Solutions for Your
Excellent Beer

Beer Analysis Overview

The Market Leader
in Beer Analysis

Over the 50 years we've spent as market leader in offering analytical solutions for the beverage industry, we've developed a range of technical innovations that increase the accuracy and speed of your measurements.

We're always a step ahead of fast-evolving beverage industry trends and applications, providing solutions that position you one step ahead, too. Whether you're analyzing a malty pale ale or a crisp lager, we'll help you save time, analyze with ease, and deliver a premium product.

1

One step ahead of beverage industry trends

→ Rely on the know-how from the market leader in offering analytical solutions for the beverage industry

→ Increase the accuracy and speed of your measurements

→ Analyze alcohol up to 10x faster than with distillation

→ Minimize waste, streamline operations, maintain consistent product quality, and drive continuous improvement

2

Maximum efficiency, effective QC

→ Measure over 50 quality parameters with one setup within eight minutes

→ Automate filling and cleaning of up to 24 samples in a row for non-pressurized systems

→ Deliver high-quality products with handheld solutions, measuring systems, automated QC labs, and in-line sensors

3

Decades of application experience

→ Know you're working with a partner with over 40 years of experience in the field

→ Draw on our application expertise wherever and whenever you need it

→ Rely on the same expertise that QC managers from around the world and across every industry have access to

4

Features that make market-leading density meters

→ Leverage usability features like 30+ guided workflows and automatic bubble detection to make your density measurements easier than ever before

→ Benefit from automatic compensation of the thermal effects on the U-tube and keep these effects at an absolute minimum over the entire lifetime of the instrument

→ Streamline your data management with AP Connect, our lab execution software

5

Expert service, guaranteed

→ Know you benefit from Anton Paar quality when it comes to durability and service

→ Get a 3-year warranty with each product

→ Access our global service network whenever you need it

→ Enjoy support in your local language

→ Know you have access to spare parts for at least 10 years after purchase

WATCH VIDEO

WATCH VIDEO

WATCH VIDEO

WATCH VIDEO

WATCH VIDEO

Always Superior Technology

The core of our density meters?

A handmade, glass U-tube. Powered by our patented Pulsed Excitation Method, it perfectly complements our Alcolyzer portfolio for selective alcohol measurement.

It's the ideal partner for your beer analysis.

Enjoy market-leading accuracy

→ Select the instrument you need for your accuracy requirements

→ Benefit from robust NIR technology with 0.01 % v/v repeatability for alcohol content

→ Get exceptional alcohol reproducibility time and time again

Your demands, our solutions

→ Access a broad portfolio: from handheld devices to multiparameter measurement systems

→ Perform the analysis you need: from wort to final product

→ Measure a range of beers: from light pilsners to dark stouts

Get a live view of the measuring cell with U-View™

→ Check the sample-filling process via a high-quality image of the glass cell on the high-resolution screen (1280 x 800 px)

→ Verify correct sample filling and measurements with the stored images

→ Print results with or without U-View™ pictures or transfer this set of data to your LIMS systems

Perform tasks quickly and easily

→ Open your favorite menu dialogs from the 10.4" screen using the quick access area

→ Assign different user levels to prevent accidental changes

→ Get system or operation alerts and see the current status of an automatic sample changer or measuring module

Ensure correct sample filling with FillingCheck™

→ Enjoy automatic monitoring of filling quality

→ Get real-time error detection and automatic documentation for later verification

→ Know you have the market's most reliable bubble detection with our patented Pulsed Excitation Method

Our Product Portfolio
for Beer Analysis

Market Leader

DMA 35: Portable density meter

→ Perform fast, reliable fermentation monitoring from -10 °Plato to +85 °Plato

→ Fill samples at temperatures up to 100 °C (hot wort)

→ Get quick results with just 2 mL sample volume

→ Store up to 30 measuring methods and up to 250 sample IDs

Alcolyzer M Beer: Beer analyzing system

→ Perform selective alcohol analysis

→ Get results in less than three minutes

→ Calibrate the instrument easily and perform product-independent adjustments

TPO 5000: Total package oxygen meter

→ Measure total package oxygen directly out of cans, glass bottles, and PET bottles

→ Get results in less than four minutes

→ Enjoy self-cleaning and minimum maintenance

Alex 500: Alcohol and extract meter

→ Monitor up to 40 fermentation processes simultaneously

→ Enjoy patented density and NIR technology in a single instrument

→ Get direct, real-time results

→ Rely on semi-automated sampling and a standardized sample handling SOP

DMA 4101, DMA 4501, DMA 5001: The fastest, most-accurate density meters

→ Analyze beer and get results with 4-digit accuracy in 20 seconds (up to 6-digit density accuracy available)

→ Track and eliminate variations in your production and achieve consistency in every batch

→ Enjoy higher throughput with automated filling, measuring, and cleaning options

→ Rely on technology that's been in the field for over 40 years

DMA 4501 Top Seller

Portable Quality Control: Anywhere, Anytime

DMA 35: A portable density meter for quality control and fermentation monitoring

The DMA 35 is durable. But don't just take our word for it.

