



AA500

**HIGH PERFORMANCE, HIGH
AUTOMATION AUTOANALYZER**

NO₃ NH₃ NO₂ PO₄ TP Si TKN

AA500 – the world's best AutoAnalyzer has evolved. Now featuring full software control including automatic startup and complete automatic shutdown.

AA500



AA500 uses full automation and intelligent technologies to deliver high performance water and seawater analysis

USEPA, ASTM, ISO, AOAC, DIN, CORESTA

and other international regulatory compliant methods are available.

APPLICATIONS INCLUDE

Drinking Water
Water and Wastewater
Seawater
Soil and Plants
Tobacco
Wine

HOW DOES THE AA500 WORK?

The AA500 is the next step in the evolution of the original world-class Technicon AutoAnalyzer. With compact, all-in-one housing, the system delivers up to six channels with total automation of startup and shutdown, as well as full digital control of digestion, distillation, and air injection. With a focus on maintaining the AutoAnalyzer's long standing reputation for high quality and reliability, the AA500 brings unequaled performance, flexibility and productivity enhancements to the laboratory.

The AA500 incorporates the same principles employed in a basic segmented flow analyzer (SFA) system, of an autosampler, a peristaltic pump, a chemistry manifold, a detector and data acquisition software. Sample and reagents are pumped continuously through the chemistry manifold. Air bubbles are introduced at regular intervals forming unique reaction segments which are mixed using glass coils. Glass is ideal as it is inert, stays clean and enables easy visual checks.

In SFA, reactions run to completion and the ratio of sample to reagents in the detector reaches a constant maximum value. This results in ultra-low detection limits and exceptional reproducibility. Variations in reaction time, temperature and sample matrix do not affect the results as they do in other colorimetric techniques, such as flow injection analysis, where the reaction is not brought to completion.

The AA500 is the top-of-the line AutoAnalyzer incorporating the latest innovations to deliver your laboratory the freedom of total automation while achieving very high precision and the lowest detections levels. It is the AutoAnalyzer you've been waiting for.

AA500 FOR TOTAL AUTOMATION ► PROGRAM AND LEAVE

The AA500 incorporates automation previously unseen in Continuous Segmented Flow Analyzers, with true automated startup, automated standards and dilution, and true automated shutdown. The computer controlled **automatic pump platen engage and release** with AACE intelligent software performs an automatic startup and shutdown. This includes turning on/off the pump, engaging/releasing the platen on/off the pump tubes, and a valve controlled reagent/wash program. With the AA500, you have an analyzer with total automation.

AA500 – the future of Segmented Flow Analyzers is here.

Total Automation • Ultralow Detection • Multitest Chemistries • High Throughput

ADVANTAGES AND BENEFITS

Set and Leave Operation

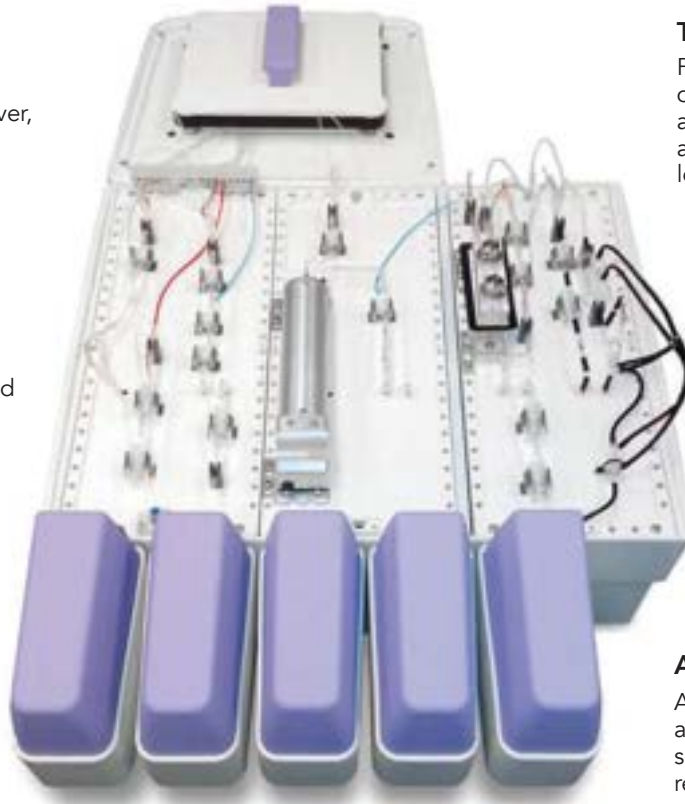
Auto startup, auto method changeover, and auto shutdown including valve/reagent wash and automatic pump platen release

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 standalone or used to replace AA3 modules.

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 10-50mm flow cells.



Total Automation

Full digital control of heating baths, distillation, digestion, air injection and reagents with automatic startup and shutdown delivers true set and leave 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

AA500 Samplers are fast, robust and available with various rack sizes to meet your sample requirements. Samples can be added at any time during the run.

POWERFUL SOFTWARE

The instrument control and data acquisition software has been completely redesigned to give total digital control of all the analyzer's functions. The AACE software package is now the most powerful, intuitive software driving a range of enhancements such as the reanalysis of runs and online and post debubbling.



Featuring Innovation & Intelligent Technologies

- ▶ **Ultra-low detection limits**
- ▶ **Total automatic start up & shutdown including platen release and self-wash**
- ▶ **Auto standards and dilution**
- ▶ **Easy reagent management with auto level sensing**
- ▶ **Multi-test manifolds for different nutrients with no hardware changes**
- ▶ **New, all-in-one housing design is both compact and modular**
- ▶ **Easy to upgrade**



PLEASE VISIT
www.seal-analytical.com

or contact your local SEAL Analytical representative about your specific application.

Colorimetric Nutrient Analyzers

DISCRETE ANALYZERS



AQ300



AQ400



AQ700

SEGMENTED FLOW ANALYZERS



AA100



AA500



QuAAtro39

50 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.

Digestion Systems

FOR METALS AND TKN, TP DIGESTION



BD50



DEENA



www.seal-analytical.com

SEAL Analytical is a global company with offices worldwide - contact us at:

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

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 a worldwide network of specialist distributors.

COMPREHENSIVE SUPPORT

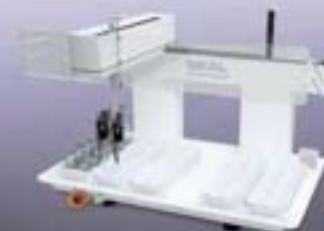
We offer comprehensive applications, technical service and software support.

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