :	600 x 600 x 420 mm (W x H x D)
	(23.6 x 23.6 x 13.7 inches WxHxD)
Weight :	45 kg

Version Elox-2 E 38 11

If you require more information about our products e. g. for on-line TOC, TN_b, TP, COD, BOD, ammonium or toxicity measurement, please call us.

We are happy to advise you!

The TOC Company

LAR PROCESS ANALYSERS AG

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TÜVRheinland CERT ISO 9001

The TOC Company

LAR PROCESS ANALYSERS AG

Measurement of COD in two minutes !

- **Elox100**
- **Elox100 plus**

Continuous Short- Time COD Measuring Systems

- **For waste water treatment and process control**
- **Fast, precise and accurate**
- **Minimal maintenance**

Elox100®

The TOC Company

LAR PROCESS ANALYSERS AG

- **The economical solution to sensitive and fast COD determination**

By using “State of the Art” manufacturing materials and techniques the **Elox100** offers performance previously only available from the most expensive on-line analysers.

Using the same LAR measuring principle, the **Elox100**, designed and built on the worldwide success of the EloxMonitor, offers an economical alternative for on-line COD measurement.

For this, the Elox technique, a worldwide patented electrochemical method has been developed by LAR, which, by the action of an electrical current on an electrode, produces OH-radicals as the oxidizing agent.

By using the newly developed difference method the influence of chloride will be completely eliminated.

- **No hazardous reagents**
- **No dangerous user exposure**

The method requires no caustic or other endangering substances. No cleaning solutions or hazardous reagents are required to be used or disposed of.

The result is the highest operational safety and outstanding uncomplicated operation.

- **Easy to operate and reliable**

Every available software function is screen help supported, in addition to the operation manual which gives information in relation to routine operation and servicing. Data can easily be transferred to disk or via serial or parallel interface to a measuring station for further processing or remote control.

The **Elox100** resumes normal operation after power loss and stores all previous data in memory.

- **For industrial and municipal waste water treatment plants (WWTP)**

The **Elox100** is suitable for almost every COD measurement in sewage treatment and industrial applications.

The ranging allows the determination of COD values between 1 and 100,000 mg/l. This extremely wide measuring range fully cover the needs for monitoring and process control.

Moreover, thousands of users from very different industries trust in the **Elox100**, world-wide.

NEW FEATURES
graphic screen, flash card, more storage

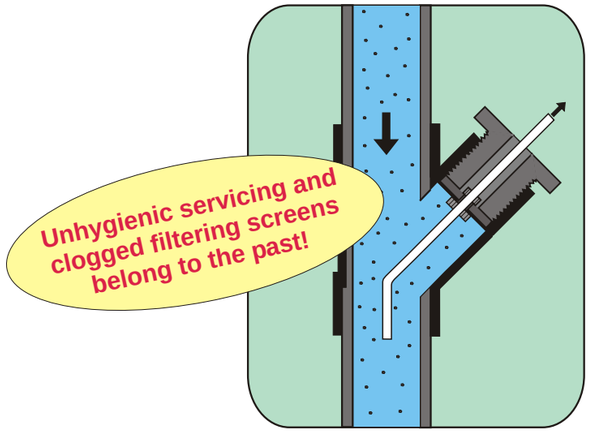
- **Instant “Spike”detection**

The great advantage of the system is that within minutes of delivering a sample the measured COD value is available.
The sensitive and fast measurement guarantees the successful operation of the **Elox100** as a useful measuring instrument in municipal and industrial process control.

- **Maintenance- and filtration-free sample preparation**

The patented sample preparation system **“Flow Sampler”** works filtration-free as the sample is taken in the centre of the sample stream against the direction of the main flow.

Thereby, all large particles are reliably removed. Smaller solid matter particles will however be sampled, so that a representative sample reaches the Analyzer.



The patented clog-free
sample preparation system “FlowSampler"

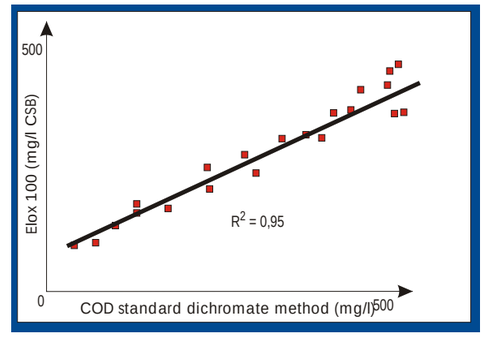
FlowSampler masters even the most difficult tasks; for example, sampling at sewage works influents before the coarse screen!

- **Actual oxidation in seconds**

The crucial advantage of the **Elox100** is the oxidation of all water components in short time. Different from photometric measurement systems an actual oxidation happens. A falsification of values due to coloration or turbidity (e. g. in chemical industry or paint production) cannot occur.

- **Accurate COD measurement with good correlation to standard method**

The electrochemical measuring principle delivers directly an electrical measuring signal. This gives good correlation with the standard dichromate method.
The graphic presents the mesaurements at the influent of a petrochemical WWTP.



Good correlation -
Elox100 with the standard dichromate method