→ IP54 protection class: Harsh industrial and field applications are no problem

→ Added rubber protection around measuring cell

→ Replace all glass hydrometers in your workplace and get the expected accuracy

→ Replaceable measuring cell for DIY maintenance

On-site measurements just got easier

→ Benefit from fast, reliable QC during all process steps on-site and in the field

→ Measurements with just 2 mL of sample, no need to transfer it to a lab

→ Gesture control: one-handed measurements

→ Glove-friendly

→ Quick result export to printer or PC for documentation and analysis

→ RFID interface and Bluetooth streamline your operations and save time in the field

→ Track daily measurements with its fermentation monitor mode

	DMA 35
Density range	0 g/cm³ to 3 g/cm³
Density accuracy	0.001 g/cm³

FIND OUT MORE

www.anton-paar.com/apb-beer-dma35

Your Entry Ticket to In-House Lab Analysis

Alex 500: Perfect for alcohol and extract analysis throughout your whole brewery

Visual fermentation monitoring

→ Confidently monitor and control your fermentation process

→ Track daily measurements with its fermentation monitor mode, which displays a density curve assigned to a tank via sample ID, and swiftly correct any deviations

→ Control up to 40 fermentation processes with one device

Easy calibration and adjustment

→ Check Alex 500 for the correctness of your results

→ Perform an adjustment with water if results are off track

→ Measure all day after a zero adjustment with deionized water

	Alex 500
Density range	0.95 g/cm³ to 1.20 g/cm³
Density repeatibility	0.0005 g/cm³
Alcohol range (beer)	0.5 % v/v to 15 % v/v
Alcohol repeatibility s.d.	0.1 % v/v

FIND OUT MORE

www.anton-paar.com/apb-beer-alex500

One Measuring Solution for Every Beer

Alcolyzer Beer M: Determine your beer's alcohol content

One solution for a wide range of beers

→ Measure a range of beers: from non-alcoholic ones all the way to hazy IPAs

→ Perfect your brews in breweries big or small

An easy system for any brewer

→ Easily use the system with a user-friendly touchscreen

→ Say goodbye to product-specific calibrations

→ Save space with your brewery with a compact design

Flexible production, maximum control

→ Maintain precise control over blending and bottled products

→ Ensure consistency in flavor profiles, harmonize blends with precision, and guarantee the quality of bottled spirits

	Alcolyzer
Alcohol range	0 % v/v to 12 % v/v
Alcohol repeatability s.d.	0.01 % v/v

Access Superior Control

TPO 5000: The fastest TPO measuring device on the market

Automatic handling for a great user experience and fast measurements

→ Automatic self-cleaning after measurement

→ Self-centering function positions beverage containers for you

→ Works with almost every bottle and can type

→ 4-minute measurements

Advanced, dependable technology

→ Minimal maintenance due to its optochemical oxygen measurement method

→ No need to regularly replace consumables

→ Compatible with CarboQC, our CO_2 meter designed to quickly determine carbon dioxide levels

→ Ready for harsh environments: stainless steel housing, splash-proof, and glove-friendly

	TPO 5000
Dissolved oxygen range	0 ppm to 2 ppm
Oxygen in the gas phase	0 hPa to 45 hPa
TPO repeatability s.d.	±8 ppb or ±6 %, whichever is higher

Next-Level Speed,
Next-Level Accuracy

DMA 4101, DMA 4501, DMA 5001: Our fastest, most intelligent benchtop density meters

Always superior:
A revolutionary user experience

Accurate density measurement of distilled fractions is the internationally recognized reference method for alcohol determination. Use it as a standalone instrument or extend it to a variety of measuring modules.

Tech with a kick

→ 4-digit density accuracy in 20 seconds

→ Patented Pulsed Excitation Method ensures market-leading precision, repeatability, and reproducibility

→ Storage for 10,000 measurements

→ Ultra-fast measurement mode boosts productivity

→ Instant pass/fail QC decisions by defining limits for different samples

→ Compliance with a range of industry standards

→ Up to 6-digit density accuracy

→ Automated conversion to % v/v

Need multiparameter analysis? No problem

→ Connect your device to a variety of Anton Paar measuring modules for a measuring system that monitors QC parameters (specific gravity, extract, and calories)

→ Measure over 50 key parameters simultaneously

→ Increase efficiency, productivity, and safety with automated sample changers or even a fully automated QC laboratory

## Features to help you make the most of your measurements

→ FillingCheck™ detects microbubbles within seconds

→ U-View™ shows a zoomable image of the measuring cell

→ Automatic compensation of temperature effects thanks to Thermo Balance™

→ Guided user workflows

→ Compatible with AP Connect, our lab execution software

	DMA 4101	DMA 4501	DMA 5001
Density range	0 g/cm³ to 3 g/cm³	0 g/cm³ to 3 g/cm³	0 g/cm³ to 3 g/cm³
Density repeatability, s.d.	0.00001 g/cm³	0.000005 g/cm³	0.000001 g/cm³
Alcohol range (distilled fractions)	0 % v/v to 100 % v/v	0 % v/v to 100 % v/v	0 % v/v to 100 % v/v
Alcohol accuracy (distilled fractions)	0.05 % v/v	0.025 % v/v	<0.01 % v/v

