



SEAL
Analytical



MiniLab

AR SERIES

**ROBOTIC TESTING AND
SAMPLE HANDLING SYSTEMS**

MiniLab AR & AP

Robotic Testing and Sample Handling Systems

Compact and powerful, the SEAL MiniLab AP (Auto Prep) and AR (Auto Read) systems combine robotic sample handling with robotic movement of probes and other testing equipment. All of this is done on a compact platform to optimize efficiency and minimize bench space in the laboratory.



AR & AP BOD
with sample prep

AR (Auto Read) System

The MiniLab AR systems are capable of many robotic testing and handling tasks. Almost any “off the shelf” probe or manual testing can be automated. Ideally suited for water and soil testing such as pH, conductivity and BOD. With the addition of an AP system, sample preparation can be automated – including filtering, pH adjustment, sample dilutions and more.

AP (Auto Prep) System

The SEAL MiniLab AP system can be added to an AR system to automate sample preparation. Before your selected test is read, a series of actions will be performed on the parent sample – automating the preparation. Parent sample bottles can be used to minimize waste and contamination, eliminating the need to use a new bottle. SEAL offers standard or custom racks for both units.

COMMON CONFIGURATIONS

► All applied methods are in compliance with international regulations including EPA, ISO, DIN, Standard Methods, etc.



pH reading

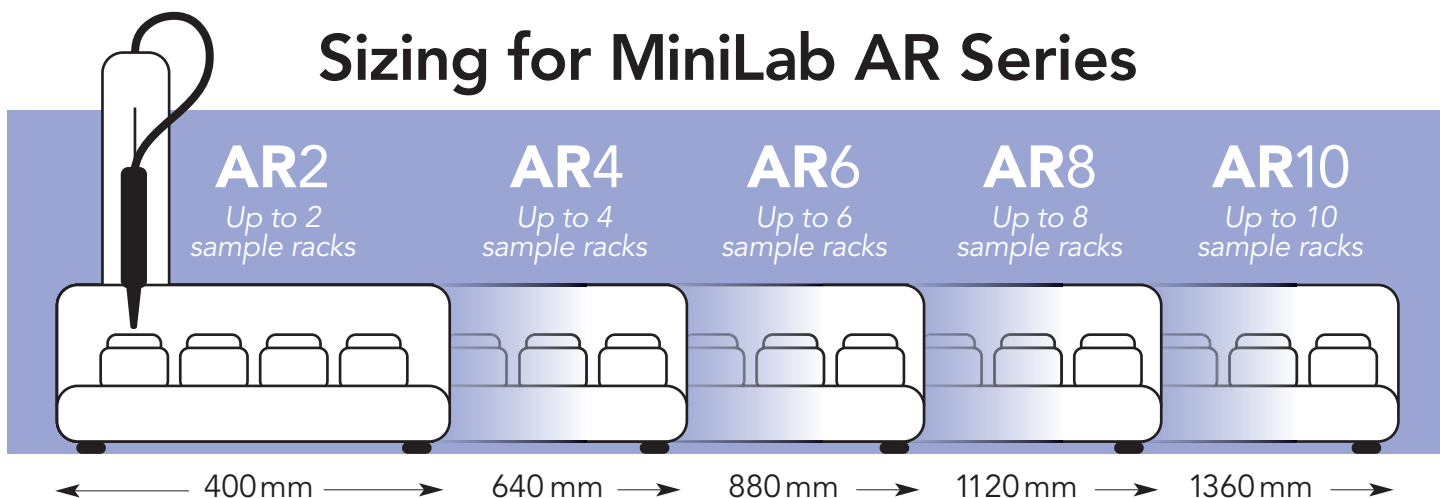
pH, conductivity, turbidity and alkalinity reading

CAPABILITIES

TESTS	AR	AP	ML
pH	●	●	●
Conductivity	●	●	●
Hardness	●		●
Alkalinity	●		●
Color	●		●
BOD	●		●
COD	●		●

AUTOMATION	AR	AP	ML
Decapping			●
Air purging		●	●
Sample dosing	●		●
Pre-dilution		●	●
Mixing	●	●	●
pH adjustment		●	●
Filtration		●	●
Weighing			●
Heating			●
Barcode integrated			●
Barcode handheld	●	●	●
Chemical dosing	●	●	●
Fill to final volume	●	●	●
Ultra-turrax homogenization		●	●

Sizing for MiniLab AR Series



SEAL's MiniLab AR & AP series is suitable for any size space and workload. Designed to be modular, you choose the platform that suits your laboratory workflow. Lower your cost per sample by reducing sample turn-around time, improving accuracy of results, eliminating errors and operator/sample interaction and minimizing downtime.

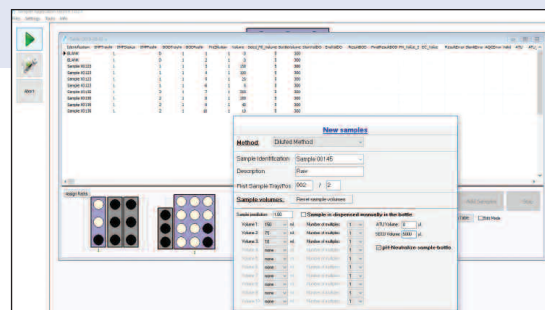
Sample Racks

The AR platform and sample racks are reliable and robust, holding each bottle firmly. They hold a wide variety of sample cups – from sample volumes of 4 mL to more than 1 L. Custom racks and systems can be made to utilize your existing racks. Contact SEAL for system capacity guidelines.



Software

The SEAL AR software is intuitive, flexible and easy to use. The scheduler is user definable and there are extensive QC options. Importing and exporting is flexible and simple. The software is written by our in house programmer resulting in fast turn around of custom features.



MiniLab ML Series

Platforms from 600 mm to 4000 mm wide

Bigger capacity.

Multiple platforms working together

More automation.

Multiple robotic arms on a single platform



Colorimetric Nutrient Analyzers

DISCRETE ANALYZERS



AQ270



AQ300



AQ400

SEGMENTED FLOW ANALYZERS



AA100



AA500



QuAAtro39

50 Years' 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.

Digestion Systems

FOR METALS AND TKN,
TP DIGESTION



BD50



SmartBlock II



DEENA 3



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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, England, the Netherlands and China along with a worldwide network of specialist distributors.

COMPREHENSIVE SUPPORT

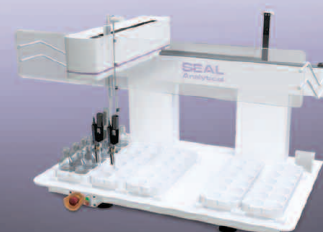
We offer comprehensive applications, technical service and software support.

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

Robotic Handling Systems

SEAL Robotic MiniLab systems for automating sample pretreatment in the laboratory — improving your sample handling efficiency. Typical applications include BOD, pH, COD, Alkalinity, and conductivity measurements with options such as decapping/capping, sample splitting, and filtration. Call us about your laboratory needs and we will design a robot to suit you.



SEAL MiniLab