

SEAL
Analytical



MiniLab

BOD SERIES

AUTOMATED SYSTEMS FOR
BIOCHEMICAL OXYGEN DEMAND (BOD) TESTING

PRECISION ROBOTICS FOR BOD AUTOMATION



AUTOMATED BOD WORKFLOW

- ▶ Bottle decapping/recapping
- ▶ pH measurement and adjustment
- ▶ Sample homogenization
- ▶ Sample dosing and pre-dilution
- ▶ Addition of dilution water, seed, and ATU (for cBOD)
- ▶ Dissolved oxygen measurement using optical probes
- ▶ Barcode reading and LIMS-compatible data export

Biochemical Oxygen Demand testing is tedious, repetitive—and essential. SEAL's MiniLab BOD Series brings powerful automation to environmental labs of all sizes, eliminating manual handling and reducing errors while increasing throughput and data integrity.

From compact benchtop systems to fully customized high-capacity robotics, each model is purpose-built to meet the unique needs of your lab, with software and mechanics tailored for performance, compliance, and ease of use.

The MiniLab series handles every step with precision—from sample prep through final DO measurement—ensuring full regulatory compliance with:

Standard Methods 5210 B • EPA 405.1 • ISO 5815-1 • DIN 38 409-H51 • and more



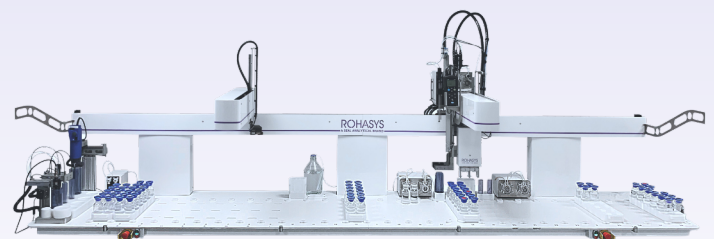
Many probe configurations available, such as simultaneous dual-read, dual-dispense configuration for up to 120 samples per hour.

CONFIGURATIONS

MiniLab ML Series

For High Throughput & Full Automation

Standard and custom solutions for high-throughput labs including options for up to 192 BOD bottles, multiple DO probes, automated sample prep, barcode scanning, and more!



Designed by chemists for chemists

Every element of the MiniLab BOD Series was engineered with lab users in mind.

No unnecessary covers. No hidden maintenance. Just robust, practical automation that gets the job done.

KEY FEATURES

▶ Scalable Systems to Match Your Needs

All MiniLab platforms are scalable in both size and automation to meet your exact BOD automation needs and available lab bench space.

▶ Compatible with Industry-Standard Probes

Integrates with leading brands of optical DO probes and meters—trusted by labs worldwide.

▶ Open, Accessible Platform

Bottles are always visible and accessible. Optional system cabinets available.

▶ Reliable Robotic Movement

More accurate and reliable than traditional stepper motors, our encoded motors on MiniLab ML systems ensure alignment is maintained during long runs for hands-free, worry-free operation.

▶ Flexible Software

LIMS-compatible with customizable instant export files, automatic COM port detection, and utilizes auto-saving, no “Save” button required.

▶ Compatible with glass and plastic BOD bottles

Precision-cut bottle trays allow you to use your preferred bottle material. Glass or plastic bottles, such as the Environmental Express Eco-Conscious Single-Use BOD Bottle, are equally compatible.

▶ Direct DI Water Connection

Wash pot can be plumbed directly to your water tap, eliminating basin refills and reducing cross-contamination risk. Wash bath built with robust and inert ultra high molecular weight polyethylene.

FOR EVERY LABORATORY

MiniLab AR

Compact, Automated BOD Analysis

Low footprint systems for up to 60 BOD bottles, scalable to match your capacity and throughput needs. Automates addition of dilution water, seed, and ATU before read takes place with an optical DO probe.



MiniLab AP

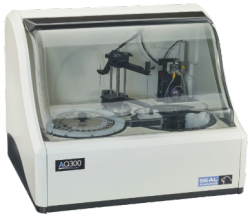
Compact, Automated BOD Prep

Add pre-dilution, pH adjustment, and sample dosing from collection bottles on MiniLab AP to BOD bottles on the MiniLab AR. This low footprint system can be integrated with a MiniLab AR system at any time.

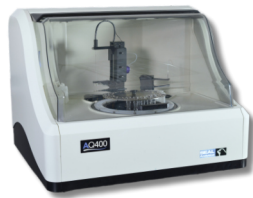


Colorimetric Nutrient Analyzers

DISCRETE ANALYZERS



AQ300

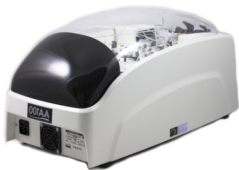


AQ400



AQ700

SEGMENTED FLOW ANALYZERS



AA100



AA500



QuAAtro39

Robotic Handling Systems

FOR BOD, PH, CONDUCTIVITY, SAMPLE PREP, AND MORE



Minilab ML



Minilab AR & AP

Digestion Systems

FOR METALS AND TKN, TP DIGESTION



BD50



DEENA 4

60 Years of Experience in Environmental Analysis Built into Every Analyzer

50 years' experience in designing, developing and manufacturing automated wet chemistry analyzers specifically for very low detection levels in environmental applications has helped SEAL to apply the most useful, easy to use features into the SEAL range of Discrete and Segmented Flow analyzers. The SEAL analyzers are widely acknowledged as the best for environmental analysis, giving you everything you need to achieve equal or superior results to the manual and approved laboratory methods the SEAL analyzer replaces.

A GLOBAL LEADER IN ENVIRONMENTAL & INDUSTRIAL ANALYSIS SOLUTIONS

SEAL Analyzers are monitoring environmental samples in every corner of the globe. They are manufactured in the USA, Germany and the Netherlands. Engineering and chemistry support is provided from SEAL global facilities in USA, Germany, UK the Netherlands, and China along with our worldwide network of specialist distributors.

COMPREHENSIVE SUPPORT

We offer comprehensive applications, technical service and software support.

INCLUDING

- ▶ A choice of preventative maintenance and service contracts to meet your specific requirements
- ▶ In-house and online training
- ▶ Guaranteed availability of genuine consumables and spare parts
- ▶ Adaptation of methods to specific requirements such as matrix, range or detection limit
- ▶ Continuous in-house development of software to incorporate new customer requested features

SEAL
Analytical



Designed by chemists for chemists

LEARN MORE AT



SEAL Analytical is a global company with offices worldwide, contact your nearest location at www.seal-analytical.com.

SEAL Analytical, Inc.
6501 West Donges Bay Road
Mequon, WI 53092
United States
Tel: +1 (262) 241 7900
Fax: +1 (262) 241 7970
sales@seal-us.com

SEAL Analytical Ltd.
Clywedog Road South
Wrexham Industrial Estate
Wrexham LL13 9XS
United Kingdom
Tel: +44 (0) 1978 807273
sales.uk@seal-analytical.com

SEAL Analytical Netherlands
Provincienbaan 4
5121 DL Rijen
The Netherlands
Tel: +31 161 240152
Fax: +31 161 240153
salesnl@seal-analytical.com

SEAL Analytical GmbH
Werkstrasse 5
D-22844 Norderstedt
Germany
Tel: +49 (0)40 60 9292 9-00
Fax: +49 (0)40 60 9292 9-02
salesde@seal-analytical.com

SEAL Analytical Shanghai
Room 413, 12th Building,
No. 128 Xiangyin Road,
Shanghai, 200433
China
Tel: +86 21 3362 5002
Fax: +86 21 3362 5002