FIND OUT MORE
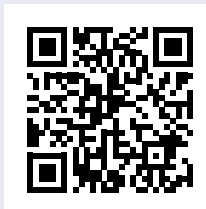
www.anton-paar.com/
apb-beer-dma
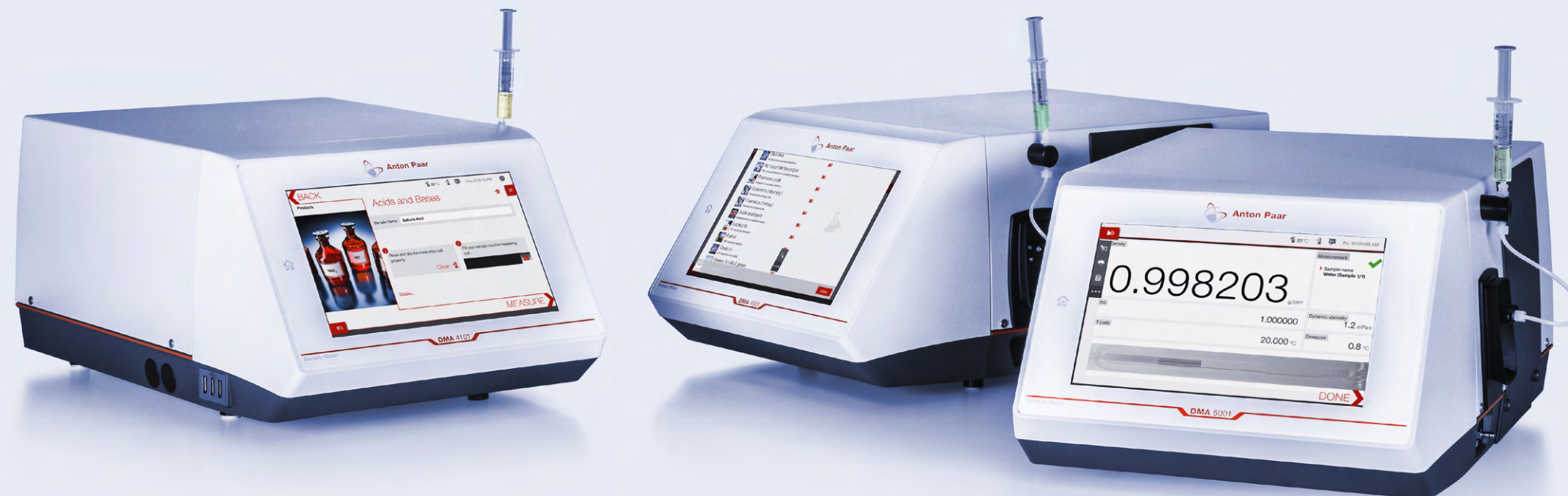
Versatile, for Different Applications

1 Wort/juice analysis
Ensure accurate measurement of apparent extract, pH, and density with our measuring systems. Increase consistency, save time, energy, water, and costs, while optimizing mashing efficiency due to a reduced boil time. Extract the maximum potential from your ingredients, which leads to transformative results and keeps you ahead of the competition.

2 Fermentation control and wash analysis
Optimize fermentation with density, alcohol, and pH measurement for consistent high-quality products, timely action, precise end point determination, and reduced time and resources. Make real-time adjustments and maximize yield.

3 Filtration
Incorporating turbidity, extract, alcohol, and pH monitoring into your beer filtration process optimizes refinement, yeast removal, stability, and early product checking. Taken together, this enhances your beer quality and consistency while also reducing the risk of spoilage.

4 Storage
Verify the storage and blending process and thus ensure correct proportions and maintain the desired flavor profile. Adjust the product to achieve the desired output by monitoring all relevant parameters. Conduct QC tests and be confident in the beer you release for bottling.

5 Bottling or canning
Packaged beverage analyzers help you guarantee the shelf life of your products and avoid costly recalls. Semi- and fully automated options eliminate sample preparation and operator errors. This will elevate your production process and support your reputation in the beer industry.
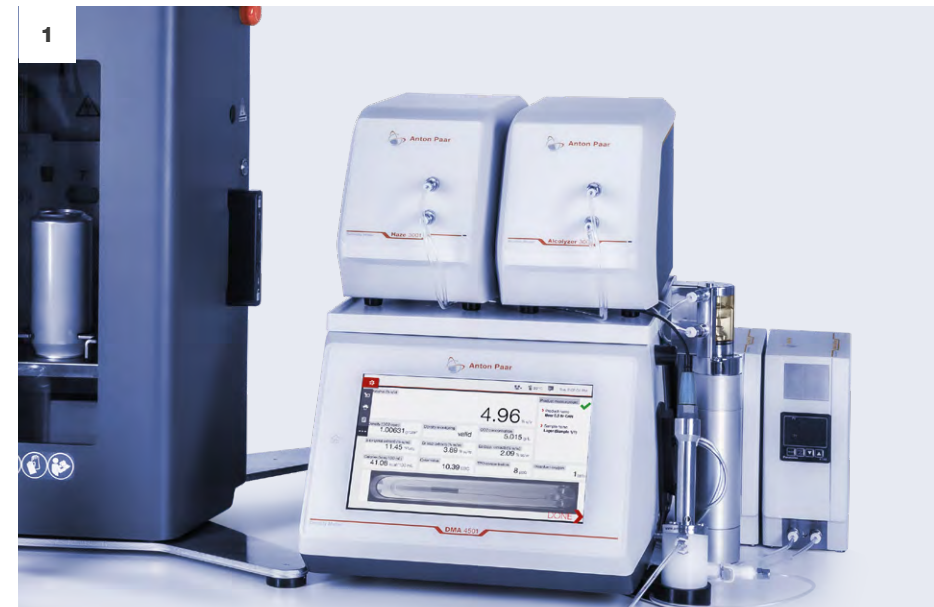
The Dream Experience

