



# PRODUCT CATALOG

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# Leading laboratories worldwide choose **SEAL** systems



SEAL Analyzers are monitoring environmental samples in every corner of the globe. They are manufactured in the USA, Germany, and the Netherlands. With full teams of engineering and chemistry support staff in facilities in Europe, USA, and China, laboratories can be sure of the best support, instruments, and methods, meeting the latest regulatory requirements. SEAL's global facilities are well supported by a worldwide network of specialist distributors and sales and service centers. Our specialist distributors maintain local stocks of SEAL Analytical parts and have factory-trained service staff.



**SEAL ANALYTICAL • US**



**SEAL ANALYTICAL • GERMANY**



**SEAL ANALYTICAL • NETHERLANDS**



**SEAL ANALYTICAL • UK**



**SEAL ANALYTICAL • CHINA**



# Designed by chemists for chemists

SEAL prides itself on designing, manufacturing, and supporting the best analyzers, sample preparation, and robotic equipment. For many of our thousands of customers around the globe this is no secret. But there are many other qualities that make SEAL a trusted brand.

## ► Focused Expertise & Support

SEAL has over 60 years of experience in designing and manufacturing automated analyzers and systems, focused specifically on environmental, agricultural, and industrial applications. Our in-house technical team of knowledgeable chemists, engineers, and software programmers sets us apart from all others in the industry in both applications and support.

## ► Innovative Products Solving Problems

Our product development always starts with you, our customer. Understanding your needs means we're developing products that are smaller, more automated, more reliable, and better for the environment.

## ► Building Integrity and Trust

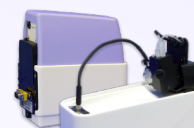
We operate with the highest integrity and focus on building strong customer relationships; in many cases we have spent decades as a trusted supplier delivering the highest quality products and solutions.

## WHAT'S NEW IN 2026?

**05**  
Ready-To-Use  
Reagents



**08**  
New SEAL  
Fluorometer



**08**  
Amperometric  
Cyanide Detection



**10**  
Soil Particle  
Size Distribution  
Robot



**10**  
Automated  
Turbidity  
Screening



**14**  
PFAS-Safe Vials  
& Closures



**WATER**



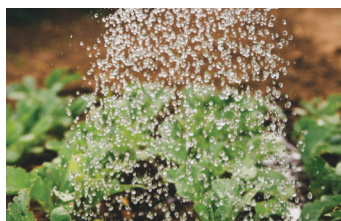
**SEAWATER**



**WASTEWATER**



**DRINKING WATER**



**SOILS & PLANTS**



**FERTILIZER**



**TOBACCO**



**FOOD & BEVERAGE**



# DISCRETE ANALYZERS

TP Phosphate Nitrate TKN Color Phenol  
Silica Ammonia Nitrite Sulfate  
Alkalinity

## THE MOST POPULAR AND VERSATILE ANALYZERS

A SEAL discrete nutrient analyzer completely automates your manual wet chemistry methods, replicating the tasks of a laboratory chemist while enabling sequential measurement of multiple analytes in a single run.. With true walk away operation including automatic standard preparation, automatic pre- and post-dilution, and automatic spiking capabilities, a SEAL discrete analyzer is ideal for laboratories requiring high levels of automation and a wide range of chemistries.

### METHODS INCLUDE

Alkalinity

Ammonia

Chloride

Cyanide

Nitrate + Nitrite

Nitrite

Phenol

Phosphate, ortho

Phosphorus, total

Silicate

Sulfate

Total Kjeldahl Nitrogen

**PLUS MANY MORE**

## AQ300

Compact bench-top analyzer.



## Features

### Multiple Methods

Multiple chemistry parameters on a single sample in any order and without operator intervention. SEAL provides method procedures specific to wastewater and other applications.

### No Cross Contamination

The only discrete analyzer with an integrated probe washer, eliminating cross-contamination between reagents and samples.

### Integrated Cadmium Coil

The cadmium reduction method is the most widely accepted nitrate+nitrite test method. SEAL's AQ software automatically switches the coil inline for the reduction step, and includes in-situ regeneration. All four EPA approved nitrate+nitrite chemistries and reduction methods can be run, allowing flexibility and options for your lab.

### Simplified Waste Disposal

Segregated chemical and wash waste minimizes hazardous waste disposal costs. Easy to access and collected outside of the analyzer.

