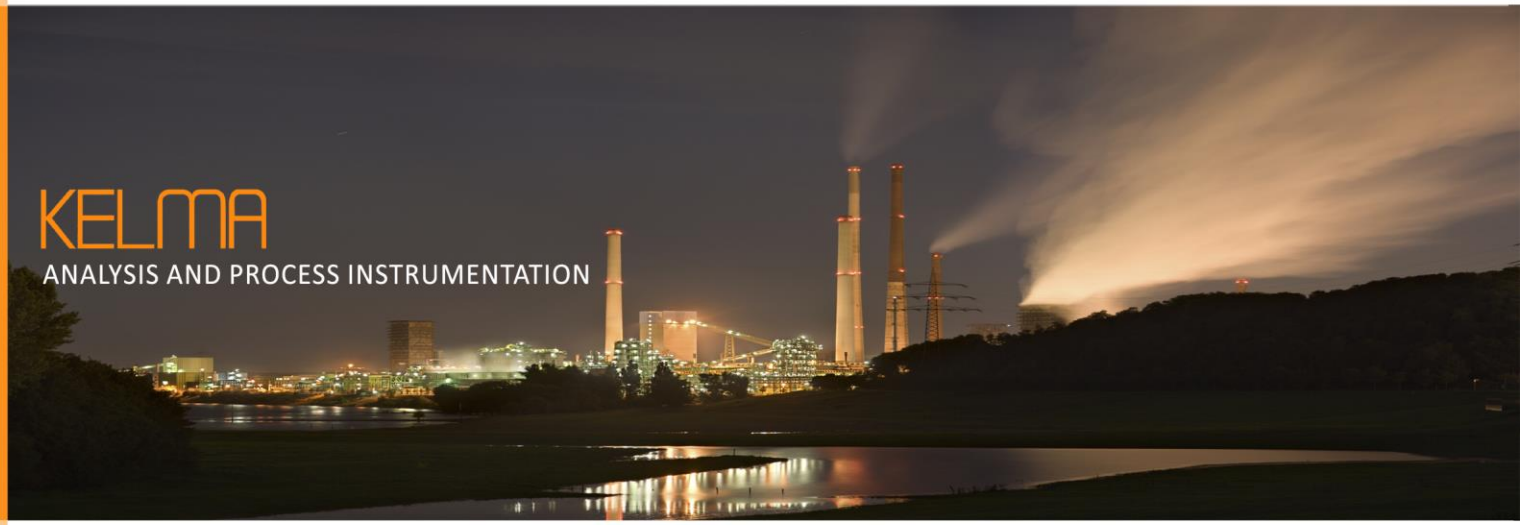

Liquid analysers | RODTOX NG

On-line BOD & Toxicity analyser
Laboratory BOD & Toxicity analyser

KELMA

RODTOX NG

RODTOX NG is an unrivalled analyser for measuring biological oxygen demand and toxicity. Micro-organisms are used to perform the measurements. By making comparisons with a reference sample, the device analyses BOD online and determines the toxicity of wastewater. A laboratory version is also available that has a sampler for measuring up to 12 samples.

APPLICATIONS

- Industrial wastewater treatment plants
- Municipal wastewater treatment plants
- Water treatment for tank-cleaning industries
- Companies that want to measure the influent and effluent of their wastewater
- Environmental laboratories

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USER INTERFACE

RODTOX NG is equipped with a completely integrated software for the control and the operation by using a touch screen. This makes it possible to follow up all data that is necessary for the supervision of the analyzes. In addition, the control of the RODTOX NG is very user-friendly. A remote follow-up is possible through an included software for the computer or through an app for the smartphone or tablet.

RODTOX NG delivers real-time measurement results. The interface of the device is equipped so that it just takes but a moment that all parameters, results and measurements are available. Through a fast data-exchange, all results will be stored into the system and the control of the RODTOX NG can be taken over by a computer, tablet or smartphone.

- ✓ Control and surveillance of all measurement results (DO, BOD & TOXICITY)
- ✓ Adjusting parameters
- ✓ Surveillance of trends and steps
- ✓ Remote operation
- ✓ Alarms are displayed when errors are found and/or by exceeding toxicity level.