You have a dream: of an intelligent instrument that shows you the measurement way, and if you take a wrong turn, guides you straight back to the right path. A superior instrument that tells you your measurement has bubbles in it, shows you via camera image, and asks you to repeat it. An instrument that's as intuitive as a smart phone.

Usability design
The software that powers our compact and benchtop density meters, others can only dream of. It's the reason measurements are so quick and intuitive. Together with the revolutionary operating systems, it guarantees maximum usability and a smartphone-like experience with industry-specific profiles, 30+ guided user workflows, and 200+ available conversion tables.

Smart features
An instrument this smart thinks for you: efficient sample throughput, industry profile customization, fast sample diagnostics with the new, automatic algorithm-driven FillingCheck™, and reliable single measurements. The automated setup for the industry-specific user interface delivers an out-of-the-box, out-of-this-world measuring experience.

Dream data: AP Connect lab execution software
You have a dream: of a liberating paperless lab that eliminates transcription errors and guarantees data quality. You have a dream: of a lab where the data you need to pass audits is available at a snap, right at your fingertips. Just plug the instrument in to our lab execution software AP Connect for a lab without a single piece of paper. AP Connect links your instruments, communicates measurement information, and ensures compliance. Store 10,000 measurements in a single digital space, with user-defined output reports. The software is available in eight different languages.

FIND OUT MORE

www.anton-paar.com/
apv-overview-usability

Combine for a **Superior Measuring System**

| Xsample 520 |
| Xsample 320 |
| **SAMPLE CHANGER** |

The core of our measuring systems?
Our always-superior density meters.

Choose from the following:

| **PRIMARY INSTRUMENTS** |
| DMA 4101 |
| DMA 4501 |
| DMA 5001 |

FIND OUT MORE

www.anton-paar.com/
apb-beer-modulyzer

pH	**TURBIDITY**	**ALCOHOL CONTENT**	**CO_2, O_2**	**FILLING DEVICE**	**TOTAL PACKAGE OXYGEN**
pH 1101	Haze 3001	Alcolyzer 1001 Beer	CarboQC 1001	PFD	TPO 5000
pH 1201		Alcolyzer 3001	CarboQC ME	PFD Plus	
pH 3101		Alcolyzer 3001 Beer	Option O_2 Plus for CarboQC ME / 1001	Sample Conditioner	
pH 3201					

Measuring System
Modular Extensions
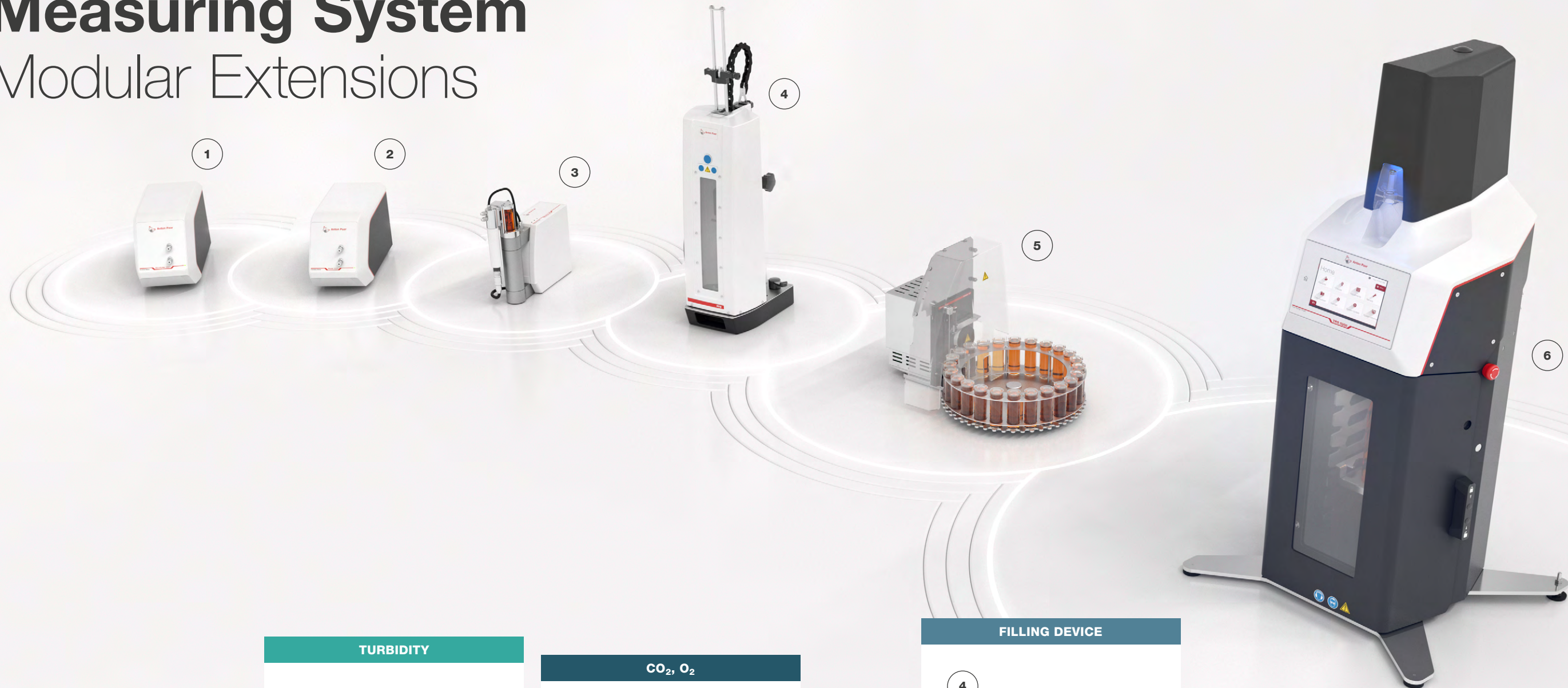
ALCOHOL CONTENT, COLOR