### Compact Design

The compact, enclosed, bench-top design allows for easy visual checks during operation and does not require a fume hood.

## AQ400

High speed, automation  
and detection levels.

## AQ700

Highest throughput and speed,  
automation and detection levels.



# The right technology to completely replace your manual methods and deliver superior results.



## NO CROSS-CONTAMINATION

The only discrete analyzer with an integrated probe washer, eliminating cross-contamination between reagents and samples. Keeps the probe free of reagents, oil, and grease. Ideal for wastewater.

## COMPACT DESIGN

Compact, enclosed, bench-top design allows for easy visual checks during operation and does not require a fume hood.



## INTEGRATED OPTICALLY PURE CUVETTE

10 mm pathlength or longer for maximum sensitivity and lower detection levels. SEAL's quartz cuvette is superior to styrene for sample analysis, ensuring the highest levels of precision.

## USEPA, ASTM, ISO APPROVED METHODS

Also complies with other international regulatory methods

## EFFECTIVE SAMPLE & REAGENT MIXING

Reproducible results thanks to sample and reagent mixing that replicates manual mixing in a flask.



## COMPLETE REACTION

Constant heating and programmable reaction time for a highly controlled reaction - allowing the reaction to be brought to completion increasing precision and accuracy of test results.

## READY-TO-USE REAGENTS

SEAL Analytical offers both Ready-to-Use Discrete Analyzer and reagent preparation procedures giving labs the choice of pre-made reagent options and preparing reagents in-house.



## MULTIPLE METHODS

Up to 14 chemistry parameters on a single sample in any order and without operator intervention.

## SIMPLIFIED WASTE DISPOSAL

Segregated chemical and wash waste minimizes hazardous waste disposal costs. Easy to access and collected outside of the analyzer.



## DISPOSABLE REACTION WELLS

Inexpensive, disposable wells that reduce carryover and cost per test.

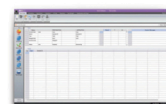
## LOWER DETECTION LEVELS

Critical for environmental applications, lowest possible detection levels are a priority. This is made possible with the right combination of mixing technique, longer path length, optically-pure detection, accurate dispensing, and completion of chemical reaction.



## REAGENT WEDGES

With onboard cooling; built-in level sensor to verify reagent volume required for each test.



## LIMS READY

Customizable output for easy integration.

## FAST, ON-DEMAND ANALYSIS

Easy, rapid colorimetric testing with minimal start-up time.



## MINIMAL MOVING PARTS

Less maintenance and a more robust analyzer.

## REDUCED REAGENT CONSUMPTION & WASTE GENERATION

Uses only  $\mu$ L dispense of reagents and samples to greatly reduced the amount of chemical used and waste generated with each test.

## REMOVABLE SAMPLE TRAY

Allows pre-loading of samples. Interchangeable for optional larger vials.



## INTEGRATED CADMIUM COIL

Allows flexibility in nitrate+nitrite testing. Software automatically switches the coil inline with easy in-situ regeneration.



## How are AQ Discrete Analyzers impacting real labs?

Watch testimonials from labs utilizing SEAL discrete analyzers every day for sample analysis:



University Labs



Municipal Labs

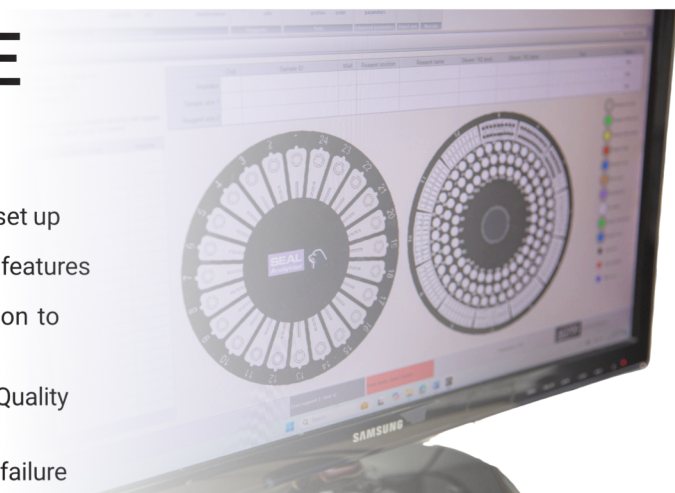


Private Testing Labs

# Software Designed for Environmental Laboratories

## AQ SOFTWARE

- ▶ User friendly, intuitive, highly flexible software streamlines run set up
- ▶ Continuous in-house development incorporates user requested features
- ▶ Controls all analytical procedures from working standard dilution to sample analysis, cuvette washing and system QC
- ▶ Automated system quality control with built in QCPro™ Data Quality Assurance System
- ▶ User can specify QC types, limits and corrective actions upon QA failure



