

# The Automated Lab for the Beverage Industry



**ALAB 5000**





# Welcome to the World of Maximum Productivity

Designed for filling lines and analysis labs, the ALAB 5000 series brings automated quality control to the beverage industry. We've integrated our instruments for packaged beverages into an automated solution that provides quick, at-line quality control for various beverages, including beer, wine, soft drinks, water, and sake.

Automated 24/7 operation means no downtime on your production line and maximum productivity. Since all of the instruments come from Anton Paar, your whole measuring system and instruments are seamlessly integrated into one powerful analysis solution.

We've combined decades of experience in the beverage industry with a proven design to produce an automated measuring system that you can rely on.

## Multiple Configurations for All Your Needs

- The ALAB 5000 series: Designed for beverage filling lines and beverage analysis laboratories, it maintains repeated sampling intervals and executes quality control of packaged beverages
- ALAB 5000 Analytic: Analyzes bulk and retail packaged beverages (e.g. glass bottles, aluminum cans) for the most important physical and chemical parameters
- ALAB 5000 Torque: Measures the opening torque of twist-off caps and crowns for bottles

FIND OUT MORE



[www.anton-paar.com/  
apb-alab-5000](http://www.anton-paar.com/apb-alab-5000)





# ALAB 5000

## Analytic

One instrument, one sample, tons of parameters.  
With ALAB 5000 Analytic, measure your most relevant parameters on one sample and spend your time working on more important tasks.

With our total package oxygen meter TPO 5000 and our Packaged Beverage Analyzer (PBA) system, you determine important parameters such as density, alcohol concentration, and extract depending on the configuration.

Integrate it into new or existing filling lines or use it as a stand-alone solution – the choice is yours.

### Robust and ready for the production facility

Protective features – like housing and enclosed cabinets – let it withstand high temperatures and humidity levels. With air conditioning and a dry air supply, it maintains stable ambient conditions so you can move your instruments from your lab to your production line.

### At-line measurements for quick results and analysis

Eight-minute measurement times and at-line analysis allow you to conduct more measurements than ever before. Since it's an at-line instrument, anyone on your production team can respond to any deviations so there's no need to get your highly trained QC team involved. What's more, since you respond to deviations on the spot, you save future costs on out-of-spec production.

### High-quality instrumentation for reproducible results

Well-proven Anton Paar analytic instruments are used to complete ALAB's analytics: TPO 5000 performs the piercing of the package and measures head-space oxygen and dissolved oxygen. The instrument also supplies the liquid sample to the connected PBA system for further analysis. Eliminate errors, no sample prep needed: Because sample preparation is automated, each sample is prepared in a reproducible, accurate way. Every measurement starts with the same external influences – and there's no operator influence – which ensures highest reproducibility of measurement results.

→ Total package oxygen  
Density  
CO<sub>2</sub>  
Alcohol  
... and much more



# ALAB 5000

## Torque

- ✓ Measure opening torque and ring crack torque in 30 secs (per bottle)
- ✓ Minimize human interaction for higher efficiency and safer operation
- ✓ Integrate it into new or existing filling lines or use it as a stand-alone solution



### Gold bottle verification equals peace of mind

ALAB 5000 Torque comes with our gold-bottle torque verification, ensuring you always get measurement results you can rely on.



### Automatic bottle detection

Bottle height and diameter are automatically measured before the torque measurement, which quantifies the correct method for the sample.



### One system for various bottle sizes

With its universal adapter for closure diameters, ALAB 5000 Torque can measure the seal-break torque and ring-crack torque of cap diameters ranging from 25 mm to 40 mm, no matter the material. The torque curve can be shown on the interface or transmitted to a data system.