1

→ Selective measurement of alcohol within two minutes

→ Independent sample adjustment with water and a binary ethanol/water solution

Our modular setup combines the Alcolyzer (including the color option) with density meters and other modules. Choose from different variants tailored for beer, wine, spirits, or an all-in-one combination.

TURBIDITY

2

→ Detects impurities of all particle sizes

→ Compliant to different industry norms, such as EBC, MEBAK, and OIV

Haze 3001 applies the approved ratio method with measurement at three angles (transmission 0°, scattered light at 25°, and 90°) to eliminate particle size influence on the turbidity value. This lets you detect impurities as well as safeguard visual properties and even chill haze if combined with a cooling unit.

CO_2, O_2

3

→ Detect CO_2 in 55 seconds, CO_2 and O_2 in 90 seconds

→ No influence from other dissolved gases

Obtain a repeatability of 0.005 vol. Rely on automatic filling error detection for the density and CO_2 measuring cell for error-free operation. Add the (optional) high-resolution optochemical oxygen sensor for the simultaneous determination of the O_2 concentration in your beverage.

FILLING DEVICE

4

→ Filling from glass bottles, PET bottles, and cans

→ No loss of CO_2 or O_2 due to pressurized filling

The PFD Filling Device transfers your sample directly from a closed container – either a bottle or a can – into the measuring chamber of a measuring instrument. As a result of sealed and pressure-driven filling, the samples are transferred without losing CO_2. A sample conditioner enables measurement below 15 °C and reduces measuring time.

SAMPLE CHANGER

5

→ Eliminate handling errors and save time with automation

→ Reduce costs per measurement

Benefit from a range of automation options. From single measurements to high-throughput solutions for large quantities of samples per day, we have an automated solution to fit your business.

TOTAL PACKAGE OXYGEN

6

→ Selective measurement of total package oxygen

→ Enables full analysis from a single package

In a measuring system, the TPO 5000 automates the piercing and filling process. In addition to the oxygen measurement, it also provides information about the headspace volume, simplifies rinsing, and enables special deep cleaning.

Recommended Configurations: Non-Pressurized

Design your beer measuring system, one component at a time. Degassing is required if CO_2 is present in the sample.

①

Quality control for craft breweries and small batch productions

DMA 4101
⊕ Alcolyzer 1001 Beer
⊕ pH 1101
⊕ Xsample 320

→ The Alcolyzer Analyzing System dedicated to craft brewing

→ Measurement of key parameters in-house

→ Ready for every type of beer: no product-specific calibration

→ Selective determination of alcohol; compliance with distillation (reference)

→ Leading technology recommended by EBC, ASBC, MEBAK, and BCoJ

②

Quality control for large and industrial breweries

DMA 4501
⊕ Alcolyzer 3001 Beer
⊕ pH 3101
⊕ Xsample 520

→ Verify your blending process

→ Adjust the product to achieve the desired output

→ Confirm your product specifications

→ Release your product for bottling

③

The modular solution, for perfect fermentation and storage

DMA 5001
⊕ Alcolyzer 3001 Beer with option Color
⊕ Haze 3001
⊕ pH 3101
⊕ Xsample 520

→ Entire production process monitoring: from wort to finished beer

→ Direct and selective alcohol determination

→ All types of beer, cider, hard seltzer, and kombucha

→ Four measuring modules, 30+ industry-specific parameters

→ Fully automatic check/calibration thanks to built-in SOP

MANY MORE CONFIGURATIONS
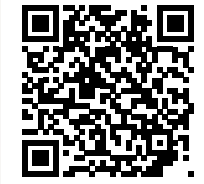
www.anton-paar.com/
apb-beer-modulyzer

Recommended Configurations: Pressurized

Design your packaged beer measuring system, one component at a time. No sample preparation is required.