### FEATURES

- ▶ Provides an audit trail of all sample analysis
- ▶ Prepares working standards from a stock solution
- ▶ Prepares spike samples and calculates recoveries
- ▶ Automatically performs system calibration and general maintenance
- ▶ Automatic rerun of over-range samples. Diluted over-range samples will be batched with associated QC as required.
- ▶ Continuously monitors analyzer status and temperature of reaction ring
- ▶ Assigns tests in the highest order of efficiency
- ▶ Real-time monitoring of reagents
- ▶ Data exportable to LIMS or worksheets
- ▶ Quickly run multiple tests in any order
- ▶ Predicts when analysis will be completed for better task planning
- ▶ Easily monitor run status with color coding to visually indicate reagent, sample, and test status

## Ready-To-Use Reagents from INORGANIC VENTURES

**When every minute counts,  
precision and reliability are paramount.**

SEAL Analytical offers both Ready-to-Use Discrete Analyzer Reagents from Inorganic Ventures as well as easy-to-follow reagent preparation procedures, allowing laboratories to choose a reagent workflow that best meets their needs.

### KEEP YOUR ANALYZER IN THE FAST LANE

- ▶ Maximize throughput, minimize manual preparation
- ▶ Up to 24 months of reagent stability
- ▶ Ensure consistent data with reduced prep errors
- ▶ Effortless setup, more time for critical tasks
- ▶ Designed specifically for EPA methods on SEAL discrete analyzers



 Explore Available Reagents 



# CONTINUOUS FLOW ANALYZERS

Plants Wastewater Soil Seawater  
Wine Drinking Water Tobacco  
Fertilizer

## AUTOANALYZERS FOR ENVIRONMENTAL ANALYSIS

Ideal for laboratories requiring high throughput, high reproducibility, and low detection limits, SEAL's segmented flow analyzers (SFA) are state-of-the-art nutrient analyzers. Systems are customizable to fit all workloads and method needs. Perfectly suited for standard chemistries as well as inline sample preparation including dialysis, distillation, gas diffusion and UV digestion.

## APPLICATIONS INCLUDE

**Seawater**

**Water and Wastewater**

**Drinking Water**

**Fertilizer**

**Soil and plants**

**Tobacco**

**Wine and Beer**

**Animal Feed**

Not all features available on all models.



### Total Automation

SEAL SFA systems are capable of full digital control of heaters, distillation, digestion, air injection, and reagents. The AA500 and QuAAtro are capable of total automation including automatic start-up and shut-down for true set and leave operation.

### Multi-Test Chemistry Manifold

SEAL SFA systems can include multi-test chemistry manifolds. These allow flexibility in your testing so that each channel is not dedicated to one chemistry and what you test on the system can vary from one run to the next.

### Dialysis

Dialyzers can remove interference from sample color or extraction solution plus extend the analytical range. The sample is passed over a dialyzer membrane and the analyte of interest is passed into a carrier solution, eliminating background color and interferences from extraction solutions.

### In-line UV Digestion

SEAL segmented flow analyzers can perform UV-assisted persulfate digestion automatically within the chemistry module. This digestion is suitable for Total Cyanide, TN, or TP and a multi-test option is available for TP and TN to be run in series on a single channel.

### In-Line Distillation

For the measurement of analytes including phenol and free, WAD, and total cyanide. The distillation heating unit and coils are built into the chemistry manifold making these analyses much more compact and simpler to run.

### Gas Diffusion

Gas diffusion manifolds can be used for analyzing chemistries such as ammonia, TKN, and cyanide, eliminating sample analysis issues due to differing salinities and pH. This ensures reproducible, reliable results.