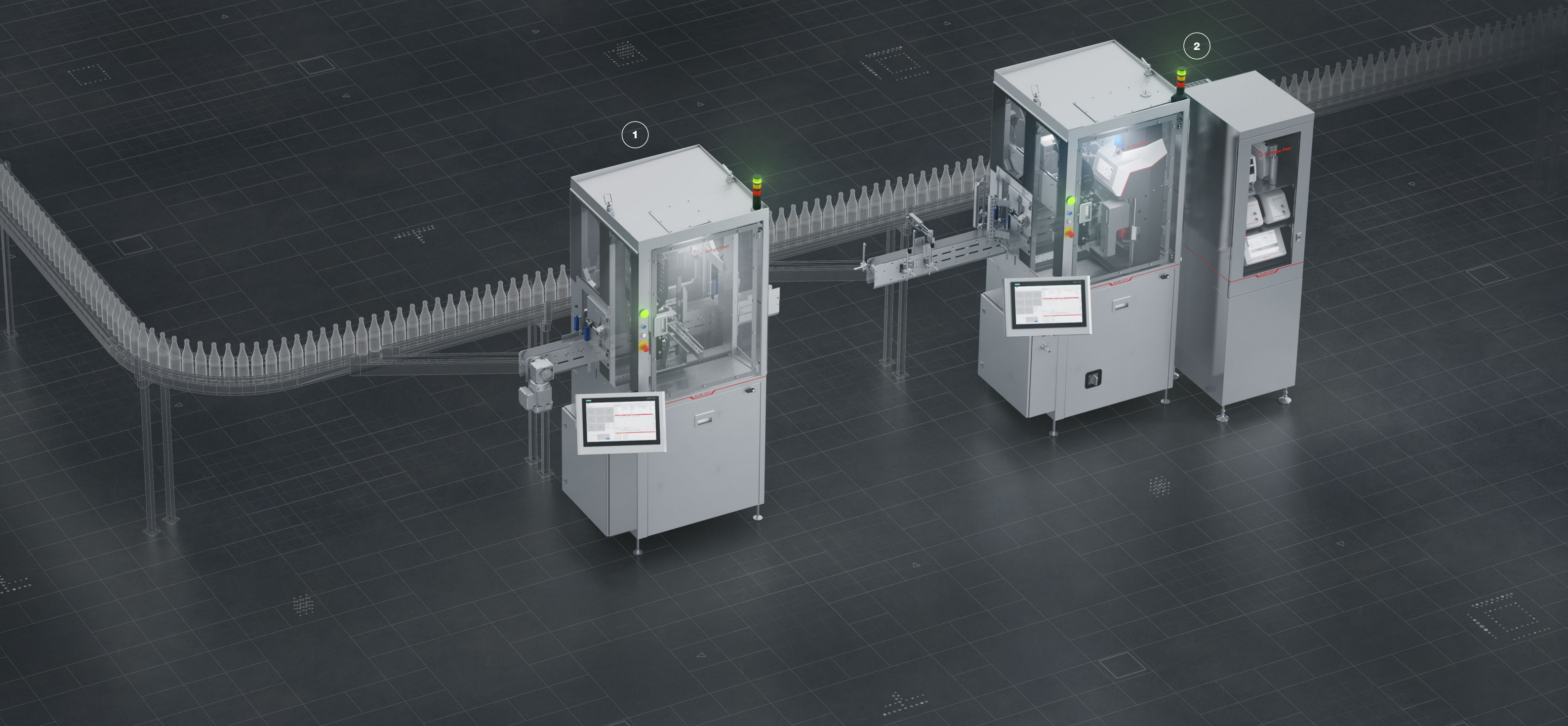
# Flexible Quality Control

## Wherever You Need It

Integrate the ALAB 5000 system into new or existing filling lines, or use it as a stand-alone solution for measurements of beer, wine, soft drink, water, sake and many more. Use both directions of each conveyor belt without a redesign, so you are completely flexible when establishing ALAB 5000 in your factory.