6

The most comprehensive analysis from a single package

DMA 5001
⊕ Sample conditioner
⊕ Alcolyzer 3001 Beer with option Color
⊕ Haze 3001
⊕ pH 3201
⊕ CarboQC ME
⊕ TPO 5000

→ Safeguard your filler performance

→ Measure 50+ quality parameters from a single package

→ Obtain all data at the push of a button in a single data set

→ Fully automated cleaning and leak test

4

Package control for craft breweries

DMA 4101
⊕ Alcolyzer 1001
⊕ pH 1201
⊕ CarboQC 1001
⊕ PFD

→ Craft beer quality verification

→ Selective alcohol determination via unique Alcolyzer technology

→ Readiness for every type of beer: no product-specific calibration

→ Selective CO_2 analysis

5

Package control for large breweries

DMA 4501
⊕ Sample conditioner
⊕ Alcolyzer 3001 Beer with option Color
⊕ Haze 3001
⊕ pH 3201
⊕ CarboQC ME with Option O_2 Plus
⊕ PFD Plus

→ Safeguard your product specifications in only three minutes

→ Fulfill legal requirements

→ Eliminate loss of alcohol due to evaporation

→ Eliminate sample preparation and operator influences

World's best beer analyzing system

Recommended Configuration	① ↓	② ↓	③ ↓
Parameters	Alcohol | Extract | pH	Alcohol | Extract | pH	Alcohol | Extract | pH | Turbidity

MEASURING RANGE

Alcohol	0 % v/v to 12 % v/v		
Density	0 g/cm³ to 3 g/cm³		
Original extract	0 °Plato to 30 °Plato		
Color	-	0 EBC to 120 EBC (0 ASBC to 60.96 ASBC)	
pH value	pH 0 to pH 14		
Turbidity	-	-	0 EBC to 100 EBC (0 ASBC to 6900 ASBC)

REPEATABILITY, S.D.

Alcohol	0.05 % v/v	0.01 % v/v	
Density	0.00001 g/cm³	0.000005 g/cm³	0.000001 g/cm³
Original extract	0.1 °Plato	0.03 °Plato	
Real extract	0.025 % w/w	0.015 % w/w	< 0.01 % w/w
Color	-	0.1 EBC (0.05 ASBC)	
pH value	0.02 in the range pH 3 to pH 7		
Turbidity	-	-	0.3 % of the measured value + 0.02 EBC / 1.4 ASBC according to formazine reference suspension

ADDITIONAL INFORMATION

Power features	U-View™, FillingCheck™, ThermoBalance™, full-range viscosity correction, ultra-fast measuring mode
Minimum amount of sample per measurement	35 mL
Typical measurement time per sample	4 minutes (incl. filling)
Sample throughput	15 - 20 samples per hour
Dimensions (L x W x H)	482 mm x 390 mm x 446 mm (19.0 in x 15.4 in 17.6 in) · 482 mm x 730 mm x 446 mm (19.0 in x 28.9 in x 17.6 in)
Power supply	AC 100 V to 240 V, 50/60 Hz, fluctuation ±10 %, 190 VA
Ambient temperature	15 °C to 32 °C (59 °F to 89.6 °F)
Air humidity	non-condensing 20 °C: <90% relative humidity; 25 °C: <60% relative humidity; 30 °C: <45% relative humidity

Recommended Configuration	① ↓	② ↓	③ ↓

STANDARDS

MEBAK	Chapter 2.9.6.3 (B-590.10.181) Chapter 2.12.2 (B-420.01.272)		Chapter 2.9.6.3 (B-590.10.181) Chapter 2.12.2 (B-420.01.272) Chapter 2.14.1.2 (B-420.01.271)
TTB	-	Density measurement in proofing alcohol for tax purposes	
GB	T 4928-2008		
EBC	Chapter 8.2.2, Chapter 9.2.6, Chapter 9.43.2		Chapter 8.2.2, Chapter 9.2.6, Chapter 9.43.2, Chapter 8.5, Chapter 8.6
BCOJ	8.3.6 Alcolyzer for alcohol contents 8.4.3 Alcolyzer for real extract Analytical method for beer		
ASBC	Beer-4G: Near-infrared and original extract content (2004)		
AOAC	-	Method 956.02 (430 nm)	

Trademarks	**FillingCheck (006834725), U-View (006834791), ThermoBalance (006835094)**

Reliable.
Compliant.
Qualified.

www.anton-paar.com/
service

Our well-trained and certified technicians are ready
to keep your instrument running smoothly.