## Featuring Innovative & Intelligent Technologies

- ▶ New, all-in-one housing design is both compact and modular
- ▶ True automatic startup and shutdown with pump platen engage and release
- ▶ Automatic standard preparation and auto dilution
- ▶ Multi-test manifolds for different nutrients with no hardware changes
- ▶ Easy reagent management with auto level sensing
- ▶ Ultra-low detection limits

# Systems to fit all workloads

## AA500

**Flexible analyzer for  
varying workloads**

### Modular & Compact

The all-in one housing uses modular components to deliver a compact analyzer with more organization, more integration, and more powerful control - all while using less bench space. System modules can be ordered as a full unit or purchased individually to replace AA3 components piece-by-piece.

### High Resolution Digital Photometer

The high resolution dual beam LED digital photometer delivers long life, low maintenance, and the lowest detection levels, even in extreme environments. Optional LED wavelength modules 250nm - 880nm. Optional 10 - 50 mm flow cells.

### Total Automation

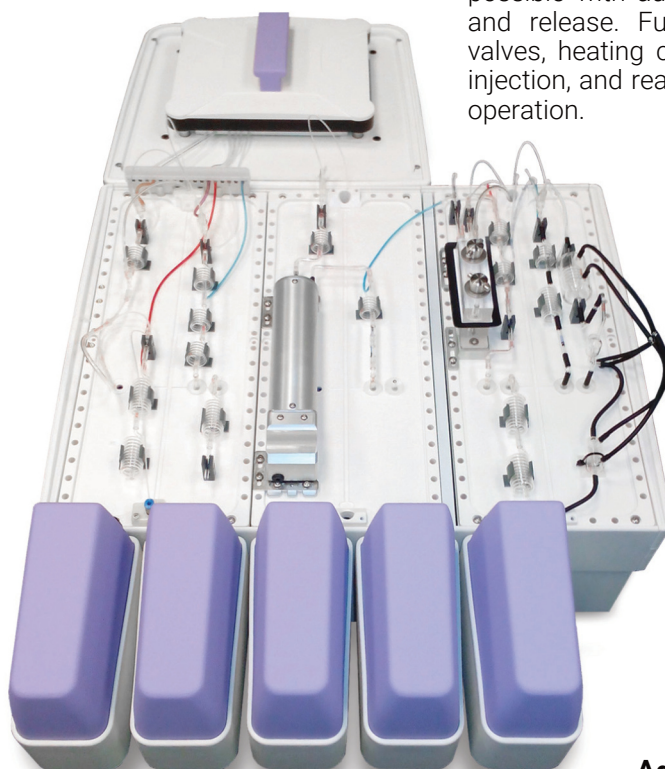
True auto startup and auto shutdown is now possible with automatic pump platen engage and release. Full digital control of reagent valves, heating coils, distillation, digestion, air injection, and reagents delivers true walk away operation.

### High Performance Chemistry Module

The chemistry manifold uses an easy-fix system to position precision glass components. Glass is chemically inert and enables quick, easy visual checks and cleaning. Distillation, gas diffusion, dialysis and UV digestion can also be incorporated. Optional multitest manifolds available for quick method changeover.

### Advanced Sampling

SEAL samplers are designed specifically for flow analysis - fast, robust, and available with various rack sizes to meet your sample requirements. Samples can be added at any time during the run.



**AutoAnalyzers In Research**

## COMPACT, AUTOMATED 2-CHANNEL NUTRIENT ANALYSIS



## AA100

**Economical analyzer  
for small laboratories**

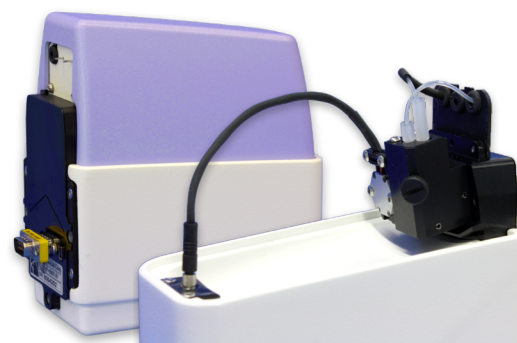
The AA100 is built for labs that need an economic, uncomplicated analyzer dedicated to one or two chemistries on up to two channels—without sacrificing the segmented flow performance you rely on. Its compact, lightweight design fits easily on the bench and is capable of housing similar hardware as the AA500 including inline distillation, gas diffusion, dialysis, and more.