1 Torque Module

2 Analytic Module





ALAB 5000 Analytic	
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Measuring time	Approx. 8 minutes
Minimal sample volume	150 mL (5 oz)
Bottle / Can diameter	55 mm to 95 mm (2.17 in to 3.74 in)
Bottle / Can height	80 mm to 300 mm (3.15 in to 11.80 in)
Ambient temperature	2 °C to 49 °C (35.6 °F to 120.2 °F)
Altitude	<2000 m (<6,560 ft)
Air humidity	2 °C to 35 °C (35.6 °F to 95 °F): 0 % RH to 90 % RH, non-condensing >35°C (>95 °F): 0 % RH to 50 % RH, non-condensing
Dimensions ALAB Analytic (L x W x H)	Approx.1750 mm x 880 mm x 2430 mm (68.9 in x 34.65 in x 95.67 in)
Weight ALAB Analytic	Approx. 670kg (1,480 lbs)
Dimensions PBA housing (L x W x H)	Approx. 560 mm x 950 mm x 2110 mm (22.1 in x 37.41 in x 83.10 in)
Weight PBA housing	Approx. 230 kg (508 lbs)
Compressed air	4.5 bar to 10 bar (65 psi to 145 psi)
Nitrogen	7 bar to 10 bar (102 psi to 145 psi)
Water	3 bar to 6 bar (44 psi to 87 psi)
Power supply	AC 200 to 240 V; 50 Hz to 60 Hz; max. 2.2 kVA

ALAB 5000 Torque	
↓	
Measuring time	Approx. 30 seconds
Measuring area	0 Nm to 2 Nm (0 inch-pound to 18 inch-pound)
Bottle / Can diameter	55 mm to 95 mm (2.17 in to 3.74 in)
Bottle / Can height	80 mm to 300 mm (3.15 in to 11.80 in)
Cap diameter	25 mm to 40 mm (0.81 in to 1.57 in)
Ambient temperature	2 °C to 49 °C (35.6 °F to 120.2 °F)
Altitude	<2000 m (<6,560 ft)
Air humidity	2 °C to 35 °C (35.6 °F to 95 °F): 0 % RH to 90 % RH, non-condensing >35 °C (>95 °F): 0 % RH to 50 % RH, non-condensing
Dimensions (L x W x H)	Approx.1750 mm x 880 mm x 2430 mm (68.9 in x 34.65 in x 95.67 in)
Weight	Approx. 550 kg (1215 lbs)
Compressed air	4.5 bar to 10 bar (65 psi to 145 psi)
Power supply	AC 200 to 240 V; 50 Hz to 60 Hz; max. 1.0kVA

TECHNICAL DATA	
Display	19" multi-touch industrial PC 1920 x 1080 Px
Controls	Touchscreen

Trademarks

ALAB (017423997)



We’re confident in the high quality of our instruments. That’s why we provide **a full warranty for three years.**

All new instruments\* include repair for three years. You avoid unforeseen costs and can always rely on your instrument. Alongside the warranty, we offer a wide range of additional services and maintenance options.

\*Due to the technology they use, some instruments require maintenance according to a maintenance schedule. Complying with the maintenance schedule is a prerequisite for the three-year warranty.

**Service and support directly from the manufacturer**  
Our comprehensive service provides you with the best individual coverage for your investment so that maximum uptime is ensured.



**Safeguarding your investment**  
Regardless of how intensively you use your instrument, we help you keep your device in good shape and safeguard your investment – including a three-year warranty.



**The shortest response time**  
We know that sometimes it’s urgent. That’s why we provide a response to your inquiry within 24 hours. We give you straightforward help from real people, not from bots.



**Certified service engineers**  
The seamless and thorough training of our technical experts is the foundation of our excellent service provision. Training and certification are carried out at our own facilities.



**Our service is global**  
Our large service network for customers spans 86 locations with a total of 350 certified service engineers. Wherever you’re located, there’s always an Anton Paar service engineer nearby.