Maximum uptime	Warranty program	Short response times	A global service network

Recommended Configuration	(4)	(5)	(6)
	↓	↓	↓
Parameters	Alcohol | Extract | pH | CO_2	Alcohol | Extract | pH | Turbidity DO | CO_2	Alcohol | Extract | pH | Turbidity TPO | DO | HSO | HSV | CO_2

MEASURING RANGE

	(4)	(5)	(6)
Alcohol	0 % v/v to 12 % v/v		
Density	0 g/cm³ to 3 g/cm³		
Original extract	0 °Plato to 30 °Plato		
Color	-	0 EBC to 120 EBC (0 ASBC to 60,96 ASBC)	
pH value	pH 0 to pH 14		
Turbidity	-	0 EBC to 100 EBC (0 ASBC to 6900 ASBC)	
CO_2 concentration	0 vol. to 5.5 vol. at 35 °C, 0 vol. to 10 vol. <10 °C		
O_2 concentration	-	DO: 0 ppm to 4 ppm	DO: 0 ppm to 2 ppm HSO: 0 hPa to 45 hPa

REPEATABILITY, S.D

	(4)	(5)	(6)
Alcohol	0.05 % v/v	0.01 % v/v	0.01 % v/v
Density	0.00001 g/cm³	0.000005 g/cm³	0.000001 g/cm³
Original extract	0.1 °Plato	0.03 °Plato	
Real extract	0.025 % w/w	0.015 % w/w	< 0.01 % w/w
Color	-	0.1 EBC (0.05 ASBC)	
pH value	0.02 in the range pH 3 to pH 7		
Turbidity	-	0.3 % of the measured value + 0.02 EBC / 1.4 ASBC according to formazine reference suspension	
CO_2 concentration	0.025 vol. (0.05 g/L)	0.005 vol. (0.01 g/L)*	
O_2 concentration	-	DO: 2 ppb (below 200 ppb)	TPO: ±8 ppb or ±6 %, whichever is higher**

ADDITIONAL INFORMATION

	(4)	(5)	(6)
Power features	U-View™, FillingCheck™, ThermoBalance™, full-range viscosity correction, ultra-fast measuring mode		
Minimum amount of sample per measurement	30 mL	150 mL	260 mL
Typical measurement time per sample	3 minutes (incl. filling)		8 min (incl. filling)
Sample throughput	15 samples per hour		7 samples per hour
Dimensions (L x W x H)	482 mm x 730 mm x 446 mm (19.0 in x 28.7 in x 17.6 in)	482 mm x 750 mm x 670 mm (19.0 in x 29.5 in x 26.4 in)	515 mm x 1200 mm x 1120 mm (20.3 in x 47.3 in x 44.1 in)
Power supply	AC 100 V to 240 V, 50/60 Hz, fluctuation ±10 %, 190 VA		
Ambient temperature	15 °C to 35 °C (59 °F to 95 °F)		
Air humidity	20 °C, <90% relative humidity; 25 °C, <60% relative humidity; 30 °C, <45% relative humidity		

Recommended Configuration	(4)	(5)	(6)
	↓	↓	↓

STANDARDS

	(4)	(5)	(6)
MEBAK	Chapter 2.9.6.3 (B-590.10.181) Chapter 2.12.2 (B-420.01.272)	Chapter 2.9.6.3 (B-590.10.181) Chapter 2.12.2 (B-420.01.272) Chapter 2.14.1.2 (B-420.01.271)	
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EBC	Chapter 8.2.2, Chapter 9.2.6, Chapter 9.43.2		Chapter 8.2.2, Chapter 9.2.6, Chapter 9.43.2, Chapter 8.5, Chapter 8.6
BCOJ	8.3.6 Alcolyzer for alcohol contents 8.4.3 Alcolyzer for real extract Analytical method for beer		
ASBC	Beer-4G: Near-infrared and original extract content (2004)		
AOAC	-	Method 956.02 (430 nm)	

Trademarks   **FillingCheck (006834725), U-View (006834791), ThermoBalance (006835094)**

* Due to sample handling and preparation in TPO 5000, CO_2 mean values may deviate by 1 % absolute compared to filling by a PFD (piercing and filling device)
** At ambient and sample temperature of 23 °C (73.4 °F) if standard cleaning is applied. Please note that the first measurement of a set is not considered for the determination of the repeatability of a set.