Designed for reliable daily operation, the AA100 pairs a high-sensitivity LED digital photometer with an inert glass manifold for quick visual checks and consistent results. SEAL samplers are integrated with the system for random access sampling and samples can be added at any time during a run to keep work moving.

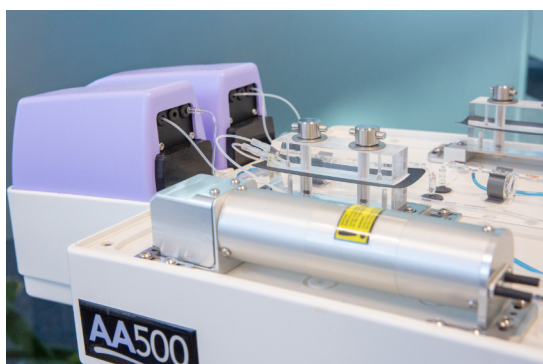


## New SEAL Fluorometer for Low-Level Ammonia

SEAL's new fluorometer is designed specifically for segmented flow analysis, delivering seamless integration with SEAL continuous flow analyzers for reliable performance and simple setup. Compact, lightweight, and cost-efficient, it saves bench space while reducing complexity for everyday operation. The SEAL fluorometer is configurable to mount directly on an AA500 like a standard detector, or to run as a standalone module for AA3 or QuAAtro 39 systems, giving labs flexible options to upgrade analyzers and expand capability with a purpose-built, streamlined fluorometer.



- ▶ Ultra-low detection limits with OPA method for ammonia analysis
- ▶ Eliminate salt water optical interference
- ▶ Mounts on AA500 manifold and compatible with AA3 & QuAAtro 39
- ▶ Compact, lightweight, cost-efficient



## Automated Cyanide Pre-Treatment & Analysis

SEAL's amperometric cyanide detectors pair with in-line gas diffusion to replace the cyanide distillation step directly on your segmented flow analyzer. The sample is passed over a PTFE membrane with an acceptor solution passing underneath the membrane. Cyanide is transferred from the sample stream into a clean matrix for measurement, leaving interfering compounds and background color behind for more reproducible results.

**Methods:** ASTM 7237 • ASTM 7511 • ASTM 6888 • ISO 14403-2

- ▶ Amperometric cyanide detection
- ▶ Compatible with in-line UV digestion for Total Cyanide
- ▶ Inline gas diffusion
- ▶ Streamlined alternative to distillation

## HIGH THROUGHPUT MICROFLOW ANALYSIS



The QuAAtro39 is a microflow SFA system, the internal diameter of all glassware being 1 mm. This reduces reagent consumption and increases throughput, with methods running up to 100 - 120 samples hour. The integrated enclosed manifold and detector are heated to 40° C. Flow stability is ensured as the optimal bubble frequency for each method is programmed by electronically-synchronized silent air valves.

Ideal for water, wastewater, seawater, soil, plant extracts, tobacco, wine and more, this analyzer has a focus on providing the lowest detection limits on a compact, upright system.

- ▶ Ideal for low-level detection
- ▶ Up to 5 channels for maximum throughput
- ▶ Microflow fluidics reduce reagent volumes
- ▶ Compact, upright design for minimal footprint