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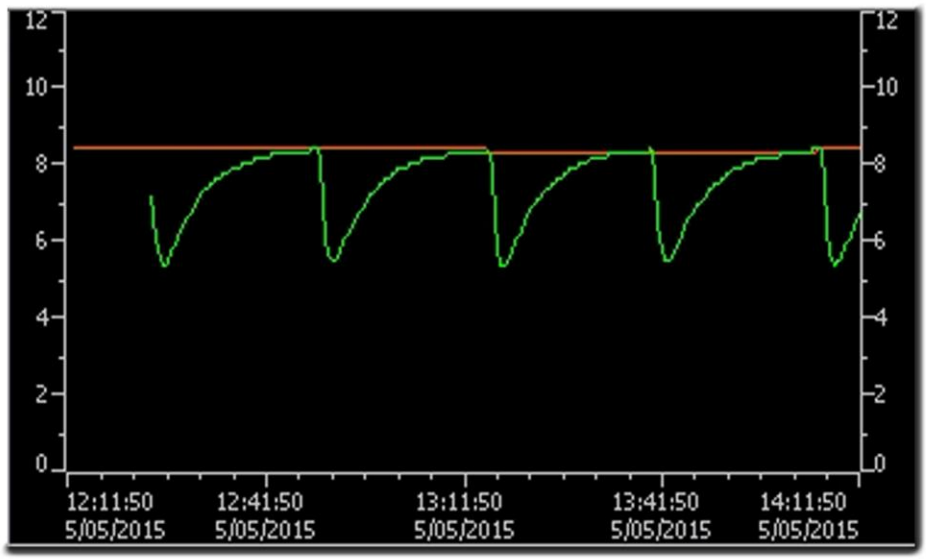
OPERATION

Biochemical Oxygen Demand (BOD) is the amount of dissolved oxygen required to break down organic material in water by micro-organisms. BOD is usable as a parameter for operating water treatment plants efficiently. It is one of the critical parameters for biological activity of sludge in water treatment plants. It is also the key measurement delivered by RODTOX NG. The simultaneous toxicity measurement tells you whether the water contains toxic substances that may damage the micro-organisms and thus also the water treatment plant.

Laboratory analyses require far more time and money. With RODTOX NG you get the measurements instantly. Users can rapidly detect threats for the water treatment plant and intervene before it's too late. All results are placed in log files and in reports saved in PDF format.



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ON-LINE MEASUREMENTS

RODTOX NG has entirely separate biological and electric parts. The biological part has a reaction vessel filled with 10 litres of sludge from the owner's water treatment plant. The sludge is constantly aerated and stirred. The device continuously monitors the amount of dissolved oxygen. Wastewater and sludge are connected to RODTOX NG by a self-cleaning bypass filter and a calibration solution.

The RODTOX NG measuring process consists of three steps: acclimatisation, calibration and measurements. Acclimatisation is necessary to get the sludge to constant temperature and to find a balance in the dissolved oxygen. Acclimatisation is followed by calibration, after which BOD, chronic and acute toxicity measurements will be performed.

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An owner of a water treatment plant is subject to numerous laws and regulations. This is why operators must regularly perform self-inspections of their plants. RODTOX NG guarantees up-to-date and accurate analysis results.

- Low maintenance
- User-friendly interface
- Security assured by administrator account with password
- Remote control
- Significant reduction of operating costs
- Fewer hours spent on sampling and laboratory work
- Lower energy bill
- Reduced charges, improved effluent quality

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TECHNICAL SPECIFICATIONS

Analytical data

Parameters	BOD - Toxicity - Dissolved oxygen
Range	0 - 500 000 mg BOD / l 0 - 100% Toxicity
Cycle time	Automatic
Acclimatisation time	Adjustable
Calibration	Automatically
Number of sampling points	1 (standard), optional till 12 points (laboratory version)

Housing

Housing	Weatherproof
Degree of protection	IP 54
Dimensions	1900 h X 600 w X 550 d mm

Electrical properties

Communication link	Ethernet (LAN) TCP/IP Sm@rtclient (app, license included)
USB port(s)	1
Alarms	Adjustable
Power supply	230 of 115 V
Frequency	50 of 60 Hz
Analogue output (BOD, O_2, pH and toxiciteit)	4 - 20 mA
Digital output	Relays (notifications: errors, service, toxicity, BOD, O_2 and pH (optional))

Compressed air properties

Compressed air	Minimum 4 bar, instrument air

Sample & sludge preparation

Tubes for inlet sludge & sample	PVC tube OD 40 mm (not included)
Wastewater flow rate	Approx 10. - 50 l/min (minimum)
Sludge flow rate	Approx 10 .- 50 l/min (minimum)

Miscellaneous

Product certificate	CE certificated
Humidity	5-95% RH
Temperature	5°-30°C

Would you like to receive more information about the product?

Can we help you?
We are always at your service!

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