Note: For information about tested package sizes please see the TPO 5000 instruction manual or contact your Anton Paar representative.
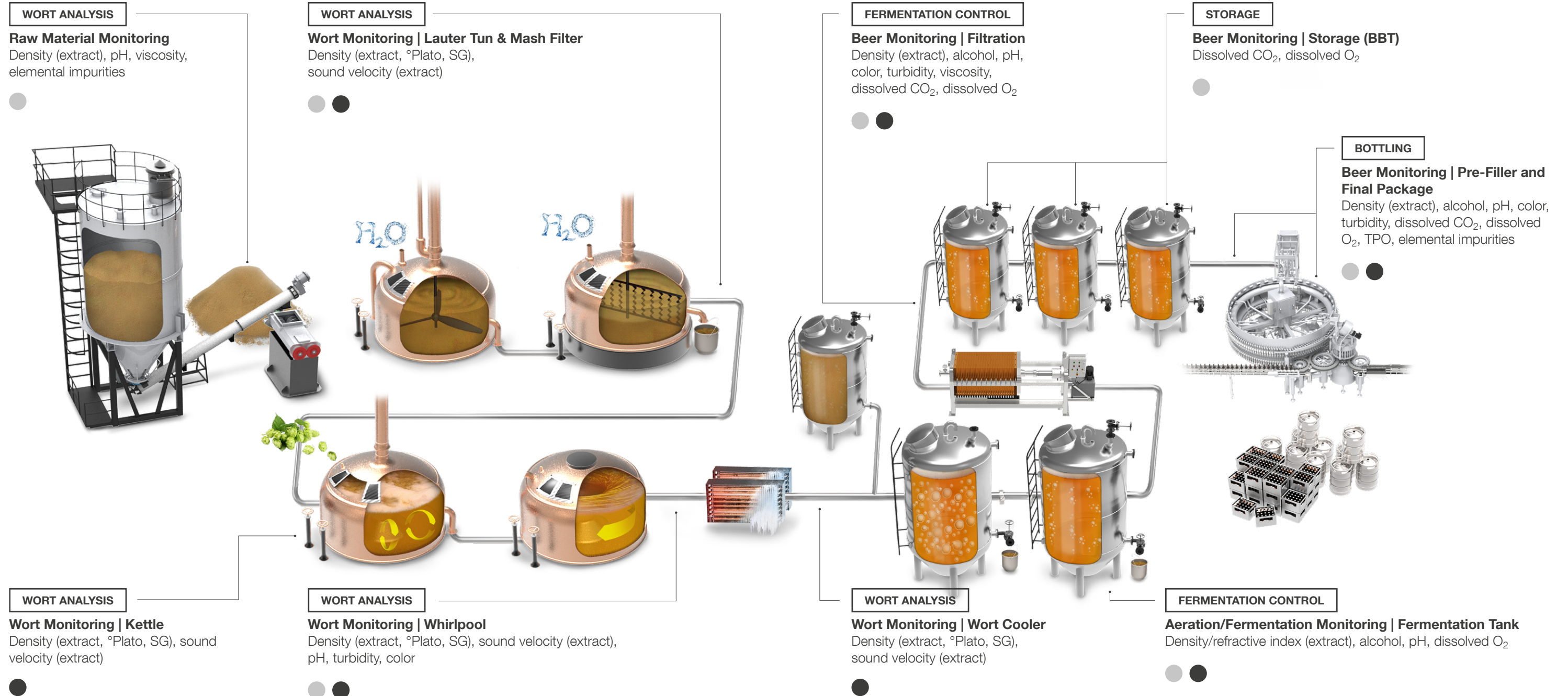
Complete Your Beer Analysis

⬤ Laboratory measurement (incl. portable instruments)

⬤ Process measurement

We're the world's first full-range supplier for beer analysis
With 25 laboratory and process instruments, you can trace 15+ parameters from any location in the plant. Streamlining your beer's quality has never been so easy.

WORT ANALYSIS

Raw Material Monitoring
Density (extract), pH, viscosity, elemental impurities

WORT ANALYSIS

Wort Monitoring | Lauter Tun & Mash Filter
Density (extract, °Plato, SG), sound velocity (extract)

FERMENTATION CONTROL

Beer Monitoring | Filtration
Density (extract), alcohol, pH, color, turbidity, viscosity, dissolved CO_2, dissolved O_2

STORAGE

Beer Monitoring | Storage (BBT)
Dissolved CO_2, dissolved O_2

BOTTLING

Beer Monitoring | Pre-Filler and Final Package
Density (extract), alcohol, pH, color, turbidity, dissolved CO_2, dissolved O_2, TPO, elemental impurities

WORT ANALYSIS

Wort Monitoring | Kettle
Density (extract, °Plato, SG), sound velocity (extract)

WORT ANALYSIS

Wort Monitoring | Whirlpool
Density (extract, °Plato, SG), pH, turbidity, color

WORT ANALYSIS

Wort Monitoring | Wort Cooler
Density (extract, °Plato, SG), sound velocity (extract)

FERMENTATION CONTROL

Aeration/Fermentation Monitoring | Fermentation Tank
Density/refractive index (extract), alcohol, pH, dissolved O_2

Grow Your Business

Our beer analysis solutions are designed to grow with your needs. Whether you're integrating data management, upscaling your analytical solutions, or implementing inline analysis in your production, we've got you covered.

Measure inline
The inline sensors for density, sound velocity, CO_2 content, oxygen content, refractive index, and color report results directly from the line.

Go paperless
Centralize your lab data and store all your measurements in a single digital space. With our lab execution software, AP Connect, your data is accessible from any network computer, whenever you need. Streamlining your data flow frees up time for analysis and ensures full traceability.

Maximize efficiency
Our solutions give you the freedom to upgrade your analytical capabilities step by step: higher accuracy, high-end turbidity measurement, or full automation.

Flex-Blend Series

Beer Monitor Series

AP
AP Connect
Lab Execution Software

Anton Paar

ALAB 5000

www.anton-paar.com