**QuAAtro39**  
High capacity nutrient analyzer

# ROBOTIC HANDLING SYSTEMS

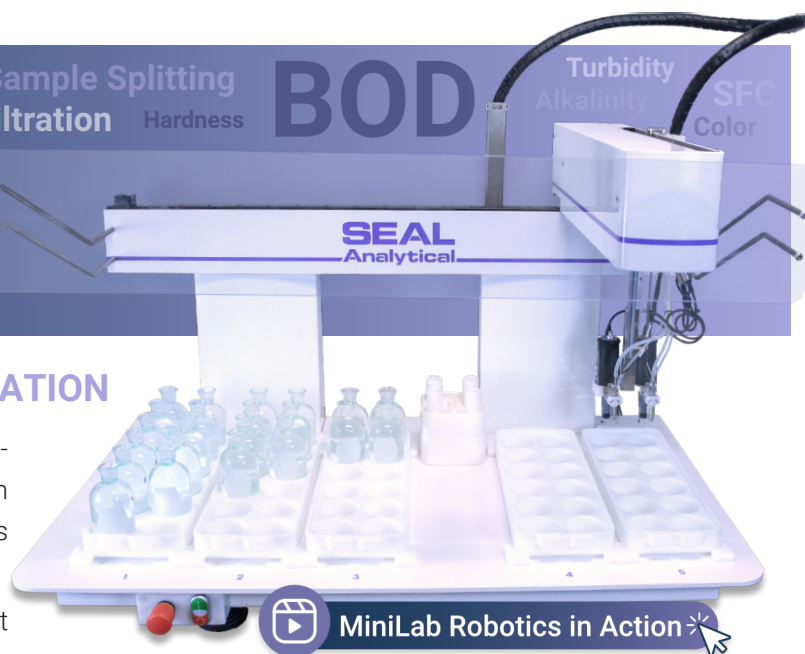


## ADVANCED LABORATORY AUTOMATION

The SEAL MiniLab series includes a robotic platform for every size laboratory and workload. With its compact benchtop design, the MiniLab employs sample preparation steps in routine analysis.

Unique to the SEAL system is the ability to select from a range of MiniLab models that automate part or all of your sample preparation steps. You choose the levels of robotics, automation, and throughput that suits your laboratory. All MiniLab models come in a range of sizes, providing you a robotic solution for every lab and budget.

The MiniLab was designed for reliable “walk-away” operation. Integration with your LIMS ensures simple import and export of sample ID’s, procedures, and preferences. The intuitive versatile software allows analysts to easily set-up a run based on preset templates.



## ADVANTAGES INCLUDE

- ▶ Automated sample pre-treatment and analysis in a single unit
- ▶ Flexibility to suit every lab and application
- ▶ Precision robotics for perfect alignment
- ▶ Robust construction and reliable operation
- ▶ Easy to use and easy to maintain
- ▶ In-house software development

## For Every Lab Size and Workflow

SEAL's MiniLab systems are available in two platform styles to match your automation needs.

**MiniLab AR & AP** units are compact benchtop robots designed for routine sample handling and preparation. AR automates probe-based measurements such as pH and conductivity, while AP adds aliquoting, dilutions, and other prep steps. Together, they offer efficient, space-saving automation for common water and soil workflows.

**MiniLab ML** platforms are larger, high-capacity systems built for advanced automation. With wider frames and options for multiple robotic arms, ML units handle complex tasks—including bottle movement, filtration, reagent dosing, and capping/decapping—delivering higher throughput and true walk-away operation.



**MiniLab AR & AP** offer compact, benchtop automation for sample prep and analysis.

**MiniLab AR & AP** offer compact, benchtop automation for sample prep and analysis.





## Multi-Parameter for pH, Conductivity, and more

The Multi-Parameter MiniLab can be configured to prepare and automate a range of analytical parameters - all in one system. Ideal for water and soil applications, systems range from a simple single parameter unit, such as pH, to a multi-probe unit designed to measure many parameters. These can include sample preparation features such as sample splitting and filtration. The MiniLab is compatible with many current meters, probe types, and titration systems.

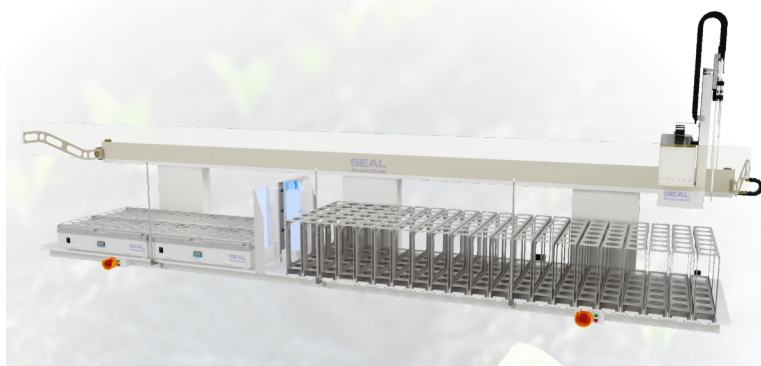


Automate one or more of the following parameters:

Alkalinity • pH • Conductivity • Turbidity • Color • Hardness • BOD

## Soil Particle Size Distribution on the MiniLab

The Soil Particle Size Distribution Robot automates key steps in soil analysis according to **ISO 11277**, offering a reliable and cost-effective solution for determining the mineral particle composition of soils. By simplifying sedimentation and pipetting processes, this robot enhances the analysis of clay fractions, helping researchers better understand soil properties. It also offers additional automation solutions for sample preparation, organic matter removal, and weighing.



### AUTOMATION INCLUDES

- ▶ Sample preparation, collection, and weighing
- ▶ Programmable dosing cycles
- ▶ Mixing and homogenization
- ▶ Controlled water evaporation
- ▶ Optional base frame for prevention of vibrations
- ▶ LIMS import and export compatibility

Ready for ISO 11277!

## Automate Turbidity Screening for Lead & Metals Testing

The MiniLab AR for Turbidity provides an automated, reliable solution for screening samples that exceed the 1 NTU turbidity requirement prior to metals analysis under **EPA 200.8**. The MiniLab AR eliminates the variability of manual turbidity checks while increasing throughput in busy drinking-water laboratories. Its compact benchtop design allows labs of any size to automate this essential pretreatment step, quickly identifying samples requiring digestion before ICP-MS. This system delivers dependable walk-away operation, flexible rack configurations, and seamless LIMS integration all designed to streamline your workflow and ensure compliance with EPA turbidity screening requirements for lead and metals testing.



# ROBOTIC HANDLING SYSTEMS

# FOR BIOCHEMICAL OXYGEN DEMAND

## 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



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

**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*

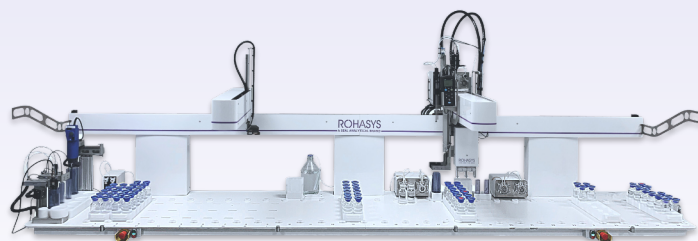


## CONFIGURATIONS

### 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!





## 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.

## 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.

## 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.



# DIGESTION SYSTEMS

Metals Kjeldahl TP  
TN TKP Mercury TKN

IMPROVED DIGESTION RESULTS IN BETTER ANALYSIS

*SEAL has many different ways to simplify the sample digestion process depending on the level of automation required and the digest temperature.*

## DEENA 2

### *Automated Metals Digestion and Sample Preparation*

The DEENA 2 is ideal for trace metals and fully automating the digestion process insuring each sample is treated exactly the same, safeguarding against human error. The DEENA 2 significantly increases laboratory safety by eliminating the manual dispensing of corrosive acids and other dangerous reagents.

The DEENA 2 automates all aspects of the digestion process, including accurate dispense of small volumes of reagents into sample tubes, thorough mixing, heating up to 200 C°, and reconstitution of the sample volume after digesting. The DEENA 2 is designed to eliminate cross-contamination throughout the digestion process with touch-free automation, keeping the sample purity in-tact.



Suitable for EPA Approved Methods:

3005, 3010, 3050A, 3050B, 200.2, 200.7, 200.8, 7470A, 7471A, 241.1, 1631, 245.7 and more!

### FEATURES INCLUDE

- ▶ Accurately dispense small volumes of reagents
- ▶ Thorough mixing and homogenization
- ▶ Self-contained fume hood for operation directly on benchtop
- ▶ Heat up to 200° C
- ▶ Fill to volume after digestion is complete
- ▶ Protect analysts from manual dispensing of hazardous reagents

## DEENA 4

### *The Next Generation of Automated Metals Digestion*

The **new** DEENA 4 combines years of expertise and customer feedback to deliver an unparalleled system adaptable to the unique needs of different industries. With improved mechanical alignment, options for an 8-way valve pump and dedicated individual pumps, syringe module for sample spiking, modernized and intuitive software, sample tube sensors, and more - the DEENA 4 introduces new ways of optimizing your automated digestions.

The same standard features of the DEENA 2 carryover to the DEENA 4, including the optional self-contained fume hood allowing the DEENA 4 to run on a standard benchtop, saving space in your fume hood for other needs. All methods from the DEENA 2 can be carried over to the DEENA 4.



### ADDITIONAL FEATURES INCLUDE

- ▶ Internal air purge
- ▶ Upgraded mechanics & precision
- ▶ Carbon-fiber dispensing arm for increased corrosion-free durability
- ▶ Optional syringe for sample spiking
- ▶ Improved ultra-sonic sensor for precise fill-to-volume
- ▶ 8-way valve reagent pump and/or dedicated, individually-calibrated pumps for up to 12 total reagents



## BD50 & BD28

## Programmable High-Temperature Digestion System

The BD50 and BD28 Programmable Digestion Systems perform acid digestion of samples under controlled conditions and are available in two different formats:

- ▶ 28 place for 250 mL digestion tubes
- ▶ 50 place for both 75 mL and 100 mL digestion tubes

Designed for durability and robustness, BD50 and BD28 digestion systems include a block digestion unit, programmable controller, tube rack with draft shield, digestion tubes, and an optional cooling stand that supports the tube rack above the block. Ideal for applications such as Total Kjeldahl Nitrogen (TKN) and Phosphorus (TKP), the unique heating element provides uniform heating throughout the solid aluminum block ensuring reproducible digestions. If you are looking to automate your digestions, the BD50 and BD28 offer enhanced productivity, better quality digestions, and increased safety.



## SEAL PARTS & CONSUMABLES

### Genuine SEAL parts for optimum performance

For any instrument, long-term reliability and reproducibility depends on regular maintenance and using quality parts. SEAL simplifies this process by offering high quality, genuine parts and consumables directly from our locally stocked warehouses for your SEAL instruments and other laboratory systems. Please visit our website at [www.seal-analytical.com](http://www.seal-analytical.com) for more information!



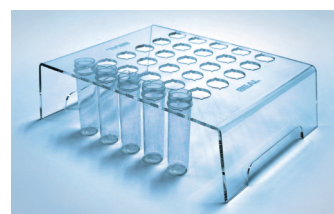
**Continuous Flow  
Analyzer Parts**



**Discrete  
Analyzer Parts**



**Flared Pump  
Tubing for ICP**



**Other Supplies**

### PFAS-Safe Vials & Closures

**At industry-leading values**, these new additions to our high-quality laboratory consumables are ready to lower your background contamination and improve your PFAS-testing experience.

Per- and Polyfluoroalkyl Substances (PFAS) testing demands unmatched precision. Even trace contamination from sample vials or closures can compromise results and regulatory compliance. SEAL Analytical now offers a line of autosampler vials, liners, and closures engineered to reduce background interference in PFAS testing following EPA and ISO methodology.



Explore PFAS-Safe Vials

# Experience SEAL Support

*From today's analyzers to legacy systems, we help you keep results flowing.*

**Free Technical Support** - Hardware, Software, & Chemistry • **Training (On-site & Virtual)** • **Free Webinars**  
**Service Contracts & Preventative Maintenance** • **Spares & Consumables** • **Software Updates**

Exceptional support is our most valuable product. Our focus is to keep your systems running smoothly while giving your team the knowledge, tools, and confidence to get the best performance from your analyzers every day. Our support spans the full life cycle of your equipment, with factory-trained chemists and engineers at each SEAL office and distributor location to help with both the newest systems and legacy models.

Our team doesn't just solve problems. We also teach best practices to maximize up-time and results through tailored training, free webinars, and clear guidance documents. For added peace of mind, flexible support contracts include preventative maintenance and priority assistance, and our in-house software team delivers easy-to-install updates with the latest features and Windows compatibility. Wherever you are, SEAL's global support network brings decades of expertise to your lab.



**Chemistry expertise on-demand**

*In-house chemists, when and where you need them.*



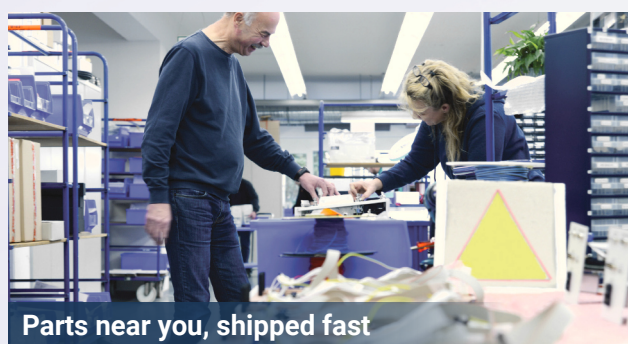
**Software built by SEAL**

*Developed in-house for stability and continuous improvement.*



**Continuous research & development**

*Keeping you up-to-date and regulatory compliant.*



**Parts near you, shipped fast**

*Local spares and consumables ready for quick dispatch.*



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